

October 19, 2010

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8:46 am, Oct 25, 2010

Alameda County Environmental Health

Mr. Paresh C. Khatri Hazardous Materials Specialist Alameda County Health Care Services Agency Department of Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502

Re: Annual Summary Report - October 2009 through July 2010

76 Service Station Facility No. 2611270

3255 Mecartney Road Alameda, California

Dear Mr. Khatri:

I declare under penalty of perjury that to the best of my knowledge the information and/or recommendations contained in the attached report is/are true and correct.

If you have any questions or need additional information, please call Ms. Lia Holden at (408) 826-1863.

Sincerely,

PLATINUM ENERGY

SHANE NOLAN

Customer Service Representative

Thorn Mach

Platinum Energy

30343 Canwood St., Suite 200 Agoura Hills, CA 91301-4327

Tel: 818-206-5705

Fax: 818-206-5729

snolan@platinum-energy.net

October 19, 2010

Mr. Paresh Khatri Hazardous Materials Specialist Alameda County Environmental Health Local Oversight Program 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

RE: Annual Summary Report

October 2009 through July 2010

Delta Consultants

Delta Project No.: I42611270

Case No.: RO0000511

Dear Mr. Khatri:

Delta Consultants (Delta) is forwarding the quarterly summary report for the following location:

Service Station

Location

ConocoPhillips Site No. 11270

3255 Mecartney Road Alameda, California

LIA HOLDEN No. 8584

OF CAL

Sincerely,

Delta Consultants

Evan Chantikian Senior Staff Geologist

Lia Holden, PG #8584 Geologist - Project Manager

Figure 1 - Site Location Map

Figure 2 – Site Plan

Figure 3 - Groundwater Elevation Contour Map

Figure 4 – Groundwater Concentration Map

Table 1 – Current Groundwater Monitoring Data

Table 2 - Historic Groundwater Monitoring Data

Attachment A – Groundwater Flow Direction Rose Diagram

Attachment B - Groundwater Sampling Laboratory Report

Attachment C – Recent Correspondence



Quarterly Summary Report Third Quarter – 2010

ConocoPhillips Site No. 11270 3255 Mecartney Road Alameda, CA

SITE DESCRIPTION:

The site is an operational 76 service station within a shopping center located on the northwest corner of the intersection of Mecartney Road and Island Drive in Alameda, California. The site is located in a mixed commercial and residential neighborhood (Figure 1).

Site features include three gasoline underground storage tanks (USTs), two fuel dispenser islands, and a station building with a service bay containing two hoists. The capacity of the three fiberglass fuel USTs are 12,000-gallon, 10,000-gallon, and 6,000-gallons. Currently, there are two onsite (MW-5, MW-6)) and four offsite active groundwater monitoring wells (MW-7, XW-1 through XW-3), and five onsite soil vapor monitoring wells (SV-1 through SV-5). Pertinent site features are shown on **Figure 2**.

PREVIOUS ASSESSMENT

May 1990 - During a routine dispenser modification, hydrocarbon contaminated soils were reported in samples P-1 and P-2 from a depth of 4.5 feet below ground surface (bgs). The dispenser area, including sample locations, was subsequently over-excavated to 4.5 feet bgs and confirmation soil samples SW1 through SW9 were collected. Total petroleum hydrocarbons as gasoline (TPH-G) and benzene were reported at maximum concentrations in sidewall samples SW1 and SW3 at concentrations of 2,000 milligrams per kilogram (mg/kg) and 18 mg/kg in SW1, and 860 mg/kg and 5 mg/kg in SW3, respectively at a depth of 8 feet bgs. SW3 could not be over-excavated to the southwest due to proximity to fuel USTs (KEI 1990). Additional excavation to 8.5 feet bgs was reported to have taken place to the south of SW-1, but it appears that additional excavation to the north of the sample was not conducted. Soil south of SW1 was excavated to 8.5 feet bgs, and soil to the north was excavated to 4.5 feet bgs, the same depth as SW1. Approximately 195 cubic yards of soil were excavated and disposed of at Class I and Class III facilities (KEI 1990). August 1992 - A preliminary site assessment was conducted at the site including the sampling of two pre-existing Mobil groundwater monitoring wells MW-2 and MW-4. Groundwater flow direction was reportedly to the west. Groundwater samples could not be collected from monitoring wells MW-1 and MW-3 due to insufficient recharge. Product sheen was observed in the purge water from all of the monitoring wells. TPH-G, benzene and total petroleum hydrocarbons as diesel (TPH-D) were reported at maximum concentrations of 2,600 micrograms per liter (μ g/l) and 250 μ g/l in MW-4 and 3,900 μ g/l in MW-2 (Hydro 1993). Locations of monitoring wells are shown on **Figure 2**, historic groundwater data and elevation is presented in **Table 2**.

<u>May 4, 1993</u> – In a correspondence letter from the BP Oil Company, the recent installation of three monitoring wells (XW-1 through XW-3) surrounding the site on Harbor Bay Landing shopping center property was acknowledged. No information to the wells installation, ownership or purpose was known. The wells were included into the site's quarterly monitoring program in June of 1993 (BP 1993). Well locations are shown on **Figure 2**.

<u>June 1993</u> - One 4-inch diameter groundwater monitoring well, MW-5, was installed in the western corner of the property to a depth of 15 feet bgs (**Figure 2**). TPH-D was reported at a concentration of 11,000 mg/kg at a depth of five feet bgs (Hydro 1995). The first groundwater sample collected from the well was reported to only contain TPH-D above the laboratory reporting limit (LRL), at a concentration of 100 ppb.

<u>October 1994</u> - Two exploratory borings (TB-1 and TB-2) were advanced to a depth of 11.5 feet bgs as part of a baseline property assessment. No analytes were reported above their respective laboratory reporting limits (LRLs) in any soil samples. Groundwater samples collected from borings, TB-1 and TB-2, contained 1,500 μ g/l and 310 μ g/l TPH-G, respectively.

<u>January 1995</u> - Monitoring wells, MW-1 through MW-4, were destroyed in January 1995. Additionally, one 4-inch diameter monitoring well, MW-6, was installed on-site and one 2-inch diameter monitoring well, MW-7, was installed approximately five feet to the northwest of the site (**Figure 2**). Monitoring well MW-6 was constructed to a depth of 15 feet bgs and MW-7 was constructed to a depth of 16.5 feet bgs. TPH-D, TPH-G, ethylbenzene, xylenes and toluene were reported in the soil sample from MW-6 at a depth of 5 feet bgs at concentrations of 480mg/kg, 89mg/kg, 0.63 mg/kg, 4.8 mg/kg and 0.21 mg/kg, respectively. In a soil sample from MW-7 from a depth of five feet, TPH-D was reported at a concentration of 110 mg/kg. Groundwater was encountered in the monitoring wells at depths ranging from 5 to 7.5 feet bgs (Hydro 1995).

<u>November 1996</u> - The oil/water separator located in the floor of the vehicle service bay on the west side of the service station building was removed. Two soil samples (OWS-1, 0.5' and OWS-1, 2') were collected from beneath the former oil/water separator. Total

recoverable petroleum hydrocarbons (TRPH) were present in the both soil samples with a maximum concentration of 49 mg/kg. All other analytes were below LRLs (EMCON 1998). Details regarding the sampling event were obtained through EMCON's Baseline Assessment Report dated July 28, 1998.

<u>August 1997</u> - Samples of pea gravel base material (S-1, through S-4) were collected from below each fuel dispenser. Only toluene and xylenes were reported above the LRLs in the samples. The original report for the sampling could not be located. Details regarding the sampling event were obtained through URS's Case Closure Summary dated October 27, 2004.

<u>July 9, 1998</u> - One 1,000-gallon single-walled fiberglass used-oil UST was removed from the site. The UST was noted to be intact with no visible holes or cracks. One native soil sample (S-6-T1E) was collected from the eastern sidewall of the UST cavity at a depth of approximately 7 feet bgs. No analytes were detected above the LRL in the soil sample (ERI 1998).

<u>August 2000</u> - Site fuel dispensers and product lines were removed and replaced. A total of four pea gravel samples (PD-1-2', PD-2-1.5', PD-3-1.5', and PD-4-1.5') were collected from beneath each of the four fuel dispensers, and four pea gravel samples (PL-3-1.5', PL-4-1.5', PL-6-1.5', and PL-7-1.5') were collected from beneath the product lines. Three pea gravel samples were also collected at each of the ends of the fuel USTs (F-1-4', F-2-4', and F-5-3'). No analytes were reported above LRLs in any of the samples submitted for laboratory analysis (SECOR 2000).

October 31, 2001: the Alameda County Environmental Health (ACEH) Department issued a letter of intent to make a determination that no further action (NFA) would be required, or to issue a closure letter for the site's environmental case (ACEH 2001). In a letter dated November 7, 2001, BP Oil notified the ACEH that monitoring and sampling of the site's monitoring wells would cease pending case closure/ the issue of an NFA (BP 2001).

October 21, 2004: URS submitted a Case Closure Summary (URS 2004).

August 21, 2008: The ACEH denied URS case closure. The ACEH stated that it was unclear whether sample SW1 was over-excavated. The sample was collected from a depth of 4.5 feet bgs, and appeared to be a sidewall sample for the 8 foot deep excavation to the south. The ACEH then stated that concentrations reported in SW1 would require additional investigation (ACEH 2008).

<u>February 2009</u>: Broadbent & Associates, Inc (BAI) attempted to advance soil boring B-4 to assess the presence of residual petroleum hydrocarbon-impacted soil onsite in the vicinity of the UST complex and the pump islands. Field activities were stopped in accordance with BP's safety protocol after encountering. According to the manager who has operated the facility for 24 years, during original construction, a large area of the subsurface soil was excavated from the site and backfilled with pea gravel (BAI 2009). The approximate extent of the pea gravel is shown on **Figure 2**. BAI also conducted a preferential pathway study, but stated that results of the study were inconclusive. BAI recommended case closure based on historically low hydrocarbon concentrations.

<u>May 8, 2009</u>: The ACEH denied BAI's closure request and stated that investigation had not been performed to confirm or repudiate concentrations in SW1. Further, the ACEH stated that since pea gravel covers much of the subsurface at the site, that vapor intrusion should be investigated.

<u>December 10, 2009</u>: Delta installed five soil vapor wells at the site. One soil sample was collected from 4.5 feet bgs in each well, and soil vapor samples were collected on January 10, 2010. TPH-D and methyl tertiary butyl ether (MTBE) were reported in soil sample SV-5 at concentrations of 50.9 mg/kg and 0.022 mg/kg, respectively. TPH-G was reported in soil vapor samples from wells SV-2, SV-4 and SV-5 at concentrations of 1,400 micrograms per cubic meter (μ g/m³), 35,000 μ g/m³ and 16,000 μ g/m³, respectively. MTBE was reported in the same wells at concentrations of 60 μ g/m³, 92 μ g/m³ and 4,700 μ g/m³ respectively. Benzene was reported in all wells at concentrations ranging from 9.9 μ g/m³ in well SV-1 to 33 μ g/m³ in well SV-2 (Delta 2010). Based on the distance from the station building and the soil vapor TPH-G concentrations in wells SV-1 (<920 μ g/m³) and SV-2 (1,400 μ g/m³) adjacent to the station building, Delta concluded that intrusion of soil vapor into the service station building is not a concern at the site, and that the site is capped with asphalt and concrete, impeding the upward movement of soil vapor towards potential receptors. Therefore, Delta recommended suspension of additional soil vapor sampling events.

SENSITIVE RECEPTORS

<u>November 1992</u> - A sensitive receptor survey and existing well search were conducted. No public water supply wells were identified within approximately 2,500 feet of the site. No private water supply wells were identified within 1,000 feet of the site. Additionally, no subways, basements, and schools were identified within 1,000 feet of the site.

The one-page checklist survey identified a surface water body located approximately 500 feet from the site, but did not name it (Hydro 1993). As observed during a site visit by URS, this surface water body is a channel excavated as part of a residential development. The channel appears to connect to the San Francisco Bay which is located, at its closest, approximately 600 feet to the north of the site (URS 2004).

Delta has identified one (circa 1910) irrigation well located less than a mile west of the site. The well was reported by the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) to be less than 100 feet deep, and was allegedly abandoned in the 1930s when development of Sierra Nevada reservoirs provided an alternate water supply. Four additional irrigation wells deeper than 100 feet were identified within a mile to the north and northeast of the site in the same report (RWQCB 1999).

MONITORING AND SAMPLING

Currently six onsite wells (MW-5 through MW-7 and XW-1 through XW-3) are monitored annually during the third quarter. All six wells were gauged and sampled this quarter on July 6, 2010. Groundwater hydraulic gradient and flow direction were calculated at 0.017 feet per foot (ft/ft) to the northwest. The attached groundwater flow direction rose diagram shows that this is consistent with historic gradient and flow direction data (**Attachment A**).

Groundwater samples are analyzed quarterly for TPH-G, BTEX compounds, MTBE, TBA, ethylene dibromide (EDB), ethylene dichloride (EDC), DIPE, ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), and ethanol.

Laboratory analytical results show that MTBE was detected in three of the six wells (MW-6, MW-7, and XW-3) at concentrations ranging from 0.75 μ g/l in MW-7 to a maximum of 1.0 μ g/l in MW-6. There were no other detections of constituents of concern in samples collected during this sampling event.

Current groundwater monitoring and sampling data is summarized in **Table 1**. The associated laboratory report is included in **Attachment B**. Historic groundwater monitoring data is included in **Table 2**.

QUALITY ASSURANCE / QUALITY CONTROL (QA/QC)

Delta performed a QA/QC data validation check on the PACE laboratory analytical results for the July 2010 sampling event. The following data qualifiers were noted on individual well and laboratory control samples:

- Laboratory Data Qualifier "B-": Analyte detected in method blank but was not detected in associated samples.
- Laboratory Data Qualifier "E": Analyte concentration exceeded the calibration range. The reported result is estimated.
- Laboratory Data Qualifier "L3": Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
- Laboratory Data Qualifier "MO": Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

All four data qualifiers are related to a high bias in TPH-GRO detections. TPH-GRO was not detected above the laboratory detection limits in any samples, and therefore the data was unaffected by the high bias. No laboratory data qualifiers were noted in the PACE Labs report that rendered the reported data to be invalid.

RECENT CORRESPONDENCE

On July 7, 2010, Delta submitted a *Request for Case Closure* to the ACEH. In a correspondence letter dated July 22, 2010, the ACEHD requested that Delta conduct additional soil vapor sampling events and submit a report due by September 20, 2010, prior to considering the site for case closure.

In email correspondence dated September 2, 2010, Delta notified the ACEH that due to lab error, vapor samples which were collected on August 27, 2010 were rendered invalid. In this correspondence, Delta requested an extension on the vapor sampling report deadline from September 20, 2010 to November 12, 2010, to allow for re-sampling. The request for extension was granted by the ACEH in email correspondence dated September 3, 2010. Recent correspondence letters are included in **Attachment C**.

CONCLUSIONS AND RECOMMENDATIONS

Delta has requested case closure for this site in Delta's *Request for Case Closure* dated July 7, 2010. At the request of the ACEH, Delta has conducted an additional soil vapor sampling event in September 2010, to allow possible changes in site conditions between summer and winter. Delta will submit a revised request for case closure with additional soil vapor sampling data on or before November 12, 2010.

OCTOBER 2009 THROUGH SEPTEMBER 2010 ACTIVITIES

- Delta prepared and submitted the Quarterly Status Report July through September 2009, dated October 13, 2009
- Delta installed and sampled five soil-vapor wells in December 2009.
- Delta conducted an initial soil vapor sampling event.
- Delta reported the results of soil vapor sampling in the *Site Assessment Report*, dated February 16, 2010.
- Delta submitted a Request for Case Closure dated July 7, 2010.
- Blainetech Services performed an annual groundwater monitoring event.
- Delta conducted a soil vapor sampling event on August 27, 2010.
- Delta resampled the five soil vapor wells on September 9, 2010.

PLANNED ACTIVITIES - OCTOBER 2010 THROUGH SEPTEMBER 2011

- Delta prepared and submitted an Annual Summary Report (provided herein).
- Delta to prepare and submit Soil Vapor Sampling Report and Request for Case Closure on or before November 12, 2010.
- If ACEH concurs with closure request, Delta to conduct well destruction activities.

REMARKS

The descriptions, conclusions, and recommendations contained in this report represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. For any reports cited that were not generated by Delta, the data from those reports is used "as is" and is assumed to be accurate. Delta does not guarantee the accuracy of this data for the referenced work performed nor the inferences or conclusions stated in these reports. This report is based upon a specific scope of work requested by the client. The Contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were conducted. This report is intended only for the use of Delta's Client and anyone else specifically listed on this report. Delta will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Delta makes no express or implied warranty as to the contents of this report.

CONSULTANT: Delta Consultants

REFERENCES

- Kapreallian Engineering Inc., Stockpiled Soil Sampling for BP Service Station 3255

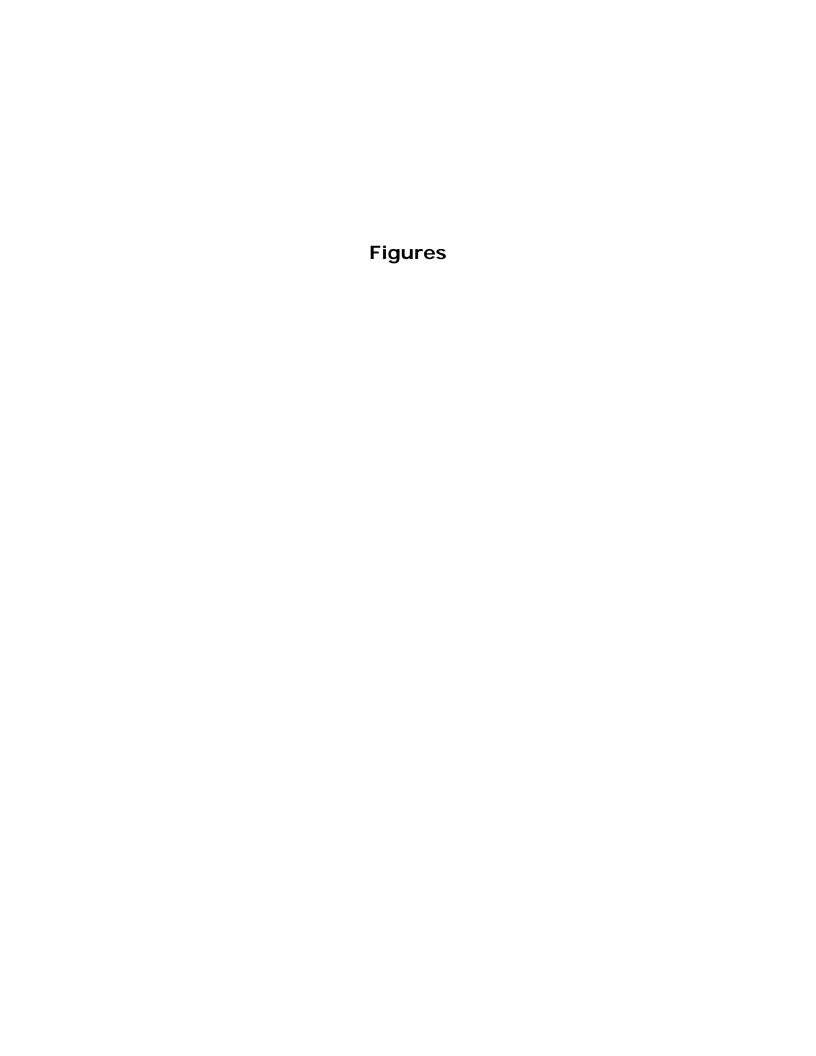
 McCartney Road, Alameda, California, July 13, 1990.
- Kapreallian Engineering Inc., Soil Sampling Report, BP Service Station 3255 McCartney Road, Alameda, California, July 16, 1990.
- Hydro-Environmental Technologies, Inc., *Preliminary Site Assessment Report, BP Oil Company, U.S.A., BP Oil Service Station No. 11270, 3255 McCartney Road, Alameda, California,* January 7, 1993.
- BP Oil Company, RE: BP OIL # 11270, 3255 Mecartney Road, Alameda, May 4, 1993.
- Emcon, Baseline Assessment Report, Site Number 11270, 3255 Mecartney Road, Alameda, California, December 27, 1994.
- Hydro-Environmental Technologies, Inc., Subsurface Investigation Report, BP Service Station No. 11270, 3255 Mecartney Road, Alameda, California, March 22, 1995.
- Emcon, Addendum to the Baseline Assessment Report, Site Number 11270, 3255 Mecartney Road, Alameda, California, July 28, 1998.
- Brabb, E.E., Graymer, R.W., Jones, D.L. Geology of the Onshore Part of San Mateo County, California: A Digital Database, OF98-137. 1998.
- RWQCB San Francisco Bay Region Groundwater Committee, East Bay Plain Groundwater Basin Beneficial Use Evaluation Report, Alameda and Contra Costa Counties, California, June 1999.
- Environmental Resolutions Inc., *Underground Storage Tank Removal at Tosco BP Service Station 11270, 3255 Mecartney Road, Alameda, California*, October 23, 1998.
- BP Oil Company, Correspondence Letter: Former BP Oil Site No. 11207, 3255 Mecartney Road, Alameda, CA, May 30, 2000.
- SECOR International Incorporated, Removal and Replacement of Product Lines and Dispensers, Tosco (Former BP) Service Station #11270, 3255 Mecartney Road, Alameda, California, September 5, 2000.
- Alameda County Health Care Services Agency, Correspondence Letter: Subject: Intent to Make a Determination That No Further Action is Required OR Issue a Closure Letter for 3255 Mecartney Rd., Alameda, CA, 94501, October 31, 2001.

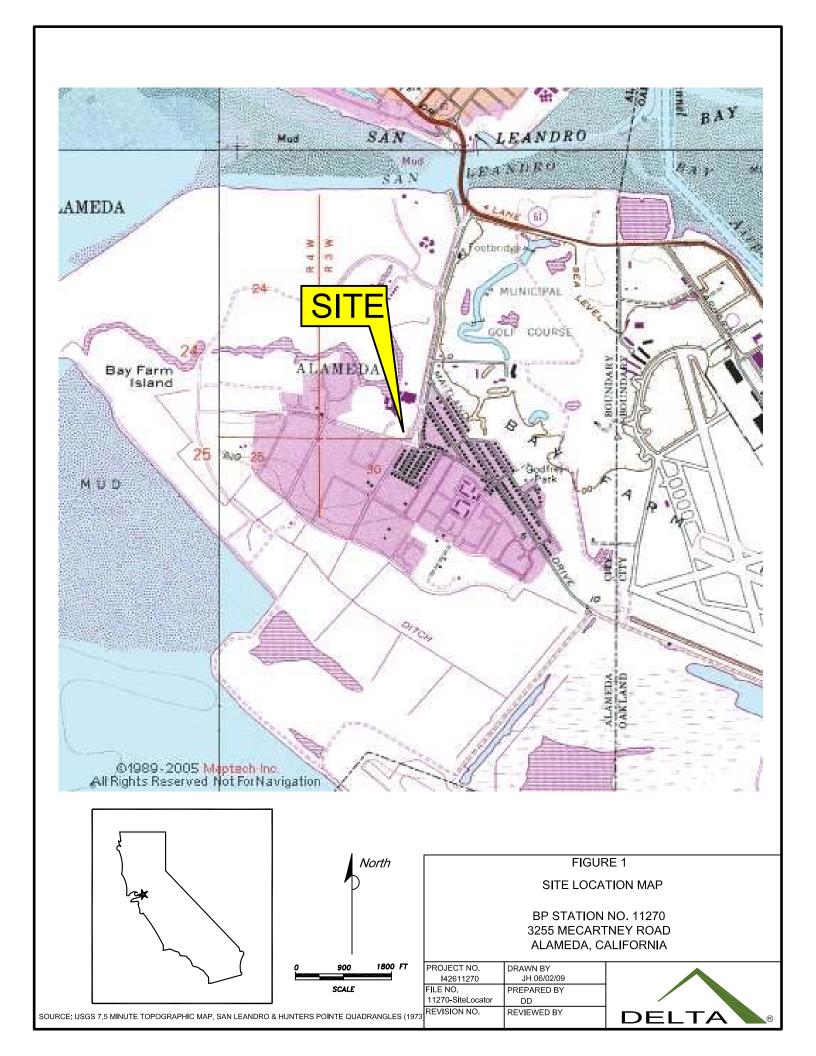
- BP Oil Company, Correspondence Letter: Former BP Oil Site No. 11207, 3255 Mecartney Road, Alameda, CA, November 7, 2001.
- URS, Case Closure Summary, Case #RO0000511, Former BP Service Station #11270, 3255

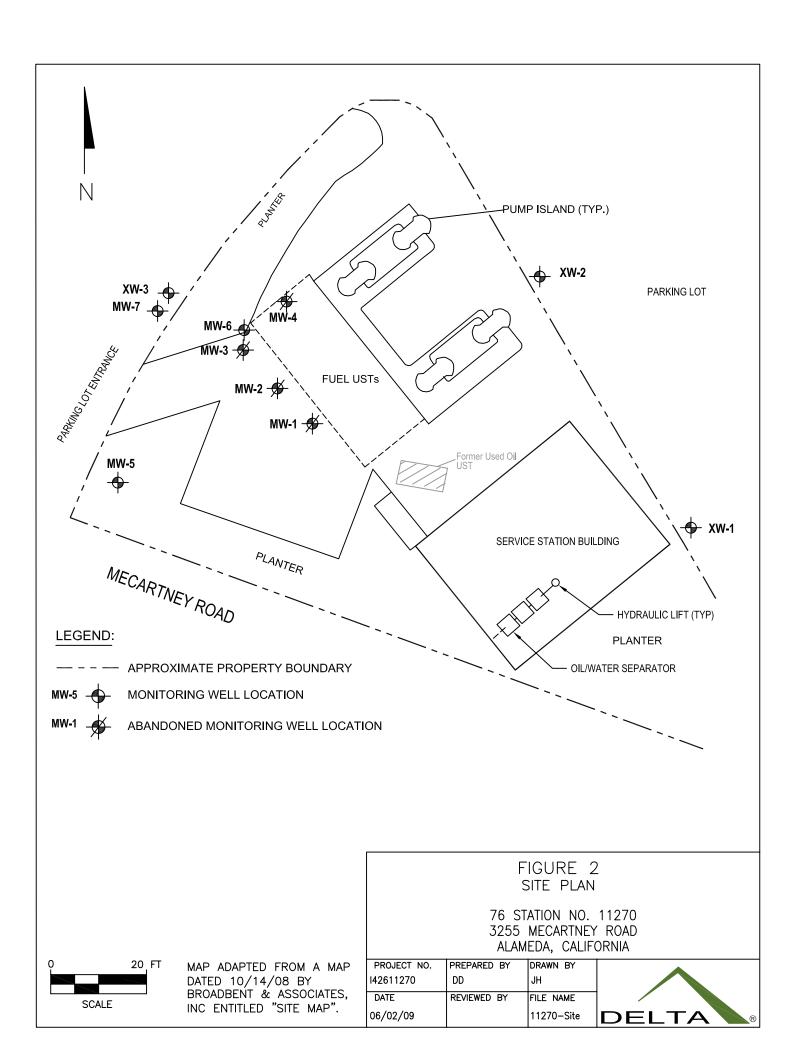
 Mecartney Road, Alameda, California, October 27, 2004.
- California Regional Quality Control Board, San Francisco Bay Region. *Screening for Environmental Concerns at Site with Contaminated Soil and Groundwater*, March 2008.
- Broadbent & Associates, Inc., On-Site Soil Investigation with Preferential Pathway Evaluation Report, Former BP Service Station #11270, 3255 Mecartney Road, Alameda, California, April 30, 2009.
- Alameda County Health Care Services Agency, Correspondence Letter: Subject: Fuel Leak

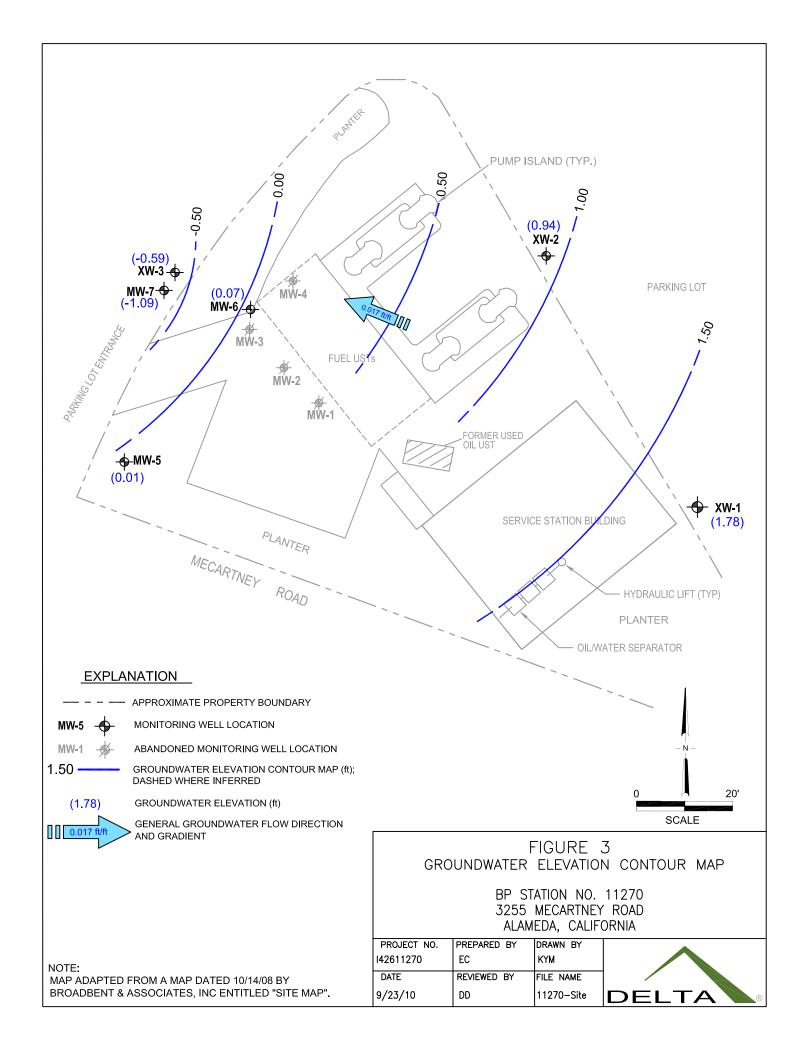
 Case No. RO0000511 and GeoTracker Global ID T0600101198, BP #11270, 3255

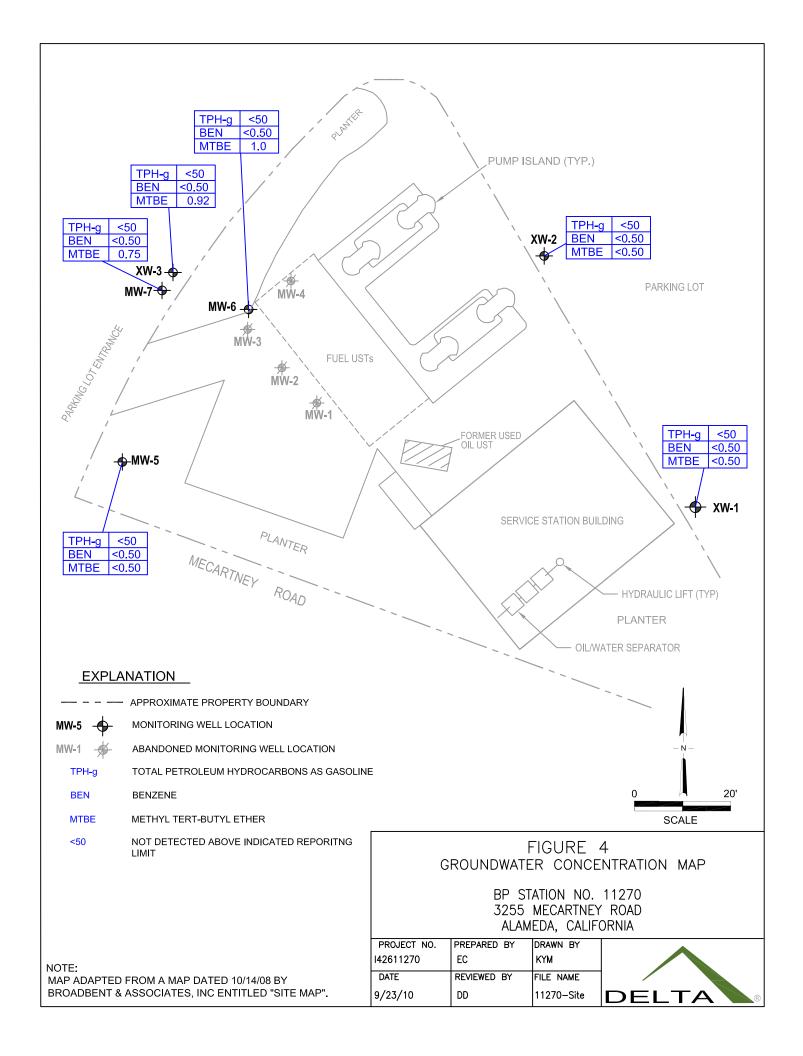
 Mecartney Rd., Alameda, CA, 94501, May 8, 2009.
- Delta Consultants, *Site Assessment Report, 76 Service Station No. 11270, 3255 Mecartney Road, Alameda, California,* February 16, 2010.











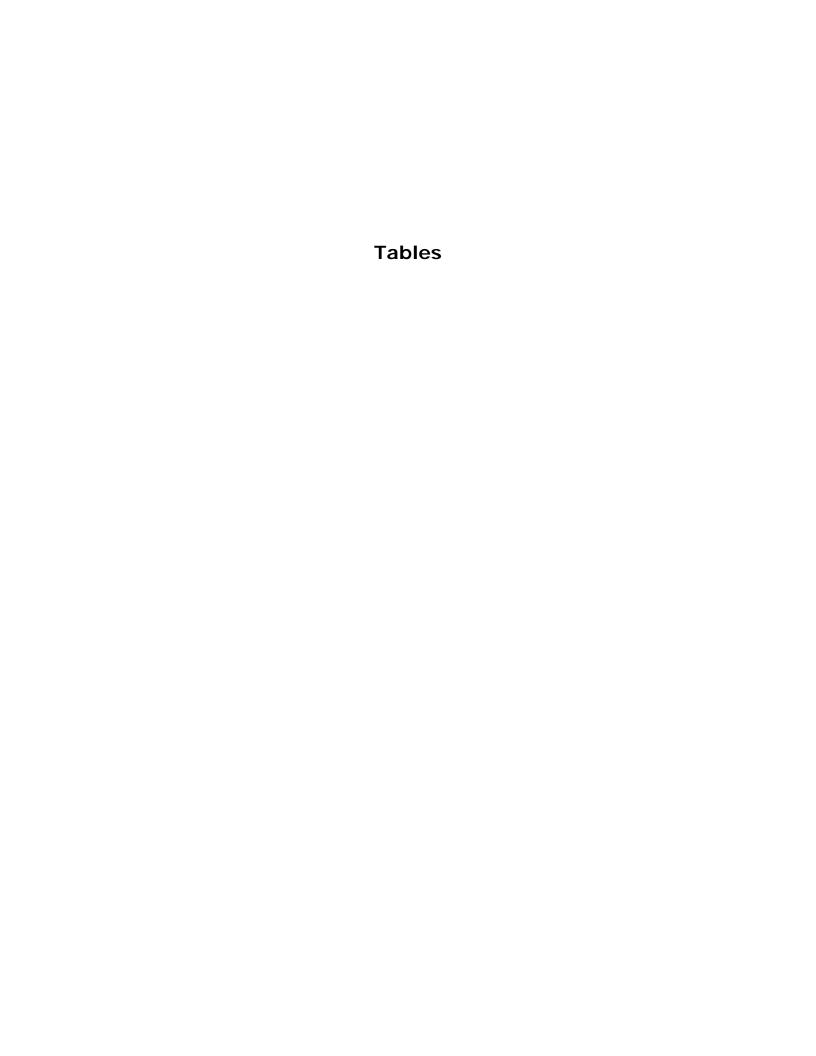




TABLE 1 CURRENT GROUND WATER GAUGING AND ANALYTICAL DATA COP ELT 2611270 3255 MCCARTNEY RD ALAMEDA, CALIFORNIA

			GROUND WATE	R GAUGING DAT	Ά						G	ROUND WATER	ANALYTICAL DA	TA					
Well I.D.	Date	TOC Elevation (ft)	Depth to Water (ft)		Water Elevation* (ft)	TPH-g (8260 GC/MS) (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8260B) (ug/L)	TBA (ug/L)	Ethanol (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	1,2- Dibromoethane (EDB) (ug/L)	1,2- Dichloroethane (ug/L)	Oxygen, Dissolved (mg/L)
MW-5	7/6/2010	8.36	8.35	NP	0.01	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	<5.0	<250	<0.50	<0.50	<0.50	<1.0	<1.0	1.7
MW-6	7/6/2010	6.88	6.81	NP	0.07	<50.0	<0.50	<0.50	<0.50	<1.5	1.0	<5.0	<250	<0.50	<0.50	<0.50	<1.0	<1.0	1.58
MW-7	7/6/2010	6.62	7.71	NP	-1.09	<50.0	<0.50	<0.50	<0.50	<1.5	0.75	<5.0	<250	<0.50	<0.50	<0.50	<1.0	<1.0	0.98
XW-1	7/6/2010	7.49	5.71	NP	1.78	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	<5.0	<250	<0.50	<0.50	<0.50	<1.0	<1.0	0.72
XW-2	7/6/2010	7.48	6.54	NP	0.94	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	<5.0	<250	<0.50	<0.50	<0.50	<1.0	<1.0	1.51
XW-3	7/6/2010	6.84	7.43	NP	-0.59	<50.0	<0.50	<0.50	<0.50	<1.5	0.92	<5.0	<250	<0.50	<0.50	<0.50	<1.0	<1.0	1.24

Gauging Notes:

TOC - Top of Casing

ft - Feet

NP - LNAPL not present

LNAPL - Light non-aqueous phase liquid

* - Corrected for LNAPL if present (assumes LNAPL specific gravity = 0.75)

NSVD - Not surveyed

-- - No information available

NGV - No guidance value

Analytical Notes:

< - Not detected at or above indicated laboratory reporting limit

NS - Well not sampled.

ug/L - micrograms/liter



TABLE 2 HISTORICAL GROUND WATER GAUGING AND ANALYTICAL DATA COP ELT 2611270 3255 MCCARTNEY RD ALAMEDA, CALIFORNIA

		(GROUND WATER	R GAUGING DATA	A								GROUND	WATER ANALYT	ICAL DATA							
Well I.D.	Date	TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	Total Purgeable Hydrocarbons (ug/L)	TPH-g (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (ug/L)	TBA (ug/L)	Ethanol (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	1,2- Dibromoethane (EDB) (ug/L)	1,2- Dichloroethane (ug/L)	Diesel Range Organics (ug/L)	Oxygen, Dissolved (mg/L
	10/29/1992	7.49	7.28	NP	0.21																	
	6/21/1993	7.49	5.40	NP	2.09																	
MW-1	4/5/1994	7.49	5.64	NP	1.85		1700	20	1.1	3.9	7.6											
	7/28/1994	7.49	6.22	NP	1.27																	
	10/26/1994	7.49	6.40	NP	1.09																	
	2/5/1995	7.49	NG 0.04	NG NP	NG 0.00																	
	10/29/1992 6/21/1993	7.07 7.07	6.84 5.49	NP NP	0.23 1.58		2500 720	140	<10 1.5	65	22 12										3900 770	
	4/5/1994	7.07	5.49	NP NP	1.67		420	12 <0.50	<0.50	11 <0.50	4	4500	4500								1300	1.8
MW-2	7/28/1994	7.07	5.97	NP	1.10																	
	10/26/1994	7.07	6.10	NP	0.97																	
	2/2/1995	7.07	NG	NG	NG																	
	10/29/1992	7.08	7.14	NP	-0.06																	
	6/21/1993	7.08	5.84	NP	1.24																	
MW-3	4/5/1994	7.08	5.83	NP	1.25		990	3.2	<0.50	<0.50	1.3	790	790								4300	
IVIVV-3	7/28/1994	7.08	6.32	NP	0.76																	
	10/26/1994	7.08	6.42	NP	0.66																	
	2/2/1995	7.08	NG	NG	NG																	
	10/29/1992	7.13	6.90	NP	0.23		2600	250	2.5	74	6.6											
	6/21/1993	7.13	5.54	NP	1.59		1400	24	2.9	2.6	7.9										1100	
MW-4	4/5/1994	7.13	5.46	NP	1.67		930	33	0.8	<0.50	2.8	8700	8700								940	2.7
	7/28/1994	7.13	6.02	NP	1.11		2400	19	1.8	0.5	8										1400	6.7
	10/26/1994	7.13	6.13	NP	1.00																	
	2/5/1995	7.13	NG	NG	NG																	
	6/21/1993	8.36	7.44	NP	0.92		<50	<0.50	<0.50	<0.50	<0.50										100	
	4/5/1994	8.36 8.36	7.42 7.88	NP NP	0.94		<50 <50	<0.50	<0.50 <0.50	<0.50	<0.50										100	2.5 7.4
	7/28/1994 10/26/1994	8.36	7.88	NP NP	0.48 0.44		<50 <50	<0.50 <0.50	<0.50	<0.50 <0.50	<0.50 <0.50										<50 160	5.5
	2/5/1995	8.36	7.83	NP	0.53		<50	<0.25	<0.25	<0.25	<0.50										<500	
	5/5/1995	8.36	9.00	NP	-0.64		<50	<0.50	<0.50	<0.50	<1.0											3.1
	7/19/1995	8.36	9.03	NP	-0.67		<50	<0.50	<0.50	<0.50	<1.0											4.6
	10/12/1995	8.36	9.15	NP	-0.79		<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5.0									4.3
MW-5	1/8/1996	8.36	9.04	NP	-0.68		<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5.0									4.9
G-AAIAI	9/11/1997	8.36	8.90	NP	-0.54		<50	<0.50	<1.0	<1.0	<1.0	<10	<10									4
	1/27/1998	8.36	8.27	NP	0.09																	
	4/19/1998	8.36	8.60	NP	-0.24																	
	9/27/2000	8.36	8.68	NP	-0.32																	
	3/21/2001	8.36	8.13	NP	0.23																	
	9/18/2001	8.36	NG	NG	NG																	
	9/19/2008	8.36	8.93	NP	-0.57		<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<300	<0.50	<0.50	<0.50	<0.50	<0.50		
	7/22/2009	8.36	8.85	NP NP	-0.49	<50	 -50.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<300	<0.50	<0.50	<0.50	<0.50	<0.50		1.7
-	7/6/2010	8.36 6.88	8.35 6.39	NP NP	0.01 0.49		<50.0 1000	<0.50	<0.50 19	<0.50 9.1	<1.5 96		<0.50	<5.0	<250	<0.50	<0.50	<0.50	<1.0	<1.0	1000	1. <i>7</i>
	2/5/1995 5/5/1995	6.88	6.85	NP NP	0.49		2300	7.6 49	9	130	96 46										1000	3.3
	7/19/1995	6.88	7.13	NP	-0.25		1500	84	3.3	28	24											3.7
	10/12/1995	6.88	7.35	NP	-0.47		1800	38	13	38	86	2500	2500									4.1
	1/8/1996	6.88	7.04	NP	-0.16		1300	31	4.7	60	53	170	170									4.2
	9/11/1997	6.88	7.29	NP	-0.41		<250	8.5	<5.0	11	6	1400	1400									3.5
MW-6	1/27/1998	6.88	6.20	NP	0.68		47000	350	150	360	690	38000	38000			-						4.6
IVIVV-0	4/19/1998	6.88	6.64	NP	0.24		36000	40	510	140	10500	660	660									4
	9/27/2000	6.88	6.99	NP	-0.11		1400	6.9	19	110	53	33	33									
	3/21/2001	6.88	6.36	NP	0.52		330	2.2	1.42	50.4	10.2	56.3	56.3									
	9/18/2001	6.88	7.11	NP	-0.23		290	0.957	<5.0	11.2	6.83	50.7	50.7									
	9/19/2008	6.88	7.31	NP	-0.43		83	<0.50	4.1	2	17	3.4	3.4	<10	<300	<0.50	<0.50	<0.50	<0.50	<0.50		
	7/22/2009	6.88	7.27	NP	-0.39	<50		<0.50	<0.50	<0.50	<1.0	2.6	2.6	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50		
	7/6/2010	6.88	6.81	NP	0.07		<50.0	<0.50	<0.50	<0.50	<1.5		1	<5.0	<250	<0.50	<0.50	<0.50	<1.0	<1.0		1.58
	2/5/1995	6.62	7.62	NP	-1.00		280	<0.25	<0.25	<0.25	<0.50										<500	5.1
MW-7	5/5/1995	6.62	7.64	NP	-1.02		290	<0.50	<0.50	<0.50	<1.0											3.6
	7/19/1995	6.62	7.70	NP	-1.08		150	<0.50	<0.50	<0.50	<1.0											4.6
	10/12/1995	6.62	7.88	NP	-1.26		110	<0.50	<0.50	<0.50	<1.0	390	390									4.7



TABLE 2 HISTORICAL GROUND WATER GAUGING AND ANALYTICAL DATA COP ELT 2611270 3255 MCCARTNEY RD ALAMEDA, CALIFORNIA

		(GROUND WATER	R GAUGING DATA	Α								GROUND	WATER ANALYT	ICAL DATA							
Well I.D.	Date	TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	Total Purgeable Hydrocarbons (ug/L)	TPH-g (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (ug/L)	TBA (ug/L)	Ethanol (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	1,2- Dibromoethane (EDB) (ug/L)	1,2- Dichloroethane (ug/L)	Diesel Range Organics (ug/L)	Oxygen, Dissolved (mg/L
	1/8/1996	6.62	7.66	NP	-1.04		9	<0.50	<0.50	<0.50	<1.0	300	300	-			-	-				4.9
	9/11/1997	6.62	7.78	NP	-1.16		<50	<2.5	<5.0	<5.0	<5.0	63	63									3.8
	1/27/1998	6.62	7.30	NP	-0.68		1400	7.7	<1.0	<1.0	<1.0	920	920				-					4.4
	4/19/1998 9/27/2000	6.62 6.62	7.52 7.71	NP NP	-0.90 -1.09		3500 <50	15 <0.50	7.7 <0.50	11 <0.50	19.3 <0.50	3600 71	3600 71									4.7
MW-7	3/21/2001	6.62	7.62	NP	-1.00																	
	3/29/2001	6.62	7.57	NP	-0.95		80	<0.50	<0.50	<0.50	<1.5	88.2	88.2									
	9/18/2001	6.62	7.74	NP	-1.12		<250	<2.5	<2.5	<2.5	<7.5	36.6	36.6									
	9/19/2008	6.62	7.81	NP	-1.19		<50	<0.50	<0.50	<0.50	<0.50	1.6	1.6	<10	<300	<0.50	<0.50	<0.50	<0.50	<0.50		
	7/22/2009	6.62	7.70	NP	-1.08	<50		<0.50	<0.50	<0.50	<1.0	1.2	1.2	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50		
	7/6/2010	6.62	7.71	NP	-1.09		<50.0	<0.50	<0.50	<0.50	<1.5		0.75	<5.0	<250	<0.50	<0.50	<0.50	<1.0	<1.0		0.98
	6/21/1993 4/5/1994	NSVD NSVD	NG 5.36	NG NP	NG NSVD		<50	<0.50	<0.50	<0.50	<0.50										70	3
	7/28/1994	NSVD	5.92	NP	NSVD														-			
	10/26/1994	NSVD	6.05	NP	NSVD																	
	2/5/1995	7.49	5.82	NP	1.67		<50	<0.25	<0.25	<0.25	<0.50										<500	4.9
	5/5/1995	7.49	5.57	NP	1.92										-							
	7/19/1995	7.49	6.12	NP	1.37		<50	<0.50	<0.50	<0.50	<1.0											4.3
	10/12/1995	7.49	6.82	NP	0.67		<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5.0								-	3.8
XW-1	1/8/1996 9/11/1997	7.49 7.49	6.11 6.57	NP NP	1.38 0.92		<50 <50	<0.50 <0.50	<0.50 <1.0	<0.50 <1.0	<1.0 <1.0	<5.0 <10	<5.0 <10									4.7 3.3
	1/27/1998	7.49	5.27	NP	2.22																	
	4/19/1998	7.49	5.24	NP	2.25																	
	9/27/2000	7.49	6.13	NP	1.36					-		-										
	3/21/2001	7.49	5.97	NP	1.52																	
	9/18/2001	7.49	6.59	NP	0.90																	
	9/19/2008	7.49	6.76	NP	0.73		<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<300	<0.50	<0.50	<0.50	<0.50	<0.50		
	7/22/2009 7/6/2010	7.49 7.49	6.65 5.71	NP NP	0.84 1.78	<50 	<50.0	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<1.0 <1.5	<0.50	<0.50 <0.50	<10 <5.0	<250 <250	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <1.0	<0.50 <1.0		0.72
	6/21/1993	7.48	5.89	NP	1.59																	
	4/5/1994	7.48	5.77	NP	1.71		<50	<0.50	<0.50	<0.50	<0.50										160	3
	7/28/1994	7.48	6.25	NP	1.23																	
	10/26/1994	7.48	6.39	NP	1.09																	
	2/5/1995	7.48	5.62	NP	1.86		<50	<0.25	0.38	<0.25	<0.50										<500	5.2
	5/5/1995 7/19/1995	7.48 7.48	5.66 6.80	NP NP	1.82 0.68		<50	<0.50	<0.50	<0.50	<1.0											3.9
	10/12/1995	7.48	7.21	NP	0.00		<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5.0	-								4.3
VIII 0	1/8/1996	7.48	6.79	NP	0.69		<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5.0									4.2
XW-2	9/11/1997	7.48	6.86	NP	0.62		<50	<0.50	<1.0	<1.0	<1.0	<10	<10									3.6
	1/27/1998	7.48	5.88	NP	1.60																	
	4/19/1998	7.48	5.42	NP	2.06																	
	9/27/2000	7.48 7.48	6.86	NP NP	0.62																	
	3/21/2001 9/18/2001	7.48	6.60 7.15	NP NP	0.88																	
	9/19/2008	7.48	7.13	NP	0.09		<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<300	<0.50	<0.50	<0.50	<0.50	<0.50		
	7/22/2009	7.48	7.23	NP	0.25	<50		1.5	11	1.9	12	<0.50	<0.50	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50		
	7/6/2010	7.48	6.54	NP	0.94		<50.0	<0.50	<0.50	<0.50	<1.5		<0.50	<5.0	<250	<0.50	<0.50	<0.50	<1.0	<1.0		1.51
	6/21/1993	6.84	5.85	NP	0.99			-													-	
	4/5/1994	6.84	5.85	NP	0.99		<50	<0.50	0.7	<0.50	<0.50										150	3.1
	7/28/1994	6.84	6.28	NP NP	0.56																	
	10/26/1994 2/5/1995	6.84	6.40 7.23	NP NP	0.44 -0.39		280	<0.50	<0.50	0.63	<1.0										 <500	4.9
	5/5/1995	6.84	7.43	NP	-0.59										-							
XW-3	7/19/1995	6.84	7.60	NP	-0.76		400	<0.50	<0.50	<0.50	<1.0										-	43
	10/12/1995	6.84	7.74	NP	-0.90		130	<0.50	<0.50	<0.50	<1.0	480	480								-	4.7
	1/8/1996	6.84	7.58	NP	-0.74		320	<2.5	<2.5	<2.5	<5.0	1100	1100		-							4.4
	1/27/1998	6.84	7.01	NP	-0.17		1200	2.8	<1.0	<1.0	<1.0	990	990									4.3
	4/19/1998	6.84	7.28	NP ND	-0.44		4500	<2.5	<5.0	<5.0	<5.0	4800	4800									4.3
	9/27/2000 3/21/2001	6.84	7.59 7.35	NP NP	-0.75 -0.51		<50 <250	<0.50	<0.50 <2.5	<0.50 <2.5	<0.50 <7.5	35 61.7	35 61.7		-							
I	3/21/2001	0.84	1.35	INP	-0.51		<200	<2.5	<2.5	<2.5	<1.5	01.7	01./						1			



TABLE 2 HISTORICAL GROUND WATER GAUGING AND ANALYTICAL DATA COP ELT 2611270 3255 MCCARTNEY RD ALAMEDA, CALIFORNIA

			GROUND WATER	R GAUGING DAT	A								GROUND V	VATER ANALYT	ICAL DATA							
Well I.D.	Date	TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	Total Purgeable Hydrocarbons (ug/L)	TPH-g (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (ug/L)	TBA (ug/L)	Ethanol (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	1,2- Dibromoethane (EDB) (ug/L)	1,2- Dichloroethane (ug/L)	Diesel Range Organics (ug/L)	Oxygen, Dissolved (mg/L)
	9/18/2001	6.84	7.70	NP	-0.86		<250	<2.5	<2.5	<2.5	<7.5	23.4	23.4				-					
XW-3	9/19/2008	6.84	7.90	NP	-1.06		<50	<0.50	<0.50	<0.50	<0.50	1.3	1.3	<10	<300	<0.50	<0.50	<0.50	<0.50	<0.50		
744-2	7/22/2009	6.84	7.70	NP	-0.86	<50		<0.50	<0.50	<0.50	<1.0	1.4	1.4	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50		
	7/6/2010	6.84	7.43	NP	-0.59		<50.0	<0.50	<0.50	<0.50	<1.5		0.92	<5.0	<250	<0.50	<0.50	<0.50	<1.0	<1.0		1.24
	4/5/1994	NSVD	NG	NG	NG		<50	<0.50	<0.50	<0.50	<0.50						-					
	7/28/1994	NSVD	NG	NG	NG		2300	19	1.7	0.5	7.4											
	10/26/1994	NSVD	NG	NG	NG		<50	<0.50	0.5	<0.50	<0.50											
	2/5/1995	NSVD	NG	NG	NG		<50	<0.25	<0.25	<0.25	<0.50											
	5/5/1995	NSVD	NG	NG	NG		2400	49	9.2	140	48											
QC-1	7/19/1995	NSVD	NG	NG	NG		1500	89	3.8	30	26											
	10/12/1995	NSVD	NG	NG	NG		1100	33	7	18	44	2200	2200									
	1/8/1996	NSVD	NG	NG	NG		1000	27	4	49	44	150	150									
	9/11/1997	NSVD	NG	NG	NG		210	8.7	<5.0	14	8	1400	1400									
	1/27/1998	NSVD	NG	NG	NG		51000	190	120	300	580	35000	35000									
	4/19/1998	NSVD	NG	NG	NG		24000	20	360	81	7100	480	480									
	4/5/1994	NSVD	NG	NG	NG		<50	<0.50	<0.50	<0.50	<0.50											
	7/28/1994	NSVD	NG	NG	NG		<50	<0.50	<0.50	<0.50	<0.50											
	10/26/1994	NSVD	NG	NG	NG		<50	<0.50	<0.50	<0.50	<0.50											
QC-2	2/5/1995	NSVD	NG	NG	NG		<50	<0.25	<0.25	<0.25	<0.50											
202	5/5/1995	NSVD	NG	NG	NG		<50	<0.50	<0.50	<0.50	<1.0											
	7/19/1995	NSVD	NG	NG	NG		<50	<0.50	<0.50	<0.50	<1.0											
	10/12/1995	NSVD	NG	NG	NG		<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5.0									
	1/8/1996	NSVD	NG	NG	NG		<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5.0									

Gauging Notes:

TOC - Top of Casing

ft - Feet

NP - LNAPL not present

LNAPL - Light non-aqueous phase liquid

* - Corrected for LNAPL if present (assumes LNAPL specific gravity = 0.75)

NG - Not gauged

NSVD - Not surveyed

-- - No information available NGV - No guidance value Analytical Notes:

-- - No information available

< - Not detected at or above indicated laboratory reporting limit

LPH - Liquid Phase Hydrocarbons

NL - Well Not Located

NO - Natural Obstruction (ice, snow, flooded, etc)

NS - Well not sampled. UG/L - micrograms/liter WD - Well Destroyed

WI - Well Inaccessable

Attachment A

Groundwater Flow Direction Rose Diagram

TABLE 2 Groundwater Gradient and Flow Direction

BP Station Number 11270 3255 Mecartney Road Alameda, California

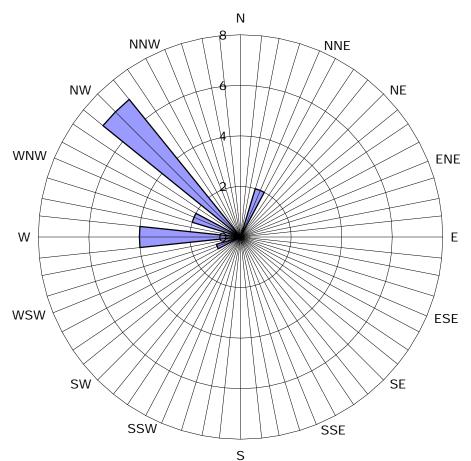
Site	Monitoring Date	Groundwater Gradient						Gro	undv	vater	Flow	Direct	ion					
		(feet per foot)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
11270	10/26/94	0.03	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	02/05/95	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	05/05/95	0.03	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	01/08/96	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	09/11/97	0.01	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	01/27/98	0.02 ; 0.07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	04/19/98	0.03	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	07/29/99	0.06	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10/18/99	0.06	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	01/12/00	0.07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	09/27/00	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	03/21/01	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	09/18/01	0.01	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	09/18/08	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	07/22/09	0.013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	07/06/10	0.017	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0.028 Average	_	2	0	0	0	0	0	0	0	0	0	1	4	2	7	0

Explanation

NA = Not available Number of Events = 16

Historic Groundwater Flow Directions BP Station No. 11270

3255 Mecartney Road Alameda, California



Legend
Groundwater flow directions are based on data from the Fourth
Quarter 1994 to the Third Quarter 2010. 16 data points shown.

■ Groundwater Flow Direction

Attachment B

Groundwater Sampling Laboratory Report





July 20, 2010

Lia Holden ELT-Delta Consultants 312 Piercy Rd San Jose, CA 95138

RE: Project: 2611270 Mecartney Pace Project No.: 254168

Dear Lia Holden:

Enclosed are the analytical results for sample(s) received by the laboratory on July 07, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Regina SteMarie

Regina Ste. Marie

regina.stemarie@pacelabs.com Project Manager

Enclosures

cc: Tara Bosch, ELT_Delta Consultants Sacramento
Dennis Dettloff, ELT_Delta Consultants Sacramen
Jonathon Fillingame, ELT_Delta Consultants Sacramento
Josh Mahoney, ELT_Delta Consultants San Jose
Tony Perini, ELT_Delta Consultants San Jose
Nicole Persaud, ELT-Delta Consultants
Don Pinkerton, ELT_Delta Consultants
Dould Sowle, Delta Consultants
Doug Umland, ELT_Delta Consultants San Jose
Ed Weyrens, ELT_Delta Consultants San Jose







CERTIFICATIONS

Project: 2611270 Mecartney

Pace Project No.: 254168

Washington Certification IDs

940 South Harney Street, Seattle, WA 98108
Alaska CS Certification #: UST-025
Alaska Drinking Water VOC Certification #: WA01230
Alaska Drinking Water Micro Certification #: WA01230

California Certification #: 01153CA Florida/NELAP Certification #: E87617 Oregon Certification #: WA200007 Washington Certification #: C1229





SAMPLE ANALYTE COUNT

Project: 2611270 Mecartney

Pace Project No.: 254168

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
254168001	MW-5_20100730	EPA 5030B/8260	LPM	16	PASI-S
		CA LUFT	LPM	2	PASI-S
254168002	MW-6_20100730	EPA 5030B/8260	LPM	16	PASI-S
		CA LUFT	LPM	2	PASI-S
254168003	MW-7_20100730	EPA 5030B/8260	LPM	16	PASI-S
		CA LUFT	LPM	2	PASI-S
254168004	XW-1_20100730	EPA 5030B/8260	LPM	16	PASI-S
		CA LUFT	LPM	2	PASI-S
254168005	XW-2_20100730	EPA 5030B/8260	LPM	16	PASI-S
		CA LUFT	LNH	2	PASI-S
254168006	XW-3_20100730	EPA 5030B/8260	LPM	16	PASI-S
		CA LUFT	LPM	2	PASI-S
254168007	TB1_20100730	EPA 5030B/8260	LPM	16	PASI-S
		CA LUFT	LPM	2	PASI-S





Project: 2611270 Mecartney

Pace Project No.: 254168

Sample: MW-5_20100730	Lab ID:	254168001	Collected: 07/06/1	10 12:35	Received: 0	7/07/10 10:00	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
3260 MSV	Analytical	Method: EPA 5	030B/8260					
tert-Amylmethyl ether	NI	0 ug/L	0.50	1		07/10/10 05:56	994-05-8	
Benzene	NI	0 ug/L	0.50	1		07/10/10 05:56	71-43-2	
tert-Butyl Alcohol	NI	0 ug/L	5.0	1		07/10/10 05:56	75-65-0	
1,2-Dibromoethane (EDB)	NI	0 ug/L	1.0	1		07/10/10 05:56	106-93-4	
1,2-Dichloroethane	NI) ug/L	1.0	1		07/10/10 05:56	107-06-2	
Diisopropyl ether	NI) ug/L	0.50	1		07/10/10 05:56	108-20-3	
Ethanol) ug/L	250	1		07/10/10 05:56	64-17-5	
Ethylbenzene) ug/L	0.50	1		07/10/10 05:56	100-41-4	
Ethyl-tert-butyl ether) ug/L	0.50	1		07/10/10 05:56	637-92-3	
Methyl-tert-butyl ether		O ug/L	0.50	1		07/10/10 05:56		
Toluene		D ug/L	0.50	1		07/10/10 05:56		
Xylene (Total)		D ug/L	1.5	1		07/10/10 05:56		
4-Bromofluorobenzene (S)		7 %	80-120	1		07/10/10 05:56		
Dibromofluoromethane (S)	_	3 %	80-122	1		07/10/10 05:56		
1,2-Dichloroethane-d4 (S)		1 %	80-124	1		07/10/10 05:56		
Toluene-d8 (S)) %	80-123	1		07/10/10 05:56		
CA LUFT MSV GRO		Method: CA LU		'		07710710 00.00	2007 20 0	
	-					07/40/40 05 56		_
			50.0	1		07/10/10 05:56	j	B-
4-Bromofluorobenzene (S)	8	o ug/L 7 % 	82-116	1	Received: 0	07/10/10 05:56	6 460-00-4	
4-Bromofluorobenzene (S)	8	J		1	Received: 0	07/10/10 05:56		
4-Bromofluorobenzene (S) Sample: MW-6_20100730 Parameters	Lab ID:	254168002	82-116 Collected: 07/06/1 Report Limit	1 10 12:45		07/10/10 05:56	Matrix: Water	
8260 MSV	Lab ID: Results Analytical	254168002 Units Method: EPA 56	82-116 Collected: 07/06/1 Report Limit 030B/8260	1 10 12:45 DF		07/10/10 05:56 07/07/10 10:00 Analyzed	Matrix: Water CAS No.	Qua
4-Bromofluorobenzene (S) Sample: MW-6_20100730 Parameters 8260 MSV tert-Amylmethyl ether	Lab ID: Results Analytical	254168002 Units Method: EPA 50	82-116 Collected: 07/06/1 Report Limit 030B/8260 0.50	1 10 12:45 DF		07/10/10 05:56 07/07/10 10:00 I Analyzed 07/10/10 06:16	Matrix: Water CAS No. 994-05-8	
4-Bromofluorobenzene (S) Sample: MW-6_20100730 Parameters 8260 MSV tert-Amylmethyl ether Benzene	Lab ID: Results Analytical NI	254168002 Units Method: EPA 50 O ug/L O ug/L	82-116 Collected: 07/06/1 Report Limit 030B/8260 0.50 0.50	1 10 12:45 DF 1 1		07/10/10 05:56 07/07/10 10:00 I Analyzed 07/10/10 06:16 07/10/10 06:16	Matrix: Water CAS No. 994-05-8 71-43-2	
4-Bromofluorobenzene (S) Sample: MW-6_20100730 Parameters 8260 MSV tert-Amylmethyl ether Benzene tert-Butyl Alcohol	Lab ID: Results Analytical NI NI	254168002 Units Method: EPA 50 0 ug/L 0 ug/L 0 ug/L	82-116 Collected: 07/06/1 Report Limit 030B/8260 0.50 0.50 5.0	1 I0 12:45 DF 1 1 1		07/10/10 05:56 07/07/10 10:00 I Analyzed 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16	Matrix: Water CAS No. 994-05-8 71-43-2 75-65-0	
4-Bromofluorobenzene (S) Sample: MW-6_20100730 Parameters 8260 MSV tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB)	Lab ID: Results Analytical NI NI	254168002 Units Method: EPA 50 Ug/L Ug/L Ug/L Ug/L Ug/L	82-116 Collected: 07/06/1 Report Limit 030B/8260 0.50 0.50 5.0 1.0	1 IO 12:45 DF 1 1 1 1		07/10/10 05:56 07/07/10 10:00 I Analyzed 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16	Matrix: Water CAS No. 994-05-8 6 71-43-2 6 75-65-0 6 106-93-4	
4-Bromofluorobenzene (S) Sample: MW-6_20100730 Parameters 8260 MSV tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane	Lab ID: Results Analytical NI NI NI	254168002 Units Method: EPA 56 Ug/L Ug/L Ug/L Ug/L Ug/L Ug/L Ug/L	82-116 Collected: 07/06/1 Report Limit 030B/8260 0.50 0.50 5.0 1.0 1.0	1 IO 12:45 DF 1 1 1 1		07/10/10 05:56 07/07/10 10:00 I Analyzed 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16	Matrix: Water CAS No. 994-05-8 6 71-43-2 6 75-65-0 6 106-93-4 6 107-06-2	
4-Bromofluorobenzene (S) Sample: MW-6_20100730 Parameters 8260 MSV tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether	Lab ID: Results Analytical NI NI NI NI	254168002 Units Method: EPA 56 ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	82-116 Collected: 07/06/1 Report Limit 030B/8260 0.50 0.50 1.0 1.0 0.50	1 DF 1 1 1 1 1 1		07/10/10 05:56 07/07/10 10:00 I Analyzed 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16	Matrix: Water CAS No. 994-05-8 6 71-43-2 6 75-65-0 6 106-93-4 6 107-06-2 6 108-20-3	
Sample: MW-6_20100730 Parameters 8260 MSV tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether Ethanol	Lab ID: Results Analytical NI NI NI NI NI	254168002 Units Method: EPA 56 ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	82-116 Collected: 07/06/1 Report Limit 030B/8260 0.50 0.50 1.0 1.0 0.50 250	1 DF 1 1 1 1 1 1 1		07/10/10 05:56 07/07/10 10:00 I Analyzed 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16	Matrix: Water CAS No. 994-05-8 71-43-2 75-65-0 106-93-4 107-06-2 108-20-3 64-17-5	
Sample: MW-6_20100730 Parameters 8260 MSV tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether Ethanol Ethylbenzene	Lab ID: Results Analytical NI NI NI NI NI NI	254168002 Units Method: EPA 56 ug/L	82-116 Collected: 07/06/1 Report Limit 030B/8260 0.50 0.50 1.0 0.50 250 0.50	1 DF 1 1 1 1 1 1 1 1		07/10/10 05:56 07/07/10 10:00 Analyzed 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16	Matrix: Water CAS No. 994-05-8 6 71-43-2 6 75-65-0 6 106-93-4 6 107-06-2 6 108-20-3 6 64-17-5 6 100-41-4	
Sample: MW-6_20100730 Parameters 8260 MSV tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether Ethanol Ethylbenzene Ethyl-tert-butyl ether	Lab ID: Results Analytical NI	254168002 Units Method: EPA 56 ug/L	82-116 Collected: 07/06/1 Report Limit 030B/8260 0.50 0.50 1.0 0.50 250 0.50 0.50 0.50	1 DF 1 1 1 1 1 1 1 1		07/10/10 05:56 07/07/10 10:00 I Analyzed 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16	Matrix: Water CAS No. 994-05-8 6 71-43-2 6 75-65-0 6 106-93-4 6 107-06-2 6 108-20-3 6 64-17-5 6 100-41-4 6 637-92-3	
Sample: MW-6_20100730 Parameters 8260 MSV tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether Ethanol Ethylbenzene Ethyl-tert-butyl ether Methyl-tert-butyl ether	Lab ID: Results Analytical NI	254168002 Units Method: EPA 56 ug/L	82-116 Collected: 07/06/1 Report Limit 030B/8260 0.50 0.50 1.0 1.0 0.50 250 0.50 0.50 0.50 0.50	1 DF 1 1 1 1 1 1 1 1 1 1		07/10/10 05:56 07/07/10 10:00 Analyzed 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16	Matrix: Water CAS No. 994-05-8 6 71-43-2 6 75-65-0 7 106-93-4 6 107-06-2 6 108-20-3 6 64-17-5 6 100-41-4 6 637-92-3 6 1634-04-4	
Sample: MW-6_20100730 Parameters 8260 MSV tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether Ethanol Ethylbenzene Ethyl-tert-butyl ether Methyl-tert-butyl ether Toluene	Lab ID: Results Analytical NI NI NI NI NI NI NI NI NI N	254168002 Units Method: EPA 56 Ug/L	82-116 Collected: 07/06/1 Report Limit 030B/8260 0.50 0.50 1.0 1.0 0.50 250 0.50 0.50 0.50 0.50 0.50 0.5	1 IO 12:45 DF 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		07/10/10 05:56 07/07/10 10:00 Analyzed 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16	Matrix: Water CAS No. 6. 994-05-8 6. 71-43-2 6. 75-65-0 6. 106-93-4 6. 107-06-2 6. 108-20-3 6. 64-17-5 6. 100-41-4 6. 637-92-3 6. 1634-04-4 6. 108-88-3	
4-Bromofluorobenzene (S) Sample: MW-6_20100730 Parameters 8260 MSV tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether Ethanol Ethylbenzene Ethyl-tert-butyl ether Methyl-tert-butyl ether Toluene Xylene (Total)	Lab ID: Results Analytical NI NI NI NI NI NI NI NI NI N	254168002 Units Method: EPA 56 Ug/L	82-116 Collected: 07/06/1 Report Limit 030B/8260 0.50 0.50 1.0 1.0 0.50 250 0.50 0.50 0.50 0.50 0.50 1.50	1 IO 12:45 DF 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		07/10/10 05:56 07/07/10 10:00 Analyzed 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16	Matrix: Water CAS No. 994-05-8 71-43-2 75-65-0 106-93-4 107-06-2 108-20-3 64-17-5 100-41-4 637-92-3 1634-04-4 108-88-3 1330-20-7	
A-Bromofluorobenzene (S) Sample: MW-6_20100730 Parameters 8260 MSV tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether Ethanol Ethylbenzene Ethyl-tert-butyl ether Methyl-tert-butyl ether Toluene Xylene (Total) 4-Bromofluorobenzene (S)	Lab ID: Results Analytical NI NI NI NI NI NI NI NI NI N	254168002 Units Method: EPA 56 Oug/L	82-116 Collected: 07/06/1 Report Limit 030B/8260 0.50 0.50 1.0 1.0 0.50 250 0.50 0.50 0.50 0.50 0.50 1.5 80-120	1		07/10/10 05:56 07/07/10 10:00 Analyzed 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16	Matrix: Water CAS No. 6. 994-05-8 6. 71-43-2 6. 75-65-0 6. 106-93-4 6. 107-06-2 6. 108-20-3 6. 64-17-5 6. 100-41-4 6. 637-92-3 6. 1634-04-4 6. 108-88-3 6. 1330-20-7 6. 460-00-4	
A-Bromofluorobenzene (S) Sample: MW-6_20100730 Parameters 8260 MSV tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether Ethanol Ethylbenzene Ethyl-tert-butyl ether Methyl-tert-butyl ether Toluene Xylene (Total) 4-Bromofluorobenzene (S) Dibromofluoromethane (S)	Lab ID: Results Analytical NI NI NI NI NI NI NI 1.1	254168002 Units Method: EPA 50 Ug/L	82-116 Collected: 07/06/1 Report Limit 030B/8260 0.50 0.50 1.0 1.0 0.50 250 0.50 0.50 0.50 0.50 1.5 80-120 80-122	1		07/10/10 05:56 07/07/10 10:00 Analyzed 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16	Matrix: Water CAS No. 994-05-8 71-43-2 75-65-0 106-93-4 107-06-2 108-20-3 64-17-5 100-41-4 637-92-3 1634-04-4 108-88-3 1330-20-7 460-00-4 1868-53-7	
Sample: MW-6_20100730 Parameters 8260 MSV tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether Ethanol Ethylbenzene Ethyl-tert-butyl ether Methyl-tert-butyl ether Toluene Xylene (Total) 4-Bromofluoromethane (S) 1,2-Dichloroethane (S) 1,2-Dichloroethane-d4 (S)	Lab ID: Results Analytical NI NI NI NI NI 1. NI 99 11.	254168002 Units Method: EPA 50 Ug/L	82-116 Collected: 07/06/1 Report Limit 030B/8260 0.50 0.50 1.0 1.0 0.50 250 0.50 0.50 0.50 0.50 1.5 80-120 80-122	1		07/10/10 05:56 07/07/10 10:00 Analyzed 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16	Matrix: Water CAS No. 994-05-8 71-43-2 75-65-0 106-93-4 107-06-2 108-20-3 64-17-5 100-41-4 637-92-3 1634-04-4 108-88-3 1330-20-7 460-00-4 1868-53-7 17060-07-0	
Sample: MW-6_20100730 Parameters 8260 MSV tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether Ethanol Ethylbenzene Ethyl-tert-butyl ether Methyl-tert-butyl ether Toluene Xylene (Total) 4-Bromofluoromethane (S) 1,2-Dichloroethane-d4 (S) Toluene-d8 (S)	Lab ID: Results Analytical NI NI NI NI NI NI NI NI NI 1.1 NI 11 11	254168002 Units Method: EPA 56 Ug/L Ug/L	82-116 Collected: 07/06/1 Report Limit 030B/8260 0.50 0.50 1.0 1.0 0.50 250 0.50 0.50 0.50 0.50 1.5 80-120 80-122 80-124 80-123	1 10 12:45 DF 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		07/10/10 05:56 07/07/10 10:00 Analyzed 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16	Matrix: Water CAS No. 994-05-8 71-43-2 75-65-0 106-93-4 107-06-2 108-20-3 64-17-5 100-41-4 637-92-3 1634-04-4 108-88-3 1330-20-7 460-00-4 1868-53-7 17060-07-0	
4-Bromofluorobenzene (S) Sample: MW-6_20100730 Parameters 8260 MSV tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether Ethanol Ethylbenzene Ethyl-tert-butyl ether Methyl-tert-butyl ether Toluene Xylene (Total)	Lab ID: Results Analytical NI NI NI NI NI NI 1.1 11 Analytical	254168002 Units Method: EPA 50 Ug/L	82-116 Collected: 07/06/1 Report Limit 030B/8260 0.50 0.50 1.0 1.0 0.50 250 0.50 0.50 0.50 0.50 1.5 80-120 80-122 80-124 80-123	1 10 12:45 DF 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		07/10/10 05:56 07/07/10 10:00 Analyzed 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16 07/10/10 06:16	Matrix: Water CAS No. 994-05-8 71-43-2 75-65-0 106-93-4 107-06-2 108-20-3 64-17-5 100-41-4 637-92-3 1634-04-4 108-88-3 1330-20-7 460-00-4 1868-53-7 17060-07-0 2037-26-5	

Date: 07/20/2010 01:22 PM

REPORT OF LABORATORY ANALYSIS

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Project: 2611270 Mecartney

Pace Project No.: 254168								
Sample: MW-6_20100730	Lab ID: 25416	68002	Collected: 07/06/1	10 12:45	Received: 0	7/07/10 10:00 I	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
CA LUFT MSV GRO	Analytical Metho	od: CA LUF	Т					
4-Bromofluorobenzene (S)	90 %		82-116	1		07/10/10 06:16	460-00-4	
Sample: MW-7_20100730	Lab ID: 25416	68003	Collected: 07/06/1	10 11:20	Received: 0	7/07/10 10:00 I	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Metho	od: EPA 503	30B/8260					
tert-Amylmethyl ether	ND ug/L	_	0.50	1		07/10/10 06:37	994-05-8	
Benzene	ND ug/L	-	0.50	1		07/10/10 06:37	71-43-2	
tert-Butyl Alcohol	ND ug/L	_	5.0	1		07/10/10 06:37	75-65-0	
1,2-Dibromoethane (EDB)	ND ug/L	_	1.0	1		07/10/10 06:37	106-93-4	
1,2-Dichloroethane	ND ug/L		1.0	1		07/10/10 06:37	107-06-2	
Diisopropyl ether	ND ug/L		0.50	1		07/10/10 06:37	108-20-3	
Ethanol	ND ug/L		250	1		07/10/10 06:37		
Ethylbenzene	ND ug/L		0.50	1		07/10/10 06:37		
Ethyl-tert-butyl ether	ND ug/L		0.50	1		07/10/10 06:37		
Methyl-tert-butyl ether	0.75 ug/L		0.50	1		07/10/10 06:37		
Toluene	ND ug/L		0.50	1		07/10/10 06:37		
Xylene (Total)	ND ug/L		1.5	1		07/10/10 06:37		
4-Bromofluorobenzene (S)	91 %	-	80-120	1		07/10/10 06:37		
Dibromofluoromethane (S)	119 %		80-122	1		07/10/10 06:37		
1,2-Dichloroethane-d4 (S)	118 %		80-124	1		07/10/10 06:37		
Toluene-d8 (S)	107 %		80-123	1		07/10/10 06:37		
CA LUFT MSV GRO	Analytical Metho	od: CA LUF	Т					
TPH-Gasoline (C05-C12)	ND ug/L	_	50.0	1		07/10/10 06:37	•	B-
4-Bromofluorobenzene (S)	91 %		82-116	1		07/10/10 06:37		
Sample: XW-1_20100730	Lab ID: 25416	69004	Collected: 07/06/1	10 12:20	Pagaiyad: 0	7/07/10 10:00 I	Matrix: Water	
• –								0
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Metho	od: EPA 503	30B/8260					
tert-Amylmethyl ether	ND ug/L		0.50	1		07/10/10 03:31		
Benzene	ND ug/L	_	0.50	1		07/10/10 03:31	71-43-2	
tert-Butyl Alcohol	ND ug/L		5.0	1		07/10/10 03:31		
1,2-Dibromoethane (EDB)	ND ug/L	_	1.0	1		07/10/10 03:31	106-93-4	
1,2-Dichloroethane	ND ug/L	_	1.0	1		07/10/10 03:31	107-06-2	
Diisopropyl ether	ND ug/L	-	0.50	1		07/10/10 03:31	108-20-3	
Ethanol	ND ug/L	_	250	1		07/10/10 03:31	64-17-5	
Ethylbenzene	ND ug/L	_	0.50	1		07/10/10 03:31	100-41-4	
	•							
Ethyl-tert-butyl ether	ND ug/L	_	0.50	1		07/10/10 03:31	637-92-3	
Ethyl-tert-butyl ether Methyl-tert-butyl ether	ND ug/L ND ug/L		0.50 0.50	1 1		07/10/10 03:31 07/10/10 03:31		

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Project: 2611270 Mecartney

Pace Project No.: 254168

Sample: XW-1_20100730	Lab ID: 25	54168004	Collected: 07/06/	10 12:20	Received:	07/07/10 10:00	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
3260 MSV	Analytical Me	ethod: EPA 5	030B/8260					
Kylene (Total)	ND (ug/L	1.5	1		07/10/10 03:3	1 1330-20-7	
4-Bromofluorobenzene (S)	86 9	%	80-120	1		07/10/10 03:3	1 460-00-4	
Dibromofluoromethane (S)	115 9	%	80-122	1		07/10/10 03:3	1 1868-53-7	
1,2-Dichloroethane-d4 (S)	111 '	%	80-124	1		07/10/10 03:3	1 17060-07-0	
Toluene-d8 (S)	106 9	%	80-123	1		07/10/10 03:3	1 2037-26-5	
CA LUFT MSV GRO	Analytical Me	ethod: CA LU	FT					
TPH-Gasoline (C05-C12)	ND (ug/L	50.0	1		07/10/10 03:3	1	B-
4-Bromofluorobenzene (S)	86 9	%	82-116	1		07/10/10 03:3	1 460-00-4	
Sample: XW-2_20100730	Lab ID: 25	54168005	Collected: 07/06/	10 10:35	Received:	07/07/10 10:00	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Me	athod: EDA 5	 030B/8260				<u> </u>	1 (
	-					07/10/10 00 5	7 004 05 0	
ert-Amylmethyl ether	ND t	•	0.50	1		07/10/10 06:5		
Benzene	ND (-	0.50	1		07/10/10 06:5	_	
ert-Butyl Alcohol	ND (Ü	5.0	1		07/10/10 06:5		
,2-Dibromoethane (EDB)	ND (•	1.0	1		07/10/10 06:5	7 106-93-4	
1,2-Dichloroethane	ND (ug/L	1.0	1		07/10/10 06:5	7 107-06-2	
Diisopropyl ether	ND t	ug/L	0.50	1		07/10/10 06:5	7 108-20-3	
Ethanol	ND t	ug/L	250	1		07/10/10 06:5	7 64-17-5	
Ethylbenzene	ND (ug/L	0.50	1		07/10/10 06:5	7 100-41-4	
Ethyl-tert-butyl ether	ND (ug/L	0.50	1		07/10/10 06:5	7 637-92-3	
Methyl-tert-butyl ether	ND (ug/L	0.50	1		07/10/10 06:5	7 1634-04-4	
Toluene	ND (ug/L	0.50	1		07/10/10 06:5	7 108-88-3	
Kylene (Total)	ND (ug/L	1.5	1		07/10/10 06:5	7 1330-20-7	
4-Bromofluorobenzene (S)	90 9	-	80-120	1		07/10/10 06:5	7 460-00-4	
Dibromofluoromethane (S)	116 9		80-122	1		07/10/10 06:5		
1,2-Dichloroethane-d4 (S)	117 (80-124	1			7 17060-07-0	
Foluene-d8 (S)	107 9		80-123	1		07/10/10 06:5		
CA LUFT MSV GRO	Analytical Me	ethod: CA LU	FT					
ΓPH-Gasoline (C05-C12)	ND (ug/L	50.0	1		07/14/10 02:2	0	L3
1-Bromofluorobenzene (S)	91 9	%	82-116	1		07/14/10 02:2	0 460-00-4	
Sample: XW-3_20100730	Lab ID: 25	54168006	Collected: 07/06/	10 11:35	Received:	07/07/10 10:00	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
3260 MSV	Analytical Me	ethod: EPA 5			· ·			
	•			1		07/40/40 00:5	2 004 05 9	
ert-Amylmethyl ether	ND I	-	0.50	1		07/10/10 03:5		
Benzene	ND (•	0.50	1		07/10/10 03:5		
tert-Butyl Alcohol	ND (ug/L	5.0	1		07/10/10 03:5	2 /5-65-0	
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Project: 2611270 Mecartney

Pace Project No.: 254168

Sample: XW-3_20100730	Lab ID: 254168006	Collected: 07/06/	10 11:35	Received: 0	7/07/10 10:00 M	atrix: Water	
Parameters	Results Uni	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA	A 5030B/8260					
1,2-Dibromoethane (EDB)	ND ug/L	1.0	1		07/10/10 03:52	106-93-4	
1,2-Dichloroethane	ND ug/L	1.0	1		07/10/10 03:52	107-06-2	
Diisopropyl ether	ND ug/L	0.50	1		07/10/10 03:52	108-20-3	
Ethanol	ND ug/L	250	1		07/10/10 03:52	64-17-5	
Ethylbenzene	ND ug/L	0.50	1		07/10/10 03:52	100-41-4	
Ethyl-tert-butyl ether	ND ug/L	0.50	1		07/10/10 03:52	637-92-3	
Methyl-tert-butyl ether	0.92 ug/L	0.50	1		07/10/10 03:52		
Toluene	ND ug/L	0.50	1		07/10/10 03:52	108-88-3	
Xylene (Total)	ND ug/L	1.5	1		07/10/10 03:52	1330-20-7	
4-Bromofluorobenzene (S)	89 %	80-120	1		07/10/10 03:52	460-00-4	
Dibromofluoromethane (S)	119 %	80-122	1		07/10/10 03:52		
1,2-Dichloroethane-d4 (S)	118 %	80-124	1		07/10/10 03:52		
Toluene-d8 (S)	106 %	80-123	1		07/10/10 03:52		
CA LUFT MSV GRO	Analytical Method: CA						
TPH-Gasoline (C05-C12)	ND ug/L	50.0	1		07/10/10 03:52		B-
4-Bromofluorobenzene (S)	89 %	82-116	1		07/10/10 03:52	460-00-4	D
Sample: TB1_20100730	Lab ID: 254168007	Collected: 07/06/	10 08:00	Received: 0	7/07/10 10:00 M	atrix: Water	
Parameters	Results Uni	s Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Parameters 8260 MSV			DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EP	A 5030B/8260		Prepared			- Qual
8260 MSV tert-Amylmethyl ether	Analytical Method: EP	A 5030B/8260 0.50	1	Prepared	07/10/10 03:10	994-05-8	Qual
8260 MSV tert-Amylmethyl ether Benzene	Analytical Method: EP/ ND ug/L ND ug/L	A 5030B/8260 0.50 0.50	1 1	Prepared	07/10/10 03:10 07/10/10 03:10	994-05-8 71-43-2	Qual
8260 MSV tert-Amylmethyl ether Benzene tert-Butyl Alcohol	Analytical Method: EP/ ND ug/L ND ug/L ND ug/L ND ug/L	A 5030B/8260 0.50 0.50 5.0	1 1 1	Prepared	07/10/10 03:10 07/10/10 03:10 07/10/10 03:10	994-05-8 71-43-2 75-65-0	Qual
8260 MSV tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB)	Analytical Method: EP/ ND ug/L ND ug/L ND ug/L ND ug/L ND ug/L	A 5030B/8260 0.50 0.50 5.0 1.0	1 1 1	Prepared	07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10	994-05-8 71-43-2 75-65-0 106-93-4	Qual
8260 MSV tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane	Analytical Method: EP/ ND ug/L	A 5030B/8260 0.50 0.50 5.0 1.0	1 1 1 1	Prepared	07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10	994-05-8 71-43-2 75-65-0 106-93-4 107-06-2	Qual
8260 MSV tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether	Analytical Method: EPA ND ug/L ND ug/L ND ug/L ND ug/L ND ug/L ND ug/L ND ug/L	A 5030B/8260 0.50 0.50 5.0 1.0 1.0 0.50	1 1 1 1 1	Prepared	07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10	994-05-8 71-43-2 75-65-0 106-93-4 107-06-2 108-20-3	Qual
tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether Ethanol	Analytical Method: EPA ND ug/L	A 5030B/8260 0.50 0.50 5.0 1.0 1.0 0.50 250	1 1 1 1 1 1	Prepared	07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10	994-05-8 71-43-2 75-65-0 106-93-4 107-06-2 108-20-3 64-17-5	Qual
tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether Ethanol Ethylbenzene	Analytical Method: EPA ND ug/L	A 5030B/8260 0.50 0.50 5.0 1.0 1.0 0.50 250 0.50	1 1 1 1 1 1	Prepared	07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10	994-05-8 71-43-2 75-65-0 106-93-4 107-06-2 108-20-3 64-17-5 100-41-4	Qual
8260 MSV tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether Ethanol Ethylbenzene Ethyl-tert-butyl ether	Analytical Method: EPA ND ug/L	A 5030B/8260 0.50 0.50 5.0 1.0 1.0 0.50 250 0.50 0.50	1 1 1 1 1 1 1	Prepared	07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10	994-05-8 71-43-2 75-65-0 106-93-4 107-06-2 108-20-3 64-17-5 100-41-4 637-92-3	Qual
tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether Ethanol Ethylbenzene Ethyl-tert-butyl ether Methyl-tert-butyl ether	Analytical Method: EP/ ND ug/L	A 5030B/8260 0.50 0.50 5.0 1.0 1.0 0.50 250 0.50 0.50 0.50	1 1 1 1 1 1 1 1	Prepared	07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10	994-05-8 71-43-2 75-65-0 106-93-4 107-06-2 108-20-3 64-17-5 100-41-4 637-92-3 1634-04-4	Qual
tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether Ethanol Ethylbenzene Ethyl-tert-butyl ether Toluene	Analytical Method: EP/ ND ug/L	A 5030B/8260 0.50 0.50 5.0 1.0 1.0 0.50 250 0.50 0.50 0.50 0.50 0.50	1 1 1 1 1 1 1	Prepared	07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10 07/10/10 03:10	994-05-8 71-43-2 75-65-0 106-93-4 107-06-2 108-20-3 64-17-5 100-41-4 637-92-3 1634-04-4 108-88-3	Qual
tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether Ethanol Ethylbenzene Ethyl-tert-butyl ether Toluene Xylene (Total)	Analytical Method: EP/ ND ug/L	A 5030B/8260 0.50 0.50 5.0 1.0 0.50 250 0.50 0.50 0.50 0.50 1.5	1 1 1 1 1 1 1 1 1	Prepared	07/10/10 03:10 07/10/10 03:10	994-05-8 71-43-2 75-65-0 106-93-4 107-06-2 108-20-3 64-17-5 100-41-4 637-92-3 1634-04-4 108-88-3 1330-20-7	Qual
tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether Ethanol Ethylbenzene Ethyl-tert-butyl ether Methyl-tert-butyl ether Toluene Xylene (Total) 4-Bromofluorobenzene (S)	Analytical Method: EP/ ND ug/L	A 5030B/8260 0.50 0.50 5.0 1.0 0.50 250 0.50 0.50 0.50 0.50 0.50 1.5 80-120	1 1 1 1 1 1 1 1 1 1	Prepared	07/10/10 03:10 07/10/10 03:10	994-05-8 71-43-2 75-65-0 106-93-4 107-06-2 108-20-3 64-17-5 100-41-4 637-92-3 1634-04-4 108-88-3 1330-20-7 460-00-4	Qual
tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether Ethanol Ethylbenzene Ethyl-tert-butyl ether Methyl-tert-butyl ether Toluene Xylene (Total) 4-Bromofluorobenzene (S) Dibromofluoromethane (S)	Analytical Method: EP, ND ug/L	A 5030B/8260 0.50 0.50 1.0 1.0 0.50 250 0.50 0.50 0.50 0.50 1.5 80-120 80-122	1 1 1 1 1 1 1 1 1 1	Prepared	07/10/10 03:10 07/10/10 03:10	994-05-8 71-43-2 75-65-0 106-93-4 107-06-2 108-20-3 64-17-5 100-41-4 637-92-3 1634-04-4 108-88-3 1330-20-7 460-00-4 1868-53-7	Qual
tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether Ethanol Ethylbenzene Ethyl-tert-butyl ether Methyl-tert-butyl ether Toluene Xylene (Total) 4-Bromofluorobenzene (S) Dibromofluoroethane (S) 1,2-Dichloroethane-d4 (S)	Analytical Method: EP/ ND ug/L	A 5030B/8260 0.50 0.50 5.0 1.0 0.50 250 0.50 0.50 0.50 0.50 0.50 1.5 80-120	1 1 1 1 1 1 1 1 1 1	Prepared	07/10/10 03:10 07/10/10 03:10	994-05-8 71-43-2 75-65-0 106-93-4 107-06-2 108-20-3 64-17-5 100-41-4 637-92-3 1634-04-4 108-88-3 1330-20-7 460-00-4 1868-53-7 17060-07-0	Qual
tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether Ethanol Ethylbenzene Ethyl-tert-butyl ether Methyl-tert-butyl ether Toluene Xylene (Total) 4-Bromofluorobenzene (S) Dibromofluoroethane-d4 (S) Toluene-d8 (S)	Analytical Method: EPAND ug/L ND ug/L 88 % 116 %	A 5030B/8260 0.50 0.50 1.0 1.0 0.50 250 0.50 0.50 0.50 0.50 1.5 80-120 80-122 80-124 80-123	1 1 1 1 1 1 1 1 1 1 1	Prepared	07/10/10 03:10 07/10/10 03:10	994-05-8 71-43-2 75-65-0 106-93-4 107-06-2 108-20-3 64-17-5 100-41-4 637-92-3 1634-04-4 108-88-3 1330-20-7 460-00-4 1868-53-7 17060-07-0	Qual
tert-Amylmethyl ether Benzene tert-Butyl Alcohol 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Diisopropyl ether Ethanol Ethylbenzene Ethyl-tert-butyl ether Toluene Xylene (Total)	Analytical Method: EPAND ug/L ND ug/L 88 % 116 % 116 %	A 5030B/8260 0.50 0.50 1.0 1.0 0.50 250 0.50 0.50 0.50 0.50 1.5 80-120 80-122 80-124 80-123	1 1 1 1 1 1 1 1 1 1 1	Prepared	07/10/10 03:10 07/10/10 03:10	994-05-8 71-43-2 75-65-0 106-93-4 107-06-2 108-20-3 64-17-5 100-41-4 637-92-3 1634-04-4 108-88-3 1330-20-7 460-00-4 1868-53-7 17060-07-0	Qual

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Project: 2611270 Mecartney

Pace Project No.: 254168

QC Batch: MSV/2644 Analysis Method: EPA 5030B/8260

QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge Associated Lab Samples: 254168001, 254168002, 254168003, 254168004, 254168005, 254168006, 254168007

METHOD BLANK: 33021 Matrix: Water

Associated Lab Samples: 254168001, 254168002, 254168003, 254168004, 254168005, 254168006, 254168007

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	07/10/10 01:06	
1,2-Dichloroethane	ug/L	ND	1.0	07/10/10 01:06	
Benzene	ug/L	ND	0.50	07/10/10 01:06	
Diisopropyl ether	ug/L	ND	0.50	07/10/10 01:06	
Ethanol	ug/L	ND	250	07/10/10 01:06	
Ethyl-tert-butyl ether	ug/L	ND	0.50	07/10/10 01:06	
Ethylbenzene	ug/L	ND	0.50	07/10/10 01:06	
Methyl-tert-butyl ether	ug/L	ND	0.50	07/10/10 01:06	
tert-Amylmethyl ether	ug/L	ND	0.50	07/10/10 01:06	
tert-Butyl Alcohol	ug/L	ND	5.0	07/10/10 01:06	
Toluene	ug/L	ND	0.50	07/10/10 01:06	
Xylene (Total)	ug/L	ND	1.5	07/10/10 01:06	
1,2-Dichloroethane-d4 (S)	%	116	80-124	07/10/10 01:06	
4-Bromofluorobenzene (S)	%	91	80-120	07/10/10 01:06	
Dibromofluoromethane (S)	%	116	80-122	07/10/10 01:06	
Toluene-d8 (S)	%	105	80-123	07/10/10 01:06	

LABORATORY CONTROL SAMPLE: 33022

Date: 07/20/2010 01:22 PM

	000==					
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4.2 Dibromoothono (EDD)	/1		10.0	95	70 117	
1,2-Dibromoethane (EDB)	ug/L	20	19.0		78-117	
1,2-Dichloroethane	ug/L	20	19.8	99	73-127	
Benzene	ug/L	20	18.5	93	75-124	
Diisopropyl ether	ug/L	20	22.8	114	69-130	
Ethanol	ug/L	400	555	139	36-177	
Ethyl-tert-butyl ether	ug/L	20	22.7	114	67-131	
Ethylbenzene	ug/L	20	20.9	105	76-124	
Methyl-tert-butyl ether	ug/L	20	25.4	127	72-130	
tert-Amylmethyl ether	ug/L	20	23.0	115	67-132	
tert-Butyl Alcohol	ug/L	100	121	121	36-164	
Toluene	ug/L	20	20.8	104	75-124	
Xylene (Total)	ug/L	60	61.9	103	76-123	
1,2-Dichloroethane-d4 (S)	%			113	80-124	
4-Bromofluorobenzene (S)	%			91	80-120	
Dibromofluoromethane (S)	%			110	80-122	
Toluene-d8 (S)	%			116	80-123	

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Project: 2611270 Mecartney

Pace Project No.: 254168

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 33322 33323											
Parameter		254167004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
	2										
	Units										
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	18.8	19.5	94	98	78-117	4	
1,2-Dichloroethane	ug/L	ND	20	20	20.3	20.4	102	102	73-127	.3	
Benzene	ug/L	ND	20	20	19.4	19.7	97	98	75-124	1	
Diisopropyl ether	ug/L	ND	20	20	23.0	23.2	115	116	69-130	.8	
Ethanol	ug/L	ND	400	400	471	559	118	140	36-177	17	
Ethyl-tert-butyl ether	ug/L	ND	20	20	22.5	23.2	112	116	67-131	3	
Ethylbenzene	ug/L	ND	20	20	22.3	21.7	111	108	76-124	3	
Methyl-tert-butyl ether	ug/L	0.57	20	20	25.6	26.2	125	128	72-130	2	
tert-Amylmethyl ether	ug/L	ND	20	20	23.2	24.0	116	120	67-132	3	
tert-Butyl Alcohol	ug/L	ND	100	100	121	126	121	126	36-164	4	
Toluene	ug/L	ND	20	20	21.7	21.3	109	107	75-124	2	
Xylene (Total)	ug/L	ND	60	60	64.4	63.6	107	106	76-123	1	
1,2-Dichloroethane-d4 (S)	%						107	113	80-124		
4-Bromofluorobenzene (S)	%						88	90	80-120		
Dibromofluoromethane (S)	%						109	110	80-122		
Toluene-d8 (S)	%						118	117	80-123		

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Project: 2611270 Mecartney

Pace Project No.: 254168

4-Bromofluorobenzene (S)

QC Batch: MSV/2645 Analysis Method: **CALUFT**

QC Batch Method: **CALUFT** Analysis Description: CALUFT MSV GRO

Associated Lab Samples: 254168001, 254168002, 254168003, 254168004, 254168006, 254168007

Matrix: Water METHOD BLANK: 33045

Associated Lab Samples: 254168001, 254168002, 254168003, 254168004, 254168006, 254168007

> Blank Reporting

> > 91

82-116

07/10/10 01:06

Parameter Result Limit Qualifiers Units Analyzed TPH-Gasoline (C05-C12) 58.4 07/10/10 01:06 Bug/L 50.0 %

LABORATORY CONTROL SAMPLE: 33046

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers TPH-Gasoline (C05-C12) ug/L 500 560 112 60-140 4-Bromofluorobenzene (S) % 92 82-116

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 33334 33335

MSD MS 254233001 Spike Spike

MS MSD MS MSD % Rec Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** Qual TPH-Gasoline (C05-C12) ug/L 22600 23600 4 E,M0

4-Bromofluorobenzene (S) % 91 96 82-116

Date: 07/20/2010 01:22 PM





Project: 2611270 Mecartney

Pace Project No.: 254168

QC Batch: MSV/2674 Analysis Method: CA LUFT

QC Batch Method: CA LUFT Analysis Description: CA LUFT MSV GRO

Associated Lab Samples: 254168005

METHOD BLANK: 33386 Matrix: Water

Associated Lab Samples: 254168005

Blank Reporting Limit Parameter Units Result Analyzed Qualifiers TPH-Gasoline (C05-C12) ug/L ND 50.0 07/13/10 21:50 % 82-116 4-Bromofluorobenzene (S) 92 07/13/10 21:50

LABORATORY CONTROL SAMPLE: 33387

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers TPH-Gasoline (C05-C12) ug/L 500 1100 219 60-140 L3 4-Bromofluorobenzene (S) % 95 82-116

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 33388 33389

MSD MS 254199007 Spike Spike MS MSD MS MSD % Rec Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** Qual ND TPH-Gasoline (C05-C12) ug/L 500 500 788 665 149 125 60-140 17 M0 4-Bromofluorobenzene (S) % 97 96 82-116

Date: 07/20/2010 01:22 PM





QUALIFIERS

Project: 2611270 Mecartney

Pace Project No.: 254168

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

LABORATORIES

PASI-S Pace Analytical Services - Seattle

ANALYTE QUALIFIERS

Date: 07/20/2010 01:22 PM

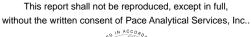
B- Analyte detected in method blank but was not detected in the associated samples.

E Analyte concentration exceeded the calibration range. The reported result is estimated.

L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in

associated samples. Results unaffected by high bias.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.







QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2611270 Mecartney

Pace Project No.: 254168

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
254168001	MW-5_20100730	EPA 5030B/8260	MSV/2644		
254168002	MW-6_20100730	EPA 5030B/8260	MSV/2644		
254168003	MW-7_20100730	EPA 5030B/8260	MSV/2644		
254168004	XW-1_20100730	EPA 5030B/8260	MSV/2644		
254168005	XW-2_20100730	EPA 5030B/8260	MSV/2644		
254168006	XW-3_20100730	EPA 5030B/8260	MSV/2644		
254168007	TB1_20100730	EPA 5030B/8260	MSV/2644		
254168001	MW-5_20100730	CA LUFT	MSV/2645		
254168002	MW-6_20100730	CA LUFT	MSV/2645		
254168003	MW-7_20100730	CA LUFT	MSV/2645		
254168004	XW-1_20100730	CA LUFT	MSV/2645		
254168005	XW-2_20100730	CA LUFT	MSV/2674		
254168006	XW-3_20100730	CA LUFT	MSV/2645		
254168007	TB1_20100730	CA LUFT	MSV/2645		

Date: 07/20/2010 01:22 PM

REPORT OF LABORATORY ANALYSIS



254168

COP ELT CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed and accurate.

Page: Cooler# 1 of

1. ¹

	ed Lab Information:	Required Project Information:			Required Invoice	Information:		•													
Lab Na	me: Pace-Seattle	Site ID #: 2611270 Task:	WG_A	A_201007	Send Invoice to:	David Sowle			•				2	20	180	1/1	17	<u>_2</u>		3Q10 GW E	vent
Addres	S:	Delta project #			Address: 11050 \	White Rock Road, S	uite 110									ne (day		10			
940 S.	Hamey Street Seattle WA 98108	Site Address 3255 MECARTNI	ΕY		City/State	Rancho Cordova (CA 95670	Phone #	1-80	00-477-74	11		QCI	evel F	Requi	red: St	tandard	1	Special		Mark one
Lab PM	I: Regina Ste. Marie	City ALAMEDA Sta	ite	CA 94502	Reimbursement pr	roject?	Non-rein	burseme	nt project	? /	Mark	one	NJ F	Reduc	ed De	eliveral	ble Pac	kage	?		·
Phone/	Fax: P: 206-957-2433 F: 206-767-5063	Delta PM Name Lia Holde	len		Send EDD to	copeltdata@intellig	entehs.c	om		1'	L		MAI	MCP (Cert?		CT F	RCP C	Dert?		Mark One
Lab PM	l email Regina.SteMarie@pacelabs.com	Phone/Fax: P: 408-826-1863	F: 408	3-225-8506	CC Hardcopy r								Lab	Proje	ct ID	(lab u	se)	Τ			I.
Annlica	ble Lab Quote #:	Delta PM Email: Iholden@d	deltae	env.com	CC Hardcopy r	report to			2				Red	ques	ted	77	77	77	777	77	
ITEM#	SAMPLE ID One Character per box. (A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX DRINKING WATER GOLIDO WATER WW SURFACE WATER C WO SURFACE WATER C WO SOLE S	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TIME	#OF CONTAINERS	FIELD FILTERED? (Y/N)	Unpreserved H₂SO₄		NaOH Na ₂ S ₂ O ₃	Methanol	1	alyse	/				/	Comment Sample I.	
1	MW-5_20100730		WG	9	7/6/10	1235	6	と		6			1 1	x				T			
2	MW-6_20100730		WG	,		1245	6	N		6			х	x				1			
3	MW-7_20100730		WG			1120	6	N		Ô			х	x							
4	XW-1_20100730		WG			1220	Ь	N	4	6			х	x 🗍							
5	XW-2_20100730		WG			1035	10	N		Ю			х	x						,	
6	XW-3_20100730		WG			1135	6	N		6			х	x						Ys = DIPI	
7	TB1_20100730		W		W	OBOU	4	2		4			X							E, ETBE, 1 DB and etl	
8												•							İ		
9							-														
A.									Λ												
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12									W.	7			П								
Additio	onal Comments/Special Instructions:		RELI	NC JISHIED BY /	AFFILIATION	DATE	TIME	ACCEF	TED BY	'AFFILIA	NOITA				ATE	TIN	ME S	amp	le Rece	ipt Condit	ions
			$\bigsqcup Z$		X	7/6/10	1545	///	χ		A	,		7/1	olio	154	15		Y/N	Y/N	Y/N
			$\mathcal{L}_{\mathcal{L}}$	#X		2/10/10	1600	ST	PATTE	لسية	Com	4//h	挺色	. 7/	HU	0 102	00	6,	% /N	QIN	(Ý) N
Ì			للو	4'			~	,				l	,	17	,				Y/N	Y/N	Y/N
GLO	BAL ID: T0600101198							1											Y/N	Y/N	Y/N
			SHIP	PING METHOD): (mark as appropri			E AND S		IRE								ွ	S	<u>o</u> c.	ank?
		İ	UPS	COURIER		ame of SAMPLER:	4،1	per	E12									Temp in °C	Samples on Ice?	Sample intact?	Trip Blank?
			US N	MAIL	SIGNATU	IRE of SAMPLER:	1	\leq		1	DATE Signe	•d • -7	Lelit	Time	e: 160	20		Ten	Sar	\ \overline{\sigma} \=	崖

Sample Container Count

CLIENT:	DeHal	Blain	& Tech	~				-		······		_			Pace Analytical"
COC PAGE	<u> </u> of _								ģ.	,				·	
Sample Line Item	VG9H	AG1H	AG1U	BG1H	BP1U	BP2U	BP3U	BP2N	BP2S	WGFU	WGKU				Comments
1	Ų							1	-:						
2								1							
3							,							_	
4	1														
5	10														
6	le														
7	4														Trip.Blank
8															1-
9															
10															
11															
12															Trip Blank?
							_	***							
AG1H	1 liter HC	L amber (glass		T		BP2S	500mL I	H2SO4 pl	astic				JGFU	4oz unpreserved amber wide
AG1U	1liter unp	reserved	amber gla			****			unpreserv		C		 i		terra core kit
AG2S 500mL H2SO4 amber glass"					2Z 500mL NaOH, Zn Ac							Summa Can			
AG2U	500mL ur	preserve	d amber	glass					NaOH pla						40mL HCL clear vial
AG3S	250mL H:	2SO4 am	ber glass						HNO3 pla					VG9T	40ml Na Thio clear vial

BP3S	250mL H2SO4 plastic	VG9U	40mL unpreserved clear vial
BP3U	250mL unpreserved plastic	VG9W	40mL glass vial preweighted (EPA 5035)
DG9B	40mL Na Bisulfate amber vial	VSG	Headspace septa vial & HCL
DG9H	40mL HCL amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WGFX	4oz wide jar w/hexane wipe
DG9T	40mL Na Thio amber vial	ZPLC	Ziploc Bag
DG9U	40mL unpreserved amber vial		
1	Wipe/Swab		-
		*	

BG1H 1 liter HCL clear glass

BP1N 1 liter HNO3 plastic

BP1S 1 liter H2SO4 plastic

BP1Z 1 liter NaOH, Zn, Ac

BP2N 500mL HNO3 plastic

BP2O 500mL NaOH plastic

BG1U 1 liter unpreserved glass

BP1U 1 liter unpreserved plastic

Sample Condition Upon Receipt



Pace Analytical Client Name	: Derta/	BL	aine Tech	F	Project#2	>4168
Courier: Fed Ex UPS USPS Clie Tracking #: <u>87/5 Oleale 54</u> Custody Seal on Cooler/Box Present: //yes	nt 🗌 Commer	rcial	☐ Pace Other		Optional Proj. Due Date Proj. Name:	
Packing Material: Bubble Wrap		ne [Other			
Thermometer Used Horiba 132013	Type of Ice:		Blue None		Samples on ice, cooling pro	ocess has begun
		Name of Street, or other Designation of the Owner, where the Parket of the Owner, where the Owner, where the Owner, where the Owner, where the Owner, where the Owner, where the Owner, where the Owner, where the Owner, where the Owner, where the Owner, where the Owner, where the Owner, where the Owner, where the Owner, where the Owner, where the Owner, where the Owner, which is the Owner, which is the Owner, where the Owner, which is the Owner		No	Date and Initials of pe	
Cooler Temperature	•		Comments:		contents. 77.771	
Chain of Custody Present:		□n/a	1.			
Chain of Custody Filled Out:	√DYes □No	□n/a	2.			
Chain of Custody Relinquished:	-ElYes □No	□n/a	3.			
Sampler Name & Signature on COC:	.⊒Yes □No	□n/a	4.			
Samples Arrived within Hold Time:	_⊟7es □No I	□n/a	5.			
Short Hold Time Analysis (<72hr):	□Yes □No	□n/a	6.			
Rush Turn Around Time Requested:	□Yes -□No	□n/a	7			
Sufficient Volume:	-⊟Yes □No	□n/a	8			
Correct Containers Used:	-⊟Yes □No	□n/a	9.			
-Pace Containers Used:	-⊟Yes □No !	□n/a				
Containers Intact:	-∰Yes □No □	□n/a	10.			
Filtered volume received for Dissolved tests	□Yes □No □	ÐN/A	11.			
Sample Labels match COC:	₽Pes □No □	□n/a	12.			
-Includes date/time/ID/Analysis Matrix:	WT					
All containers needing preservation have been checked.	□Yes □No	ÐN/A	13.			
All containers needing preservation are found to be in compliance with EPA recommendation.	□Yes □No	ÐN∕A				
exceptions VOA, coliform, TOC, O&G, WI-DRO (water)	ÆYes □No		Initial when completed		Lot # of added preservative	
Samples checked for dechlorination:	□Yes □No →	Øñ/A	14			
Headspace in VOA Vials (>6mm):	□Yes -ÐNo	□n/a	15.			
Trip Blank Present:	-EYes □No	□n/a	16.			
Trip Blank Custody Seals Present	□Yes □No →	⊟N7A		ac*		
Pace Trip Blank Lot # (if purchased):						
Client Notification/ Resolution: Person Contacted: Comments/ Resolution:		Date/∏	ime:		Field Data Required?	Y / N
Project Manager Review:	<u> </u>				Date: <u>() () / (</u>	07 /10_

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

	COP-ELT Well-Head Inspection & Well Gauging Form roject No: 2611770 Site Address: 3755 MECARTNEY RD.													
Proje	ect No: 2611270	······································	······································				•	Site A	ddress: <u>ජ</u>	255 MEC	4RTNEY	RD		
Field	Technician: 1:PARK	122		····						Date: 7/6	110			Weather: OVERLAST
	We	ell Co	nditio	on							ging Informa	ition		
Sample Order	Field Point	Bolts	Seal	Lid Secure	Lock	Expanding Cap	Water in Well Box	Well Casing Dia.	Time	Depth to Water (Feet)	Depth to Bottom (Feet)	Depth to LNAPL (Feet)	LNAPL Thickness (Feet)	Comments
	MW·S	P	P	P	G	G	N	4	0910	8.35	14.65	-scoreed	****	1/2 Bours MISSING WILL PORMUD
	MW-6	MA	Α.	P	G	G	(1	Ч	0930	681	14.77	Pi	V00304446	TWIST-LOCK TUPE WELL BOX.
	MW·7	P	P	P	a	G	N	2	0970	7.11	14.71	- Automore	3447	IN BOUTS MISSING LOVE ORPHICOD
	XW-1	P	P	P	a	9	N	2	0900	571	15:50	420,0440	vodéčnos.	22 TABS STRIPPED
	XW-Z	P	P	P	9	9	N	2	0905	6:54	1450	. 1/47/20)	- Application	2/2 TABS STRIPTED
	xw-3	P	P	P	G	Ca	N	2	0925	7.43	13.86	урубабы	**************************************	1/2 BOUTS ISIBOKEN
	N. C.								ŕ					

		-												
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Notes	St			····									The state of the s	
w	ater level meter de	econ	tau	INC	40	w. M	R Ho	tsy p	messure	washer a	nd leque	nux pri	or to and	s between gaiging



	CO	P-ELT Gr	oundwa	ter Samı	oling For	m		
Site Address:	3255 N	JECAKINSEL	1 2D.			NAME OF THE PARTY		
Project No:	2611270)	Fi	eld Technician:	J.PARKE	Z		
Field Point:				Date:	7/6/10			
Depth to Water (DTW) (ft bgs):			Well	Diameter (in):	2	<u>4</u>) 6 8		
Depth to LNAPL (ft bgs):	1		Thickness	of LNAPL (ft):	-y politica productiva de la compansa			
Total Depth of Well (ft bgs):	14.65		Water Colu	nn Height (ft):	6.30			
				d Calculations				
Purge Method:		Purge Ed	luipment:		S	Sample Colle	ection Method	
Low-Flow 3 casing volumes Other:		X Electric S Peristal Bladde	ble Bailer ubmersible tic Pump er Pump		Oti	Extrac Dedicat	able Bailer ition Port ied Tubing ble Tubing	
Water Column Height (ft):	6.30 .2			: 0.66 3				
Conversion Factors	(gal/ft): 2"	= 0.17 4"	= 0.66 6"	= 1.5 8" =	2.6 Other	= radius ² * 0.	.163	
Purge: Start 1	rime: <u>095</u>	8			Stop Time:	1001		
Time	Temp (°C)	рН	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
Pre-Purge				_{er} dalum ¹ Prés				
1000	18.70	6.55	8904	24.9	>1000	2.61	2.1	
1001	19.18	6.79	11458	19.1		1.66	4.2	
								,
	***************************************							·
	*******						6 ,	
1235	19.86	7-12	10162	12.2	17	1.70	A SECTION OF THE PROPERTY OF T	
Post-Purge				**************************************		L'anglessation		
Did Well dewater?	(Yes) 1	lo	I Total	Purge volume ((gai): 4.2		*	
Other Comments:	80% CO	16) ; p	TW: 8.38	3				
Λ								
Sample Info:				_		11 1.0 0		
Sample ID:		0100730		Sample Date	and Time:	1/0/10 C	1035	
Selected Analysis:	SEE CC	C_						
Signature:				Date: _	OIJUIT	William Company of the Company of th		
DELTA Consultants, 1-800-477-7411		LNAPL= light non		•	gal = gallon/s			
		bgs = below grou ORP = Oxidation-			temp = temperatu NTU = Nephelome		nits	

D.O.= dissolved oxygen

mV = millivolts



	CO	F LT Gr	oundwa	iter Sam	ر ، pling	rm		
Site Address	:: 3255 N	JECAKONYOL	1 RD.					
Project No	: 2611270	>	F	ield Technician:	J.PARKI	EL.		
Field Point		***		Date:	7/6/10			
Depth to Water (DTW (ft bgs)			Wel	ll Diameter (in)	2	6 8	Walter State Control of the Control	
Depth to LNAPL (ft bgs)		Western	Thicknes	s of LNAPL (ft):	· A very paper la la la la la la la la la la la la la			
Total Depth of Well (ft bgs)	14.77		<u> </u>	ımn Height (ft):				
Purge Method:			ging Into an Juipment:	id Calculations		Sample Coll	ection Method	:
Low-Flow		Disposa	ble Bailer			X Disposa	able Bailer	
3 casing volumes Other:		X Electric S	ubmersible tic Pump			Extrac	ction Port ted Tubing	·
Other			er Pump	_	O		ble Tubing	
Water Column Height (ft):_	7.96	X Conversion	Factor (gal/ft): <u>0,66</u>	= Casi	ng Volume (g	al): 5.3	
Casing Volume (gal):	5.3	X Specified V	olumes:		_ = Calculated	Purge (gal):	15.9	
Conversion Factors		= 0.17 4"	= 0.66 6"	= 1.5 8" =		= radius ² * 0	.163	
	Time: 4 Temp		Conductivity		Stop Time: Turbidity	D.O.	Volume	Water Level (for
Time	(°C)	pH	(μS/cm)	ORP (mV)	(NTU)	(mg/L)	Purged (gal)	Low-Flow only)
Pre-Purge								
1048	19.33	6.96	1091	-39.9	129	0.80	2.7	
1150	20.54	6.63	883	-17.5	61	0.66	5.4	
1152	20.42	687	1025	-20.6	10	0.53	8.1	
	f .							
1245	19.08	7.14	1462	-48.6	19	1.58	distance for the second	
Post-Purge								
Did Well dewater?	(Yes) N	lo		Purge volume ((gal): 9:0)		
	80% C.	3.40; D	TW: 6.37					
Other Comments:								241
Sample Info:	1							
Sample ID:	NW-6_ 10	0100730	·	Sample Date	and Time:	Orloh	11.45	
Selected Analysis	SEE CO				***************************************			
Signature:				Date:	OIDIF			
			***************************************				THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAM	CASTANA CANADA AND AND AND AND AND AND AND AND AN
Q DELTA Consultants, 1-800-477-7411		LNAPL= light non-			gal = gallon/s			
		bgs = below grour DRP = Oxidation-F			temp = temperate NTU = Nephelome		nits	
	I	D.O.= dissolved or	kygen		mV = millivolts			
DELTA						Page	1 of 1	

	COI	LT Gr	oundwa	iter Sam	ر pling	rm			
Site Address:	3255 N	JECARTN'EL	1 2D.						
Project No:	2611270)	F	ield Technician:	J. PARKE	52		Marie De Chronica and Carlotte Control of Co	
Field Point:	1 MW-7			Date:	7/6/10				
Depth to Water (DTW) (ft bgs):			Wel	l Diameter (in)		4 6 8			
Depth to LNAPL (ft bgs):			Thicknes	s of LNAPL (ft):					
Total Depth of Well (ft bgs):	14.71		Water Colu	mn Height (ft):	7.0				
				d Calculations					
Purge Method:		Purge Ed	quipment:		;	Sample Coll	ection Method		
Low-Flow 'X3 casing volumes Other:		X Electric S Peristal	tic Pump er Pump	_	Ot	Extrac Dedicat	able Bailer ction Port ced Tubing ble Tubing		
Water Column Height (ft):		X Conversion X Specified V): <u>0.17</u> 3	= Casi				
Conversion Factors		= 0.17 4"	= 0.66 6"	= 1.5 8" =		= radius ² * 0	.163	,	
Purge: Start 1		ì		I	Stop Time:	1			
Time	Temp (°C)	pН	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)	
Pre-Purge	-			_d regarding	_	- grante			
1199	19.63	6.78	24397	-24.5	95	1.21	0.6		
1110	19.48	6-77	24804	-234	119	1.19	1.2	è	
(11)	1891	6.80	24297	-23.4	109	1.65	18		
1112	18.75	6.92	14312	-30.7	11.6	1.07	2.4		
1113	18.80	698	18416		48	0.96	3.0		
1114	18.79	7.00	18381	-34.8	56	0.98	3.6		
					,				
					S. (1886)				
Post-Purge						er many districts			
Did Well dewater?	Yes (N	<u>)</u>	Total	Purge volume ((gal): 3. 6				
Other Comments:	80% C C	1.11 ; D	TW: 7.83						
Sample Info:	1								
Sample ID:	NW-7 - 10	0100730		Sample Date	and Time:	01/0/j	1120		
Selected Analysis	SEE CO	-	:				-		
Signature:				Date:	סילטלר				
ELTA Consultants, 1-800-477-7411	L	NAPL= light non-	aqueous phase lic	quids g	gal = gallon/s				
	C	gs = below grour PRP = Oxidation-F	Reduction Potentia	· · · · · · · · · · · · · · · · · · ·					

______ of ____ Page _____



	CO	P ¿LT Gr	oundwa	iter Samı	ور وpling	oling , orm					
Site Address	: 3255 N	JECARETNIEL	1 2D.								
Project No	2611270	>	F	ield Technician:	J. PARKE	52					
Field Point	XW-1			Date:	7/6/10						
Depth to Water (DTW (ft bgs)			Wel	l Diameter (in):	(3)	4 6 8					
Depth to LNAPL (ft bgs)			Thicknes	s of LNAPL (ft):	· a complete de la co						
Total Depth of Well (ft bgs)	15.5	B	Water Colu	ımn Height (ft):	9.87	l					
		************		d Calculations		CI- C-II-		-			
Purge Method:		_	quipment:				ection Method	:			
Low-Flow		Disposa X Electric S	ble Bailer ubmersible			X Disposa Extrac	ible Bailer tion Port				
√3 casing volumes Other:		Peristal	tic Pump			Dedicat	ed Tubing				
, and the second		Bladde Other:	er Pump	_	Ot	Disposa ther:	ble Tubing	····			
Water Column Height (ft):_	9.87	X Conversion	Factor (gal/ft	0: 0.17	= Casi	ng Volume (g	al): 1.7				
Casing Volume (gal):	.7	X Specified V	olumes:): <u>0.17</u> 3	_ = Calculated	Purge (gal):	5.1				
Conversion Factors	(gal/ft): 2"	= 0.17 4"		= 1.5 8" =	2.6 Other	$= radius^2 * 0.$					
Purge: Start	Time: <u> 12C</u>	W			Stop Time:_	1212	1.5				
Time	Temp (°C)	pН	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)			
Pre-Purge				,							
1207	19.96	6-99	1092	-1.8	13	0.92	0.4				
1208	20.24	698	1130	-3.9	11	1.93	1.8				
1209	1890	685	1714	- 4.4	175	0.79	2.7	÷			
1210	18.43	689	1732	-25.1	89	0.70	3.6				
1211	18.38	6.89	1740	-29.4	87	0.71	4.5				
1212	18:26	6.87	1747	-27.3	49	0.72	5.4				
					\$\frac{1}{2} \tag{2}						
Post-Purge				حصيمين		· 					
Did Well dewater?			OCCUPATION NO CONTROL OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OW	Purge volume ((gal): 5. L	1					
	80% C -	7.68 ; D	TW: 7.56								
Other Comments:											
		nies									
11/ 1	16.1			Sample Date	and Time:	dialia a	1000				
Sample ID:	5 Vil.	0100730		Sample Date	and Time.	10/10 Q	<u> </u>				
Selected Analysis	SEE CO	<u> </u>									
Signature:				Date:	<u>01/0/17</u>						
					•						
DELTA Consultants, 1-800-477-7411		LNAPL= light non- bgs = below groui			gal = gallon/s temp = temperat	ure					
		ORP = Oxidation-I	Reduction Potenti	ial l	NTU = Nephelom		its				
		D.O.= dissolved o	xygen		mV = millivolts						
DELTA.						Page	1 of <u>1</u>				

	COI	LLT Gr	oundwa	iter Sam	د . pling	rm .		
Site Address	3255 A	JECARTNEL	1 2D.					
Project No	1	7	F	ield Technician:	: J.ALEKE	5 <u>e</u>		
Field Point	XW-2		·	Date:	7/6/10			
Depth to Water (DTW) (ft bgs)			Wel	l Diameter (in)	2	4 6 8		
Depth to LNAPL (ft bgs)			Thicknes	s of LNAPL (ft):				
Total Depth of Well (ft bgs):	14.50)	Water Colu	mn Height (ft):	7.96			
Division Markley J.				d Calculations		Camala Calle	antina Mathad	
Purge Method:			uipment:			•	ection Method	1.
Low-Flow 'X'3 casing volumes		Disposa X Electric Si	ble Bailer ubmersible			∑ Disposa Extrac	ible Bailer tion Port	
Other:		Peristal	tic Pump			Dedicat	ed Tubing	
CREATE CO.		Other:	r Pump	_	O	Disposa ther:	ble Tubing	
Water Column Height (ft):_	1.96	X Conversion	Factor (gal/ft): 6.17	= Casi	ng Volume (ga	al): 1.4	
Water Column Height (ft):	.4	X Specified Vo	olumes:	3	_ = Calculated	Purge (gal):	4.2	
Conversion Factors			= 0.66 6"	= 1.5 8" =	CONTRACTOR AND ADDRESS OF THE PROPERTY OF THE	MARIE CONTRACT TO CONTRACT TO AND THE PARTY OF THE PROPERTY.	163	
Purge: Start					Stop Time:			
Time	Temp (°C)	рН	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
Pre-Purge				* - Amounts				
1019	1921	6-89	12195	27.1	+ (1.42	0.7	
1020	18.82	6.90	7998	3.2	12	1.74	1.4	
1021	19.66	699	2288	-53.1	86	1.39	21	
1022	20.61	696-	2289	-69.8	51	1.49	28	
1023	10.65	6.99	2296	-7k4	82	1.50	3.5	
1024	20:70	7.03	2306	-73-1	63	1.51	4.2	
								WT-0-0-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-
Post-Purge						· 		
Did Well dewater?	Yes N			Purge volume ((gal): 4, Z			***************************************
	80% C 6	1.13; D	in: 8.12					
Other Comments:				ı	Nelsi	SD TAKE		
\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\					M2/M	AD TAICES	9	
	xw-2_10)(D(2330		Sample Date	and Time:	01/01/	1035	9
Selected Analysis	SEE CO							
7/12/					orlote			
Signature:		оздального ворин фермальный роби обранов вывестн		Date:	HALLO			
DELTA Consultants, 1-800-477-7411		NAPL= light non-	aqueous nhase II	auids "	gal = gallon/s			
	t	gs = below groun DRP = Oxidation-R	d surface	t	temp = temperati NTU = Nephelome		its	

D.O.= dissolved oxygen

mV = millivolts



					(/-			
				iter Sam	pling 🤙	rm		
Site Address:	CONTRACTOR OF THE PARTY OF THE	JECAIZTN'S	***************************************	and the second s	-			
	2611270	<u> </u>	Į F	ield Technician				· · · · · · · · · · · · · · · · · · ·
Field Point: Depth to Water (DTW)	•			Date	11-11-			
(ft bgs):	1.40		Wel	I Diameter (in)		4 6 8		
Depth to LNAPL (ft bgs):			Thicknes	s of LNAPL (ft)				
Total Depth of Well (ft bgs):	13.82			ımn Height (ft)	0.0			
Purge Method:			rging Info an quipment:	d Calculation		Sample Coll	ection Method	l:
Low-Flow X3 casing volumes Other:		Electric S Perista	ltic Pump er Pump	_	0	Extra Dedica	able Bailer ction Port ted Tubing able Tubing	
Water Column Height (ft):	239	X Conversion	Factor (gal/ft): 0.17	= Casi	ng Volume (g	_{pal):} .	
Water Column Height (ft):		X Specified V	olumes:	3	_ = Calculated	Purge (gal):	3.3	
Conversion Factors (= 0.66 6"	= 1.5 8" =	2.6 Other	= radius ² * 0		
I	ime: <u>)) [</u> Temp		Conductivity		Stop Time: Turbidity	110Z	Volume	Water Level (for
Time	(°C)	pH	(µS/cm)	ORP (mV)	(NTU)	(mg/L)	Purged (gal)	Low-Flow only)
Pre-Purge				,		-3340		
1101	20.11	7.06	2300	-36.0	78	1.27	0.6	
1102	19.85	7.08	2348	-61.7	130	0.83	1.2	***************************************
-1108	WWW.WARA						1.80	
1135	10.01	7-01	19368	22.2	100	1:24		
Post-Purge								
Did Well dewater?	(Yes') N			Purge volume	(gal): 1.5		**	The Control of the Co
Other Comments:	80% C B	.71 ; D	7.44					
ample Info:			T			11.1.0.0	1100	
#1 as 10 as	XW-3_10			Sample Date	and Time:	MONO (S	1135	
Selected Analysis:	SEE Ca				-			
ignature:	en en en en en en en en en en en en en e	and the second s	MATERIAL SECTION SECTI	Date: _	<u>01/0/17</u>	*****************	THE RESERVE OF THE PERSON NAMED OF THE PERSON	
ELTA Consultants, 1-800-477-7411	t C	_NAPL= light non- ogs = below grou DRP = Oxidation-l D.O.= dissolved o	nd surface Reduction Potenti	al	gal = gallon/s temp = temperati NTU = Nephelome mV = millivolts		nits	
DELTA.						Page	of L	no Aconstant



COP ELT CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed and accurate.

Page:	1 of
Cooler#	of

Lab Name: Pace-Seattle	Site ID #: 2611270 Task:		Required Invoice	milomiation.													
	WG_A_201007 Send Invoice to: David Sowle					***************************************	3Q10 GW Event					ent					
Address:	Delta project #		Address: 11050 V	White Rock Ros	ad, Suite 110					Turn around time (days)				10			
940 S. Harney Street Seattle WA 98108	Site Address 3255 MECARTN	City/State	City/State Rancho Cordova CA 95670 Phone #: 1-800-477-7411				QC level Required: Standard Special Mark one						Mark one				
Lab PM: Regina Ste. Marie	City ALAMEDA Sta	ate CA 94502	Reimbursement pr	roject?	Non-rein	nbursement p	project?	T	Mark one	NJ	Reduce	ed Del	iverable Pa	l ackage	?		
Phone/Fax: P: 206-957-2433 F: 206-767-5063	Delta PM Name Lia Hok	den	Send EDD to	copeltdata@i	intelligentehs.c	om	·· ···· // ± «··········.			MA	MCP (Cert?	СТ	RCP (Cert?		Mark One
Lab PM email Regina.SteMarie@pacelabs.com	Phone/Fax: P: 408-826-1863	F: 408-225-8506	CC Hardcopy report to					Lab Project ID (lab use)									
Analisa le Lab Quote #:	Delta PM Email: Iholden@		CC Hardcopy report to					Requested ///			///	77	77				
SAMPLE ID One Character per box. (A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX DRINGRING WATER GROUND WATER G	MATRIX CODE SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TI	MI MOF CONTAINERS	FIELD FILTERED? (Y/N)			23	300	alyse	/				Comment Sample I.	
1 <u>MW-5_20100730</u>		wg G	7/6/10	1235	6	N		6		X	х						
2 MW-6_20100730		WG)		1245	6	N		6		X	x						
3 MW-7_20100730		WG		1120	6	N		0		х	x						
4 XW-1_20100730		WG		1220	16	N		6		Х	х						
5 XW-2_20100730		WG		1035) / Q	U		(t)		Х	х						
6 XW-3_20100730		WG		1135	6	V)		6		х	x					Ys = DIPI	
7 TB1_20100730		W	*	teau	14	N.		4		X	X					, ETBE, 1 B and eth	
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Additional Comments/Special Instructions:		RELINCUISHED BY	/ AFFILIATION	D	ATE TIME	ACCEFT	DBY A	FFILIAT	ION		D,	ATE	TIME	Samp	e Recei	pt Conditi	ions
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					1	1									Y/N	Y/N	Y/N
GLOBAL ID: T0600101198		N. C.				1									Y/N	Y/N	Y/N
		SHIPPING METHOD			MPLER NAM	E AND SIG	NATURE	=						ွပ			
		UPS COURIER			1.17	Yers	2	A STATE OF THE PARTY OF THE PAR						Temp in ⁰ C	Samples on Ice?	Sample intact?	Blank?
		US MAIL	SIGNATU	JRE of SAMPLER:				DA	TE Signed	76/1	o Time	160	00	Tem	Sam on Ic	Sa	Trip

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAM	ME COPE AL	AMEDA		PROJECT NUMBER 261270						
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	ТЕМР.	INITIALS			
18 556	0918100592	7/6/10	PH71014.	7.01 9.95 4.15	YES	74.00	D.			
			PO 10096 000P: 1355	94.7% 235.Z						
				r' .						
	·									

Is the Data Valid? <(circle) Yes)/ No

Preservation Temperature (if Known): <u>∅, 6</u> °C

Delta Lab Validation Sheet

COP ELT

Date of Validation:	Project/Client: CoP ELT	
Completed By: Evan C Signature: 4 (if any): ACE - 425 4/69 1. Was the analysis the one requested? 2. Do the sample number(s) on the chain-of-custody (COC) match the one(s) that appear on the laboratory data sheet? 3. Were samples prepared (extracted, filtered, etc.) within EPA holding times? 4. Once prepared/extracted, were the samples analyzed within the EPA holding times? 5. Were Laboratory blanks performed, if so, were they below non-detect? 6. Are the units correct? (i.e., soil samples in mg/kg or ug/g, water samples mg/L, ug/L, and air samples in volume mg/m^3,etc.) 7. Were appropriate Matrix Spike (MS) and Matrix Spike Duplicate (MSD) samples included in the laboratory batch sample? 8. In lieu of MS/ MSD, were surrogate spike (SS) or surrogate spike duplicate (SSD) samples included in the laboratory batch samples? 9. Were MS/ MSD (or SS/SSD) within the acceptable range of % recovery (i.e., approx 80-120% depending on analyte)? A(Compared to the content of the chain of the chai	Project #: 14611270	Cirolo or
Analytical Lab Used and Report # (if any): ACE - #254/69 1. Was the analysis the one requested? 2. Do the sample number(s) on the chain-of-custody (COC) match the one(s) that appear on the laboratory data sheet? 3. Were samples prepared (extracted, filtered, etc.) within EPA holding times? 4. Once prepared/extracted, were the samples analyzed within the EPA holding times? 5. Were Laboratory blanks performed, if so, were they below non-detect? 6. Are the units correct? (i.e., soil samples in mg/kg or ug/g, water samples mg/L, ug/L, and air samples in volume mg/m^3,etc.) 7. Were appropriate Matrix Spike (MS) and Matrix Spike Duplicate (MSD) samples included in the laboratory batch sample? 8. In lieu of MS/ MSD, were surrogate spike (SS) or surrogate spike duplicate (SSD) samples included in the laboratory batch samples? 9. Were MS/ MSD (or SS/SSD) within the acceptable range of % recovery (i.e., approx 80-120% depending on analyte)? 10. Were MS/MSD (or SS/SSD) values used to calculate Relative Percent Difference (RPD)?		
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11. Were Relative Percent Difference values within the acceptable range (i.e. ± Yes / No	(i.e., approx 80-120% depending on analyte)? All within appropriate limits	Kes (No)
		Yes / No
	11. Were Relative Percent Difference values within the acceptable range (i.e. \pm 25%)?	(Yes) No

If any answer is no, explain why and what corrective action was taken:

5) Lab Qualifier B- : Analyte detected in method blank but was not detected in associated Samples (therefor notwither action required) - method blank TPH-GRO-sample

Attachment C

Recent Correspondence

ALAMEDA COUNTY HEALTH CARE SERVICES

AGENCY



JUL 27 2010

RECEIVED

ALEX BRISCOE, Director

July 22, 2010

ENVIRONMENTAL HEALTH DEPARTMENT ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

Paul Supple (Sent via E-mail to: paul.supple@bp.com)
Atlantic Richfield Company
(A BP Affiliated Company)
P.O. Box 1257
San Ramon, CA 94583

Eric G. Hetrick (Sent via E-mail to: <u>Eric.G.Hetrick@contractor.conocophillips.com</u>)
ConocoPhillips
76 Broadway
Sacramento, CA 95818

Ping Liu Chien (Sent via E-mail to: <u>JamesLiu2000@aol.com</u>)
Harbor Bay Landing, LLC.
P.O. Box 117610
Burlingame, CA 94011

Subject: Additional Soil Vapor Sampling Event for Fuel Leak Case No. RO0000511 and GeoTracker Global ID T0600101198, BP #11270, 3255 Mecartney Road, Alameda, CA 94501

Dear Messrs. Supple, Grayson, and Chien:

Thank you for the recently submitted document entitled, "Site Assessment Report," dated February 22, 2010 and the "Request for Case Closure," dated July 7, 2010, both prepared by Delta for the subject site. Alameda County Environmental Health (ACEH) staff has reviewed the case file including the above-mentioned reports for the above-referenced site. The above-mentioned reports summarize installation of five soil vapor wells (SV-1 through SV-5) as well as soil and soil vapor sample analytical results. According to Delta, soil vapor sample analytical results were below Regional Water Quality Control Board's Environmental Screening Levels for commercial land-use risk scenario and subsequently requests case closure for the subject site.

ACEH generally concurs with the Delta's case closure recommendation. However, to adequately evaluate potential subsurface contaminant volatilization to indoor air, ACEH requests that you address the following technical comments, perform the proposed work, and send us the technical report described below.

TECHNICAL COMMENTS

Soil Vapor Sampling – Since the data collected detected petroleum hydrocarbons in soil
vapor, and there appears to be a potential for contaminant vapor intrusion at the site, an
additional round of soil vapor samples are necessary to adequately evaluate the potential risk

Messrs. Supple, Grayson, and Chien RO0000511 July 22, 2010, Page 2

to occupants of the building, prior to case closure consideration. It is recommended that soil vapor samples be collected over two seasonal events at various times of the day so that the samples collected are adequately representative of actual site conditions. Also, please ensure that laboratory detection limits are below the contaminant's corresponding ESL. Please perform the second sampling event and submit a report due by the date specified below.

Case closure evaluation will be considered based on the pending additional soil vapor sampling data.

NOTIFICATION OF FIELDWORK ACTIVITIES

Please schedule and complete the fieldwork activities by the date specified below and provide ACEH with at least three (3) business days notification prior to conducting the fieldwork.

TECHNICAL REPORT REQUEST

Please submit technical reports to ACEH (Attention: Paresh Khatri), according to the following schedule:

 September 20, 2010 – Soil and Water Investigation Report (Second Soil Vapor Sampling Event)

Thank you for your cooperation. Should you have any questions or concerns regarding this correspondence or your case, please call me at (510) 777-2478 or send me an electronic mail message at paresh.khatri@acgov.org.

Sincerely,

Paresh C. Khatri

Hazardous Materials Specialist

Enclosure:

Responsible Party(ies) Legal Requirements/Obligations

ACEH Electronic Report Upload (ftp) Instructions

Digitally signed by Paresh Khatri DN: cn=Paresh Khatri, o=Alamedi County Environmental Health, ou=Local Oversight Program, email=Paresh.Khatri@acgov.org, Date: 2010.07.22 15:27:11-0700°

cc: Dennis S. Dettloff, Delta, 11050 White Rock Road, Suite 110, Rancho Cordova, CA 95670

Tony Perini, Delta, 11050 White Rock Road, Suite 110, Rancho Cordova, CA 95670

Donna Drogos, ACEH (Sent via E-mail to: donna.drogos@acgov.org)

Paresh Khatri, ACEH (Sent via E-mail to: paresh.khatri@acgov.org)

GeoTracker

File

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)

REVISION DATE: July 20, 2010

ISSUE DATE: July 5, 2005

PREVIOUS REVISIONS: October 31, 2005;

December 16, 2005; March 27, 2009; July 8, 2010

SECTION: Miscellaneous Administrative Topics & Procedures

SUBJECT: Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- Please do not submit reports as attachments to electronic mail.
- Entire report including cover letter must be submitted to the ftp site as a single portable document format (PDF) with no password protection.
- It is preferable that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- Signature pages and perjury statements must be included and have either original or electronic signature.
- <u>Do not</u> password protect the document. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. Documents with password protection will not be accepted.
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:
 RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Submission Instructions

- 1) Obtain User Name and Password:
 - a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
 - i) Send an e-mail to dehloptoxic@acgov.org
 - b) In the subject line of your request, be sure to include "ftp PASSWORD REQUEST" and in the body of your request, include the Contact Information, Site Addresses, and the Case Numbers (RO# available in Geotracker) you will be posting for.
- 2) Upload Files to the ftp Site
 - a) Using Internet Explorer (IE4+), go to ftp://alcoftp1.acgov.org
 - (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site.
 - b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
 - c) Enter your User Name and Password, (Note: Both are Case Sensitive.)
 - d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
 - e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.
- 3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
 - a) Send email to dehloptoxic@acgov.org notify us that you have placed a report on our ftp site.
 - b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
 - c) The subject line of the e-mail must start with the RO# followed by Report Upload. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
 - d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

Responsible Party(ies) Legal Requirements/Obligations

REPORT REQUESTS

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/electronic submittal/report rgmts.shtml.

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

From:

Khatri, Paresh, Env. Health

To:

Lia Holden;

Subject:

RE: Request for Extension - RO 000511 3255 Mecartney Road, Alameda, BP 11270

Date:

Friday, September 03, 2010 8:24:11 AM

Dear Ms. Holden,

Under the circumstances presented in your e-mail correspondence, the revised due date is acceptable.

Sincerely,

Paresh C. Khatri
Hazardous Materials Specialist
Alameda County Environmental Health
Local Oversight Program
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Phone: (510) 777-2478 Fax: (510) 337-9335

E-mail: Paresh.Khatri@acgov.org

http://www.acgov.org/aceh/lop/lop.htm

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From: Lia Holden [mailto:LHolden@deltaenv.com] **Sent:** Thursday, September 02, 2010 12:19 PM

To: Khatri, Paresh, Env. Health

Subject: Request for Extension - RO 000511 3255 Mecartney Road, Alameda, BP 11270

Dear Mr. Khatri,

As you are aware, Delta had conducted soil gas sampling at the subject site on Friday August 27, 2010. This sampling was conducted per your directive letter received on July 27, 2010 and dated July 22, 2010. Helium was used as a leak tracer during the sampling. At the time the canisters were ordered from the laboratory, Delta informed the laboratory (in writing) of our need to analyze for helium. Delta was to receive the data from the sampling event today, but received a call yesterday evening from the lab. Our contracted

lab has made an irreparable error; the lab pressurized the Summa canisters with helium, which has invalidated all of the samples.

We have scheduled the resampling to occur on **Thursday**, **September 9**, **2010**.

As we are now required to repeat the sampling event, Delta respectfully requests an extension of the September 20th deadline, to **November 12**, **2010**. This additional time will allow for the resampling, laboratory sample analysis, data evaluation, and report preparation.

Your consideration is greatly appreciated,

Lia

Lia Holden, PG | Geologist - Project Manager | North American Operations
Delta Consultants, an Oranjewoud N.V. Company
Direct (408) 826-1863 | Fax (408) 225 8506 | Mobile (408) 410-9781 | USA Toll Free 800 477
7411
Iholden@deltaenv.com | www.deltaenv.com

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