Denis L. Brown

Shell Oil Products US
HSE – Environmental Services
20945 S. Wilmington Ave.
Carson, CA 90810-1039
Tel (707) 865 0251
Fax (707) 865 2542
Email denis.l.brown@shell.com

June 12, 2006

Jerry Wickham
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Groundwater Extraction Well Installation Report
Shell-branded Service Station
2120 Montana Street
Oakland, California
SAP Code 135675
Incident No. 98995740
ACHCSA Case # RO-0173

Dear Mr. Wickham:

Attached for your review and comment is a copy of the *Groundwater Extraction Well Installation Report* for the above referenced site. Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

If you have any questions or concerns, please call me at (707) 865-0251.

Sincerely,

Denis L. Brown
Sr. Environmental Engineer

CAMBRIA

June 12, 2006

Mr. Jerry Wickham
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: **Groundwater Extraction Well Installation Report**
Shell-branded Service Station
2120 Montana Street
Oakland, California
SAP Code 135675
Incident # 98995740
Cambria Project #248-0733-008
ACHCSA Case # RO-0173

Dear Mr. Wickham:

Cambria Environmental Technology, Inc. (Cambria) prepared this report on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell) to document the recent well installation activities at the referenced site. Shell recommended groundwater extraction (GWE) system expansion and additional soil vapor investigation in Cambria's October 24, 2005 *Subsurface Investigation and Vapor Sampling Report.* Alameda County Health Care Services Agency (ACHCSA) concurred with these recommendations in their November 10, 2005 letter to Shell. Cambria followed the scope of work presented in our January 23, 2006 *Remedial Action and Additional Site Investigation Work Plan* and approved in ACHCSA's February 3, 2006 letter to Shell. Cambria performed the work in accordance with ACHCSA and San Francisco Bay Regional Water Quality Control Board guidelines.

SITE LOCATION AND DESCRIPTION

This operating Shell-branded service station is located at the Montana Street and Fruitvale Avenue intersection in Oakland, California (Figures 1 and 2). Commercial properties lie to the north and east of the site, and residential properties lie to the west. Montana Street, a freeway on-ramp, and Highway 580 are located south of the site.

Cambria Environmental Technology, Inc.

5900 Hollis Street
Suite A
Emeryville, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

PREVIOUS WORK

1997 Dispenser and Turbine Sump Upgrades: In November 1997, Paradiso Mechanical (Paradiso) of San Leandro, California upgraded fuel-related equipment at the service station. Secondary containment was added to the three existing dispensers and to the turbine sumps above the underground storage tanks (USTs). Soil samples D-1, D-2, and D-3 were collected from beneath the dispensers at a depth of approximately 5 fbg (Figure 2). Soil samples were not collected from beneath the associated piping because it was not exposed during upgrade activities. The maximum total petroleum hydrocarbons as gasoline (TPHg), benzene, and methyl tertiary-butyl ether (MTBE) (analyzed by EPA Method 8020) concentrations were reported in sample D-3 at 59 parts per million (ppm), 0.76 ppm, and 1.1 ppm, respectively. Cambria's February 3, 1998 *Dispenser Soil Sampling Report* summarizes these activities.

1999 Subsurface Investigation: In October 1999, Cambria advanced soil borings SB-1 through SB-3 (Figure 2). SB-1 was advanced to 16 fbg, and SB-2 and SB-3 were advanced to 20 fbg. The maximum detected hydrocarbon concentrations in soil were 54 ppm TPHg in boring SB-1 at 5 fbg, 0.019 ppm benzene in boring SB-2 at 15 fbg, and 0.24 ppm MTBE (by EPA Method 8260) in boring SB-2 at 10 fbg. The maximum reported hydrocarbon concentrations in groundwater were 2,380 parts per billion (ppb) TPHg in boring SB-3, 10.6 ppb benzene in SB-2, and 3,210 ppb MTBE (by EPA Method 8020) in SB-3. Cambria's June 7, 2000 *Subsurface Investigation Report and Work Plan for Installation of Groundwater Monitoring Wells* summarizes these activities.

2001 Monitoring Well Installation: In February 2001, Cambria installed groundwater monitoring wells MW-1, MW-2, and MW-3. The maximum TPHg and MTBE concentrations were found in soil samples collected from monitoring well MW-2, located in Montana Street across from the site. TPHg was detected at 21 fbg at a concentration of 10 ppm, and MTBE was detected at 15.5 fbg at a concentration of 5.2 ppm. The maximum detected benzene concentration of 0.066 ppm was detected in the soil sample collected from monitoring well MW-1 at 10 fbg. Cambria's May 22, 2001 *Groundwater Monitoring Well Installation Report* summarizes these activities.

2001 Sensitive Receptor Survey, Well Survey, and Conduit Study: In August 2001, Cambria conducted a sensitive receptor survey, well survey, and conduit study. ACHCSA requested this work in a July 23, 2001 letter to Shell. The sensitive receptor survey indicated that no known water-producing wells are located within ½-mile radius of the site. The nearest surface water body is Sausal Creek, located approximately 240 feet west-northwest of the site. Sausal Creek is diverted into a 10-foot by 10-foot culvert, located approximately 420 feet west-northwest of the site, with a flow line depth shallower than the typical water table at the site. Sausal Creek

resurfaces approximately 730 feet southwest of the site. The utility study indicated that utility conduits in the area do not typically encounter groundwater, and likely do not act as preferential pathways for contaminant migration. Based on this information, no known receptors are likely to be impacted by chemicals at the site. However, at the time of this survey, the potential for hydrocarbon vapor migration to the neighboring residences had not been investigated. Cambria's September 24, 2001 *Sensitive Receptor Survey, Well Survey, and Conduit Study Report* summarizes these activities.

2001-2003 Mobile GWE: In August 2001, mobile GWE from wells MW-1 and TBW-N, using a vacuum truck, began at the site. Mobile GWE was conducted on a weekly basis through November 2001, on a bi-weekly basis through December 2001, on a monthly basis through March 2003, and then again on a weekly basis between August 19, 2003 and January 6, 2004. The cumulative estimated mass of TPHg and MTBE removed by mobile GWE at the site is 25.27 pounds and 8.13 pounds, respectively. Additionally, approximately 2.68 pounds of separate-phase hydrocarbons (SPH) were removed from wells MW-1 and TBW-N through manual bailing and mobile GWE.

2002 Soil Vapor Extraction (SVE) Test: In June 2002, Cambria performed a 5-day SVE test from tank backfill well TBW-E to remove petroleum hydrocarbon mass and to determine whether extracted vapor concentrations would be sustained over a long period of time. High initial vapor concentrations indicated the presence of source material available for recovery within the UST facility. Operation of the internal combustion engine over the 5-day test period resulted in an order of magnitude decrease in TPHg and MTBE vapor concentrations. Based on operating parameters and vapor sample analytical results collected throughout the test period, the TPHg, benzene, and MTBE vapor-phase mass removal over the test period is estimated at 176, 0.998, and 1.92 pounds, respectively. Cambria's September 4, 2002 *Subsurface Investigation, Soil Vapor Extraction Pilot Test Report, and Interim Remediation Work Plan* summarizes these activities.

2002 Monitoring Well Installation: In June 2002, Cambria installed groundwater monitoring wells MW-4 and MW-5 (Figure 2). TPHg and benzene, toluene, ethylbenzene, and xylenes (BTEX) were not detected in soil samples collected from MW-4. TPHg was detected in samples collected from MW-5 from 9 fbg and 19 fbg at concentrations of 1.3 ppm and 18 ppm, respectively. Benzene was detected in samples collected from MW-5 from 9 fbg and 19 fbg at concentrations of 0.0083 ppm and 0.0071 ppm, respectively. MTBE was not detected in any soil samples collected during this investigation. Cambria's September 4, 2002 *Subsurface Investigation, Soil Vapor Extraction Pilot Test Report, and Interim Remediation Work Plan* summarizes these activities.

2003 GWE System: Cambria's September 4, 2002 *Subsurface Investigation, Soil Vapor Extraction Pilot Test Report, and Interim Remediation Work Plan* proposed GWE as interim

remediation. Construction of a GWE system began in early February 2003, and start-up occurred on April 2, 2003. The GWE system is designed to extract groundwater from monitoring well MW-1 and tank backfill well TBW-N. Due to the presence of SPH, Cambria did not operate the GWE system between July 18, 2003 and April 21, 2004. Cambria re-designed the GWE system to include an oil-water separator. Modifications to the GWE system were completed on March 31, 2004. An oil-water separator, two particle filters in parallel, and a series of three 1,000-pound aqueous-phase carbon vessels treat the groundwater stream. Treated groundwater is discharged to the sanitary sewer under the authorization of an East Bay Municipal Utilities District wastewater discharge permit. As of April 27, 2006, a total of approximately 550.843 gallons of groundwater has been extracted. A total of approximately 20.3 pounds of TPHg, 0.748 pounds of benzene, and 4.71 pounds of MTBE has been recovered.

2003 Tank Repair: In November 2003, Able Maintenance of Santa Rosa, California exposed the regular-grade UST for inspection by the tank manufacturer (Xerxes Company). Xerxes Company found a small crack on the bottom of the tank. The crack was investigated, repaired with fiberglass resin, and air tested for the City of Oakland Fire department by the Xerxes Company. After the Xerxes Company completed their air test, Able Maintenance called in a third-party tank tester to precision test the tank. Afford-a-Test completed that test, and the tank was certified as tight. Able Maintenance monitored the tank through Shell's Veeder-Root monitoring system since the repair, and it passed the associated pressure tests.

2004 Fuel System Upgrades: In May 2004, Paradiso upgraded the station's fuel dispensers and UST sumps. Cambria collected soil samples D-1-4.0, D-2-4.0, and D-3-4.0 from underneath the dispensers. TPHg was detected in D-2-4.0 and D-3-4.0 at concentrations of 1,900 and 110 ppm, respectively. Benzene was detected in D-2-4.0 at a concentration of 1.7 ppm. Ethylbenzene was detected in D-2-4.0 and D-3-4.0 at concentrations of 21 and 3.1 ppm, respectively. Xylenes were detected in D-1-4.0 and D-2-4.0 at concentrations of 0.17 and 57 ppm, respectively. MTBE was detected in all three samples at concentrations ranging from 0.65 ppm in D-3-4.0 to 5.8 ppm in D-2-4.0. Lead was detected in all three samples at concentrations ranging from 7.3 ppm in D-2-4.0 to 8.7 ppm in D-3-4.0. Cambria's November 1, 2004 *Dispenser Upgrade Sampling Report* summarizes these activities.

2004 SVE Test: In July 2004, Cambria performed a 5-day SVE test from monitoring well MW-1 to evaluate enhanced removal of petroleum hydrocarbons and MTBE from the source area. Cambria initially used the GWE system's submersible pneumatic pump in MW-1 to dewater the soils, but switched to an electric pump to achieve greater drawdown. Data from MW-1 suggests that SVE was effective as interim remediation. An average flow rate of 30.3 standard cubic feet per minute was obtained with a measured wellhead vacuum ranging from 249.8 to 382.9 inches water column. High TPHg, BTEX and MTBE vapor concentrations (up to 10,240 parts per

million by volume total volatile organic compounds [VOCs]) were sustained over the duration of SVE. Cambria measured up to 0.8 feet (9.6 inches) of SPH in off-site monitoring well MW-2 during dewatering and SVE from on-site well MW-1. Based on operating parameters and vapor sample analytical results collected throughout the test period, the TPHg, benzene, and MTBE vapor-phase mass removal over the test period is estimated at 257, 0.822, and 1.22 pounds, respectively. Cambria's January 18, 2005 *Interim Remediation Report* summarizes these activities.

2005 Cone Penetrometer Test (CPT) Borings and Soil Vapor Investigation: On June 14 through June 16, 2005, Cambria oversaw the advancement of four CPT borings (SB-4, SB-5, SB-6, and SB-8) and installation of two soil vapor probe pairs (SV-D and SV-E). At each CPT location, an ultraviolet induced fluorescence (UVIF) module was used to identify SPH in the subsurface. However, no evidence of an SPH plume was found during this investigation. The maximum TPHg concentration of 23 ppm in soil was detected in SB-4 at 20 fbg. Benzene was detected only in soil collected from SB-4 at 5 fbg, at a concentration of 0.0072 ppm. The maximum MTBE concentration in soil was 0.23 ppm, detected in SB-8 at 15 fbg. The maximum concentration of tertiary-butyl alcohol (TBA) in soil was 9.3 ppm, detected in SB-6 at 15 fbg. Grab groundwater samples collected from the CPT borings contained maximum concentrations of 28,000 ppb TPHg (SB-5-W), 100 ppb benzene (SB-5-W), 1,100 ppb MTBE (SB-6-W), and 15,000 ppb TBA (SB-6-W).

On August 24, 2005, Cambria collected soil vapor samples from each probe pair (SV-D and SV-E), at both 5 and 10 fbg. Sample SV-D-5.0 contained 22,000 micrograms per cubic meter ($\mu g/m^3$) TPHg, and sample SV-E-5.0 contained 25,000 $\mu g/m^3$ TPHg. Sample SV-D-10.0 contained 16,000,000 $\mu g/m^3$ TPHg and 480 $\mu g/m^3$ benzene. Sample SV-E-10.0 contained 78,000,000 $\mu g/m^3$ TPHg and 46,000 $\mu g/m^3$ benzene. MTBE and TBA were not detected in any soil vapor samples, though the detection limits for some samples were elevated.

On August 10, 2005, Cambria staff conducted a survey of businesses and residences within approximately 200 feet of the subject site to determine the building foundation type and the presence of any wells (existing or abandoned), sump pumps, basements or crawl spaces on the surrounding properties. Cambria received responses for four of the nine properties within the survey area. No wells (existing or abandoned) or sump pumps were identified in any of the responses. Cambria's October 24, 2005 *Subsurface Investigation and Vapor Sampling Report* presents detailed results of the CPT borings, vapor probe installation and sampling, and the door-to-door survey.

Groundwater Monitoring: The TPHg, benzene, and MTBE concentrations reported for samples collected during the first quarter 2006 (March 3, 2006) were anomalously low for wells MW-1 and MW-2 and anomalously high for wells MW-3 and MW-4. It is Cambria's professional

opinion that either the samples or the results for well MW-1 were switched with those from MW-3, and the samples or results for well MW-2 were switched with those from MW-4. Cambria inquired about the possibility of switched samples or results with the well sampling company, Blaine, and the analytical laboratory, Test America Analytical Testing Corporation. The laboratory reviewed the raw data and observed that the results of the original analytical analysis for samples MW-3 and MW-4 did not agree with the results of subsequent analyses from different sample vials. This suggests that certain individual sample containers may have been labeled incorrectly.

Based on historical concentration trends at the site, it is unlikely that the reported results are valid. As discussed with Jerry Wickham of ACHCSA on May 2, 2006, Cambria therefore scheduled Blaine to resample the site wells on May 12, 2006 in order to confirm or dispute the recent results. A preliminary review of the laboratory results for this sampling event supports the assertion that the first quarter 2006 samples or results for certain wells were switched. These results will be submitted with Cambria's *Second Quarter 2006 Groundwater Monitoring Report.*

INVESTIGATION SUMMARY

Cambria oversaw the installation of two on-site GWE wells (EW-1 and EW-2) at the locations shown on Figures 2 and 3. Cambria presents our standard field procedures for remediation well installation in Attachment A and summarizes the details of this subsurface investigation below.

Cambria Personnel Present: Cambria Senior Staff Scientist Stewart Dalie directed the field activities, working under the supervision of California Professional Geologist Aubrey Cool.

Permit: Cambria obtained an extraction well installation permit (Permit # W2006-0190) from the ACHCSA (Attachment B).

Drilling Company: Gregg Drilling and Testing, Inc. of Martinez, California (C57 License No. 485165).

Drilling Dates: April 5 and 6, 2006.

Drilling Method: 10-inch hollow-stem augers.

Number of Borings and Wells: Two hollow-stem-auger borings were drilled and converted into GWE wells EW-1 and EW-2. Figures 2 and 3 show the boring locations, and Attachment C presents the boring logs.

Boring Depths: Both borings were advanced to 30 fbg.

Groundwater Depths: Cambria observed first-encountered water levels of approximately 13.5 and 18 fbg in borings EW-1 and EW-2, respectively.

Soil Sampling Methods: Cambria logged soil types using the Unified Soil Classification System and describes the encountered soils on the boring logs presented in Attachment C. Cambria collected soil samples continuously for soil description and at approximate 5-foot intervals for headspace analysis and potential chemical analysis. Cambria screened soil samples from the borings for the presence of organic vapors using a photo-ionization detector (PID). PID readings are recorded on the boring logs.

Soil Classification: Soils encountered in these borings were consistent with soils encountered during previous investigations. Soils consisted of silt, silty and clayey sand, gravel, sand, and clay to the total explored depth of 30 fbg.

Chemical Analyses: State-certified Test America Analytical Testing Corporation of Irvine, California analyzed selected soil samples for TPHg, BTEX, MTBE, TBA, di-isopropyl ether (DIPE), ethyl tertiary-butyl ether (ETBE), and tertiary-amyl methyl ether (TAME) by EPA Method 8260B. The certified analytical laboratory report is included in Attachment D.

Soil Disposal: Cambria temporarily stockpiled soil generated during the field activities on site and profiled the soil for disposal using analytical data from the previous investigation in 2005. On April 7, 2006, Manley and Sons Trucking, Inc. of Sacramento, California transported the soil to Allied Waste Industries' Forward Landfill in Manteca, California for disposal as non-hazardous waste. Attachment E presents soil disposal confirmation.

Well Construction: The wells were constructed using 4-inch diameter ASTM F480 casing. EW-1 is screened from 12 to 28 fbg and EW-2 is screened from 8 to 28 fbg using 0.020-inch slotted ASTM F480 CircumSlot™ casing. The wells were completed by placing a

filter pack of Monterey #2/12 sand from the bottom of the well casing to approximately 2 feet above the top of the screened casing. Approximately 2 feet of bentonite was placed above the filter pack. Neat Portland cement was placed in the annular space between the boring wall and the well casing from the top of the bentonite seal to approximately 1 fbg. A flush-mounted, traffic-rated well box was installed to protect and finish each well to grade. The boring logs (Attachment C) present well construction details. Attachment F presents Department of Water Resources Well Completion Reports.

Well Development and Sampling: Blaine developed and purged wells EW-1 and EW-2 on May 5, 2006, and gauged and sampled the wells on May 12, 2006. Blaine developed the wells using surge block agitation and pump evacuation. Attachment G presents Blaine's well development sheets.

Wellhead Survey: Once GWE system expansion activities are completed, a licensed land surveyor will survey the top of casing elevations, longitudes and latitudes for wells EW-1 and EW-2.

INVESTIGATION RESULTS

Hydrocarbon Distribution in Soil: TPHg was detected in all six soil samples at concentrations ranging from 0.158 ppm in sample EW-2-5 to 0.920 ppm in sample EW-1-12. Benzene was detected in samples EW-1-10, EW-1-12, and EW-2-12 at concentrations of 0.00603 ppm, 0.00496 ppm, and 0.00532 ppm, respectively. MTBE and TBA were detected in all three soil samples collected from well EW-1, at concentrations ranging from 0.0497 ppm to 0.320 ppm and 01376 ppm to 0.848 ppm, respectively. MTBE and TBA were not detected in any soil samples collected from well EW-2. DIPE, ETBE, and TAME were not detected in any soil samples.

Table 1 summarizes the soil analytical data. Figure 3 presents TPHg, benzene, and MTBE concentrations in soil. The laboratory analytical report is presented in Attachment D.

Hydrocarbon Distribution in Groundwater: Cambria's second quarter 2006 groundwater monitoring report will present the groundwater sampling results.

CONCLUSIONS AND RECOMMENDATIONS

Shell installed two GWE wells (EW-1 and EW-2) to facilitate the proposed GWE system expansion. Cambria will oversee expansion of the GWE system to incorporate these wells as extraction points and will submit a report documenting the GWE system modifications by August 15, 2006.

CLOSING

We appreciate your continued assistance with this project. Please call Cynthia Vasko at (510) 420-3344 if you have any questions or comments regarding the contents of this report.

Sincerely,
Cambria Environmental Technology, Inc.

Cynthia Vasko
Project Engineer

Aubrey K. Cool, P.G.
Senior Project Geologist

Figures:
1 - Vicinity/Area Well Survey Map
2 - Site Plan
3 - Soil Chemical Concentration Map

Tables:
1 - Historical Soil Analytical Data

Attachments:
A - Standard Field Procedures for Remediation Well Installation
B - Permit
C - Boring Logs and Well Construction Details
D - Laboratory Analytical Report
E - Soil Disposal Confirmation
F - Department of Water Resources Well Completion Reports
G - Well Development Sheets

cc: Denis Brown, Shell Oil Products US, 20945 S. Wilmington Ave., Carson, CA 90810

G:\\Oakland 2120 Montana Street\2006 Additional GWE Wells\Report

05/30/06

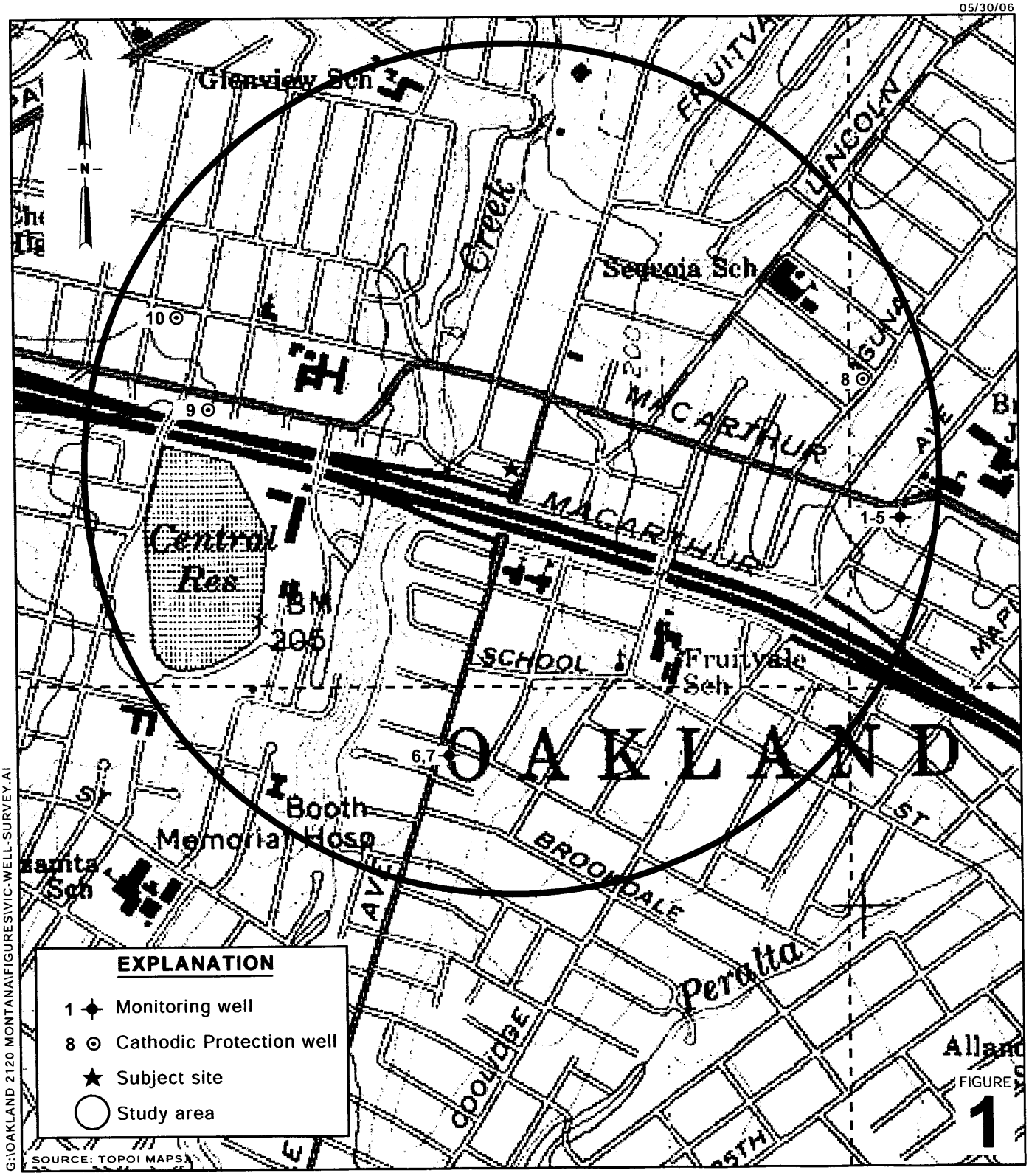


FIGURE 1

Shell-branded Service Station
2120 Montana Street
Oakland, California
Incident No.98995740

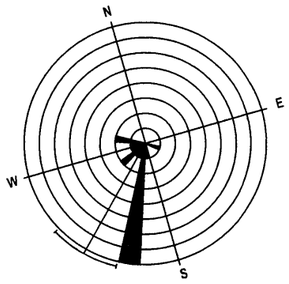
CAMBRIA

Site Vicinity and Area Well Survey Map
(1/2-Mile Radius)

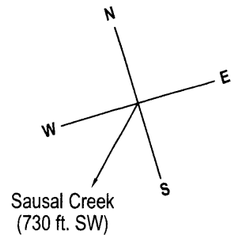
04/25/06

EXPLANATION

- SV-F — Proposed soil vapor probe location
- EW-1 — Extraction well location
- SB-4 — Soil boring location (06/14-16/05)
- SV-D — Soil vapor sampling location (06/14-16/05)
- SB-7 — Attempted soil boring location (6/15/05)
- SV-A — Attempted soil vapor sampling location (6/14/05)
- D-1-4.0 — Soil sample location (Cambria, 5/04)
- MW-1 — Well used for groundwater extraction
- MW-2 — Monitoring well location
- TBW-N — Tank backfill well location
- SB-1 — Cambria soil boring location (10/99)
- D-1 — Cambria soil sampling location (11/97)
- INF — GWE system sampling location
- Electrical and overhead electric line (E, OE)
- Sanitary sewer (SS)
- Water line (W)
- Telecommunications line (T)
- Remediation piping (R)
- Proposed remediation piping (P-R)
- Discharge line (D)
- ❶ Product dispenser number

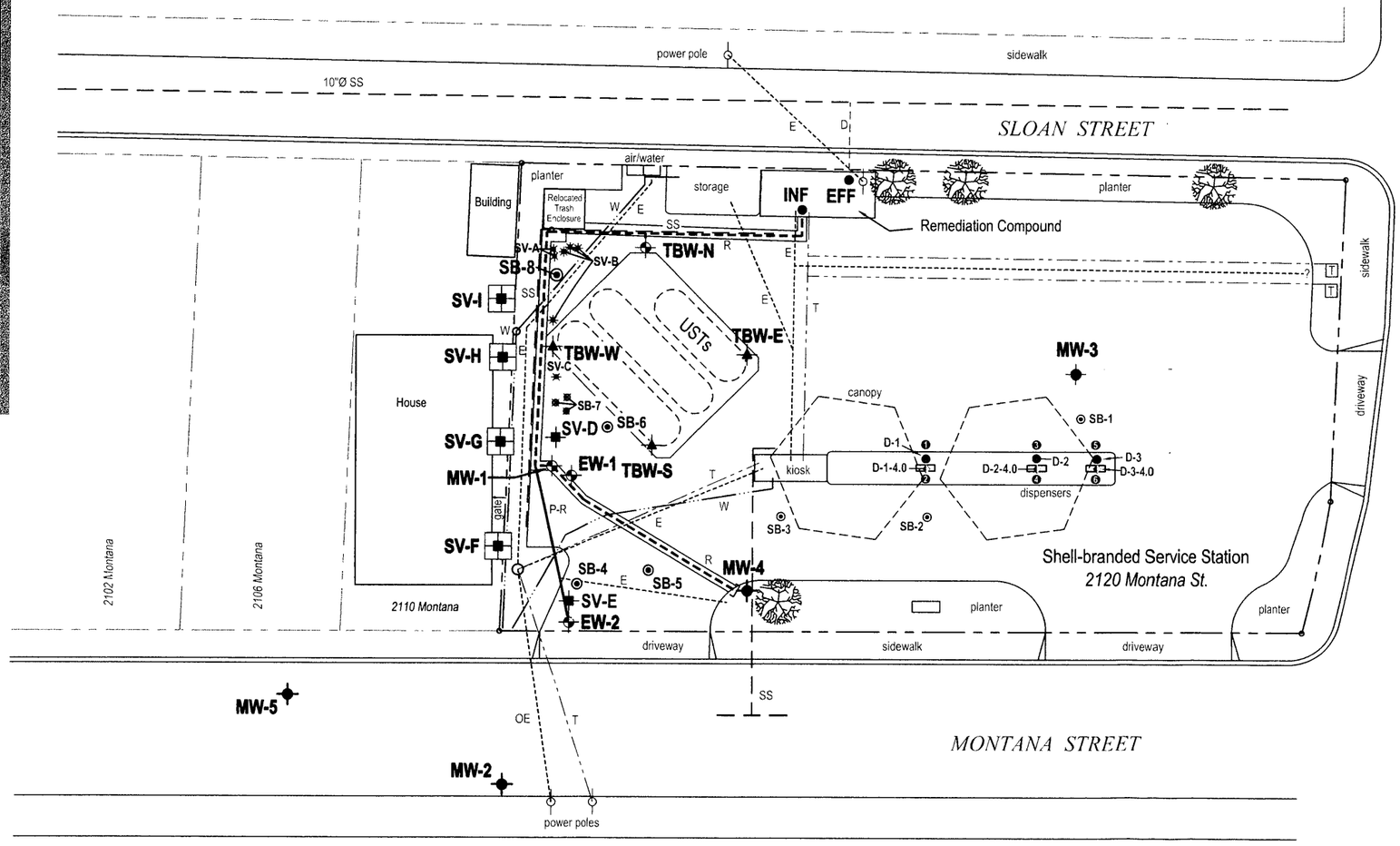


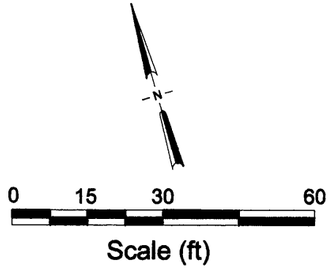
Groundwater Gradient Direction
(1Q01 through 4Q05)



Sausal Creek
(730 ft. SW)

Location of Sensitive Receptor
Relative to Site





G:\OAKLAND 2120 MONTANA\FIGURES\SITE PLAN.DWG

Site Plan

CAMBRIA

Shell-branded Service Station
2120 Montana Street
Oakland, California
Incident No.98995740

FIGURE
2

05/03/06

Soil Chemical Concentration Map

April 5-6, 2006

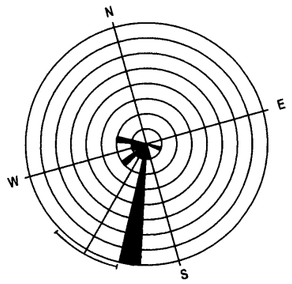
EXPLANATION

- SV-F — Proposed soil vapor probe location
- EW-1 — Extraction well location
- SB-4 — Soil boring location (06/14-16/05)
- SV-D — Soil vapor sampling location (06/14-16/05)
- SB-7 — Attempted soil boring location (6/15/05)
- SV-A — Attempted soil vapor sampling location (6/14/05)
- D-1-4.0 — Soil sample location (Cambria, 5/04)
- MW-1 — Well used for groundwater extraction
- MW-2 — Monitoring well location
- TBW-N — Tank backfill well location
- SB-1 — Cambria soil boring location (10/99)
- D-1 — Cambria soil sampling location (11/97)
- INF — GWE system sampling location
- Remediation piping (R)
- Proposed remediation piping (P-R)
- Discharge line (D)
- Product dispenser number

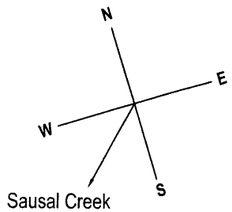
EW-1: SOIL (ppm)			
Depth	TPHg	Benz.	MTBE
5'	0.232	<0.00200	0.0497
10'	0.803	0.00603	0.320
12'	0.920	0.00496	0.172

Soil Sample ID

Soil sample depth and TPHg, benzene, and MTBE concentrations in soil, in ppm



Groundwater Gradient Direction
(1Q01 through 4Q05)



Sausal Creek
(730 ft. SW)

Location of Sensitive Receptor Relative to Site

parking lot

Commercial property

sidewalk

sidewalk

10"Ø SS

SLOAN STREET

Building

planter

air/water

storage

Relocated Trash Enclosure

INF

EFF

Remediation Compound

planter

sidewalk

SV-A

SV-B

TBW-N

R

SB-8

SV-I

USTs

TBW-E

TBW-W

SV-C

MW-3

SV-H

House

canopy

SB-7

SB-6

SV-D

SB-1

D-1

D-1-4.0

D-2

D-2-4.0

D-3

D-3-4.0

kiosk

dispensers

SV-G

EW-1

TBW-S

MW-1

gate

SB-3

SB-2

SV-F

SB-4

SB-5

MW-4

Shell-branded Service Station
2120 Montana St.

2102 Montana

2106 Montana

2110 Montana

SV-E

EW-2

planter

planter

driveway

sidewalk

driveway

EW-1: SOIL (ppm)			
Depth	TPHg	Benz.	MTBE
5'	0.232	<0.00200	0.0497
10'	0.803	0.00603	0.320
12'	0.920	0.00496	0.172

EW-2: SOIL (ppm)			
Depth	TPHg	Benz.	MTBE
5'	0.158	<0.00200	<0.00200
10'	0.488	<0.00200	<0.00200
12'	0.715	0.00532	0.00300

MW-5

MW-2

MONTANA STREET

FRUITVALE AVENUE

INTERSTATE 580 ON-RAMP

N

0 15 30 60

Scale (ft)

G:\OAKLAND 2120 MONTANA\FIGURES\SOIL DATA 4-06.DWG

CAMBRIA

FIGURE

3

Shell-branded Service Station

2120 Montana Street
Oakland, California
Incident No.98995740

Table 1: Historical Soil Analytical Data - Shell-branded Service Station, 2120 Montana Street, Oakland, California

Sample ID	Date	Depth (fbg)	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Total Xylenes (ppm)	MTBE (ppm)	TBA (ppm)	DIPE (ppm)	ETBE (ppm)	TAME (ppm)	Lead (ppm)
D-1	11/11/97	5	**1.8**	<0.0050	<0.0050	<0.0050	**0.0059**	**0.16**	NA	NA	NA	NA	9.2 [a]
D-2	11/11/97	5	**9.5**	**0.024**	**0.016**	<0.0050	**0.088**	**0.37**	NA	NA	NA	NA	9.2 [a]
D-3	11/11/97	5	**59**	**0.76**	**0.14**	<0.050	**0.095**	**1.1**	NA	NA	NA	NA	9.2 [a]
SB-1-5	10/27/99	5	**54**	<0.050	<0.050	**0.091**	**0.099**	<0.50	NA	NA	NA	NA	NA
SB-1-10	10/27/99	10	**12**	<0.0050	<0.0050	**0.0093**	**0.030**	<0.05	NA	NA	NA	NA	NA
SB-2-5	10/27/99	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	NA	NA	NA	NA	NA
SB-2-10	10/27/99	10	**2.0**	**0.0050**	**0.0063**	<0.0050	<0.0050	**0.27 (0.24)** [b]	NA	NA	NA	NA	NA
SB-2-15	10/27/99	15	**14**	**0.019**	**0.032**	**0.064**	**0.072**	<0.05	NA	NA	NA	NA	NA
SB-2-20	10/27/99	20	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	NA	NA	NA	NA	NA
SB-3-5	10/27/99	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	NA	NA	NA	NA	NA
SB-3-10	10/27/99	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.11**	NA	NA	NA	NA	NA
SB-3-15	10/27/99	15	**17**	**0.013**	**0.018**	**0.054**	**0.16**	**0.19**	NA	NA	NA	NA	NA
MW-1-5.5	2/20/01	5.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.12**	NA	NA	NA	NA	NA
MW-1-10.0	2/20/01	10	**4.7**	**0.066**	<0.0050	**0.12**	**0.14**	**2.4**	NA	NA	NA	NA	NA
MW-1-15.5	2/20/01	15.5	**1.0**	**0.014**	**0.041**	**0.024**	**0.098**	**5.0**	NA	NA	NA	NA	NA
MW-1-20.5	2/20/01	20.5	**1.5**	**0.023**	**0.16**	**0.037**	**0.17**	**2.0**	NA	NA	NA	NA	NA
MW-1-24.0	2/20/01	24	**4.4**	**0.024**	**0.14**	**0.050**	**0.27**	**0.51**	NA	NA	NA	NA	NA
MW-2-5.5	2/21/01	5.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA
MW-2-10.5	2/21/01	10.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA
MW-2-15.5	2/21/01	15.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**5.2**	NA	NA	NA	NA	NA
MW-2-21.0	2/21/01	21	**10**	**0.028**	**0.012**	**0.080**	**0.021**	**1.3**	NA	NA	NA	NA	NA
MW-3-5.5	2/21/01	5.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA
MW-3-10.5	2/21/01	10.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA
MW-3-15.5	2/21/01	15.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA
MW-3-20.5	2/21/01	20.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA
MW-4-5.5	6/21/02	5.5	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	NA	NA	NA	NA	NA
MW-4-9.0	6/21/02	9	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	NA	NA	NA	NA	NA
MW-4-13.5	6/21/02	13.5	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	NA	NA	NA	NA	NA

Table 1: Historical Soil Analytical Data - Shell-branded Service Station, 2120 Montana Street, Oakland, California

Sample ID	Date	Depth (fbg)	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Total Xylenes (ppm)	MTBE (ppm)	TBA (ppm)	DIPE (ppm)	ETBE (ppm)	TAME (ppm)	Lead (ppm)
MW-5-5.5	6/21/02	5.5	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	NA	NA	NA	NA	NA
MW-5-9.0	6/21/02	9	**1.3**	**0.0083**	<0.005	<0.005	<0.005	<0.5	NA	NA	NA	NA	NA
MW-5-19.0	6/21/02	19	**18**	**0.0071**	<0.005	**0.014**	**0.019**	<0.5	NA	NA	NA	NA	NA
D-1-4.0	5/6/04	4	<4.8	<0.024	<0.024	<0.024	**0.17**	**0.77**	NA	NA	NA	NA	**7.5**
D-2-4.0	5/6/04	4	**1,900**	**1.7**	<1.0	**21**	**57**	**5.80**	NA	NA	NA	NA	**7.3**
D-3-4.0	5/6/04	4	**110**	<0.50	<0.50	**3.1**	<0.50	**0.65**	NA	NA	NA	NA	**8.7**
SB-4-5	6/15/05	5	<1.0	**0.0072**	<0.0050	<0.0050	<0.0050	**0.13**	**0.53**	<0.010	<0.0050	<0.0050	NA
SB-4-10	6/15/05	10	**2.0**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**0.020**	<0.010	<0.0050	<0.0050	NA
SB-4-15	6/15/05	15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	NA
SB-4-20	6/15/05	20	**23**	<0.025	<0.025	**0.056**	**0.10**	**0.061**	**0.25**	<0.050	<0.025	<0.025	NA
SB-5-5	6/15/05	5	<5.0	<0.025	<0.025	<0.025	<0.025	<0.025	**2.3**	<0.050	<0.025	<0.025	NA
SB-5-10	6/15/05	10	<4.9	<0.024	<0.024	<0.024	<0.024	<0.024	**3.3**	<0.049	<0.024	<0.024	NA
SB-5-13	6/15/05	13	**9.3**	<0.024	<0.024	**0.030**	**0.040**	<0.024	**0.14**	<0.049	<0.024	<0.024	NA
SB-5-15	6/15/05	15	**8.6**	<0.0050	<0.0050	**0.20**	<0.0050	**0.065**	**0.50**	<0.010	<0.0050	<0.0050	NA
SB-6-5	6/15/05	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.030**	**0.13**	<0.010	<0.0050	<0.0050	NA
SB-6-10	6/15/05	10	<1.0	<0.0050	<0.0050	<0.0050	**0.0064**	**0.0068**	**0.49**	<0.010	<0.0050	<0.0050	NA
SB-6-15	6/15/05	15	<4.8	<0.024	<0.024	<0.024	<0.024	**0.13**	**9.3**	<0.048	<0.024	<0.024	NA
SB-6-17	6/15/05	17	<4.9	<0.025	<0.025	<0.025	<0.025	<0.025	**3.1**	<0.049	<0.025	<0.025	NA
SB-8-5	6/15/05	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.0050**	**0.011**	<0.010	<0.0050	<0.0050	NA
SB-8-10	6/15/05	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**1.6**	<0.010	<0.0050	<0.0050	NA
SB-8-12	6/15/05	12	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.014**	**0.30**	<0.010	<0.0050	<0.0050	NA
SB-8-15	6/15/05	15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.23**	**0.38**	<0.010	<0.0050	<0.0050	NA
EW-1-5	4/5/06	5	**0.232**	<0.00200	<0.00200	<0.00200	<0.00500	**0.0497**	**0.848**	<0.00200	<0.00500	<0.00200	NA
EW-1-10	4/5/06	10	**0.803**	**0.00603**	<0.00200	**0.00581**	<0.00500	**0.320**	**0.376**	<0.00200	<0.00500	<0.00200	NA
EW-1-12	4/5/06	12	**0.920**	**0.00496**	<0.00200	**0.00637**	**0.0270**	**0.172**	**0.502**	<0.00200	<0.00500	<0.00200	NA
EW-2-5	4/6/06	5	**0.158**	<0.00200	<0.00200	<0.00200	<0.00500	<0.00200	<0.0500	<0.00200	<0.00500	<0.00200	NA
EW-2-10	4/6/06	10	**0.488**	<0.00200	<0.00200	<0.00200	<0.00500	<0.00200	<0.0500	<0.00200	<0.00500	<0.00200	NA
EW-2-12	4/6/06	12	**0.715**	**0.00532**	<0.00240	<0.00200	<0.00500	<0.00300	<0.0500	<0.00200	<0.00500	<0.00200	NA

Table 1: Historical Soil Analytical Data - Shell-branded Service Station, 2120 Montana Street, Oakland, California

Sample ID	Date	Depth (fbg)	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Total Xylenes (ppm)	MTBE (ppm)	TBA (ppm)	DIPE (ppm)	ETBE (ppm)	TAME (ppm)	Lead (ppm)

Abbreviations and Notes:

fbg = Feet below grade
ppm = Parts per million, equivalent to mg/Kg
mg/Kg = Miligrams per kilogram
<x = Not detected at detection limit x
NA = Not analyzed
TPHg = Total petroleum hydrocarbons as gasoline
MTBE = Methyl tertiary-butyl ether
TBA = Tertiary-butyl alcohol
DIPE = Di-isopropyl ether
ETBE= Ethyl tertiary-butyl ether
TAME = Tertiary-amyl methyl ether

TPHg analyzed by EPA Method 8015M for samples collected prior to 2000; later samples analyzed by EPA Method 8260B.
Benzene, toluene, ethylbenzene and total xylenes analyzed by EPA Method 8020 prior to 2000; later samples analyzed by EPA Method 8260B.
MTBE analyzed by EPA Method 8020 prior to 2000, unless otherwise noted; later samples analyzed by EPA Method 8260B.
TBA, DIPE, ETBE, and TAME analyzed by EPA Method 8260B.
Lead sample from 1997 analyzed according to Title 22; 2004 lead samples analyzed by EPA Method 6010B.

a - Lead results reported are based on a composite sample of D-1, D-2, and D-3.
b - Results in parentheses were analyzed by EPA Method 8260.
Note: SB-7 was not advanced due to utility conflicts.

ATTACHMENT A

Standard Field Procedures for Remediation Well Installation

STANDARD FIELD PROCEDURES FOR REMEDIATION WELL INSTALLATION

This document presents standard field methods for drilling and sampling soil borings and installing remediation wells. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

SOIL BORING AND SAMPLING

Objectives

Soil samples are collected to characterize subsurface lithology, assess whether the soils exhibit obvious hydrocarbon or other compound vapor or staining, and to collect samples for analysis at a State-certified laboratory. All borings are logged using the Unified Soil Classification System by a trained geologist working under the supervision of a California Registered Geologist (RG) or a Certified Engineering Geologist (CEG).

Soil Boring and Sampling

Soil borings are typically drilled using hollow-stem augers or push technologies such as the Geoprobe. Prior to drilling, the first 5 ft of the boring are cleared using an air or water knife and vacuum extraction. This minimizes the potential for impacting utilities.

Soil samples are collected at least every five ft to characterize the subsurface sediments and for possible chemical analysis. Additional soil samples are collected near the water table and at lithologic changes. Samples are collected using lined split-barrel or equivalent samplers driven into undisturbed sediments at the bottom of the borehole.

Drilling and sampling equipment is steam-cleaned prior to drilling and between borings to prevent cross-contamination. Sampling equipment is washed between samples with trisodium phosphate or an equivalent EPA-approved detergent.

Sample Analysis

Sampling tubes chosen for analysis are trimmed of excess soil and capped with Teflon tape and plastic end caps. Soil samples are labeled and stored at or below 4oC on either crushed or dry ice, depending upon local regulations. Samples are transported under chain-of-custody to a State-certified analytic laboratory.

Field Screening

One of the remaining tubes is partially emptied leaving about one-third of the soil in the tube. The tube is capped with plastic end caps and set aside to allow hydrocarbons to volatilize from the soil. After ten to fifteen minutes, a portable photoionization detector (PID) measures volatile hydrocarbon vapor concentrations in the tube headspace, extracting the vapor through a slit in the cap. PID measurements are used along with the field observations, odors, stratigraphy and groundwater depth to select soil samples for analysis.

Grouting

If the borings are not completed as wells, the borings are filled to the ground surface with cement grout poured or pumped through a tremie pipe.

REMEDIATION WELL INSTALLATION

Well Construction

Remediation wells are commonly installed for dual phase extraction (DPE), soil vapor extraction (SVE), groundwater extraction (GWE), oxygenation, air sparging (AS), and vapor monitoring (VM). Well depths and screen lengths will vary depending upon several factors including the intended use of the well, groundwater depth, occurrence of hydrocarbons or other compounds in the borehole, stratigraphy and State and local regulatory guidelines.

Well casing and screen are typically one to four inch diameter flush-threaded Schedule 40 PVC. Screen slot size varies according to the sediments screened, but slots are generally 0.010 or 0.020 inches wide. A rinsed and graded sand occupies the annular space between the boring and the well screen to about one to two ft above the well screen. A two ft thick hydrated bentonite seal separates the sand from the overlying sanitary surface seal composed of Portland type I,II cement. Well-heads are typically connected with remediation piping set in traffic-rated vaults finished flush with the ground surface. Typical well screen intervals for each type of well are described below.

DPE Wells: DPE wells are screened in the vadose zone targeting horizons with the highest hydrocarbon concentrations and a few feet into the saturated zone, targeting SPH on or submerged by the water table. A vacuum is applied to the well casing and/or a 'stinger' (a one-inch diameter tube) placed in the well about 1 to 2 feet below the static fluid level. Vacuums can be adjusted to fine tune the performance of the well/system and to optimize the removal of SPH without excessive production of ground water.

SVE Wells: SVE wells are screened in the vadose zone targeting horizons with the highest hydrocarbon concentrations. SVE wells are also occasionally screened as concurrent soil vapor and groundwater extraction wells with screen interval above and below the water table.

GWE Wells: Groundwater extraction wells are typically screened ten to fifteen ft below the first water-bearing zone encountered. The well screen may or may not be screened above the water table depending upon whether the water bearing zone is unconfined or confined.

Oxygenation Wells: Oxygenation wells are installed above or below the water table to supply oxygen and enhance naturally occurring hydrocarbon biodegradation. Oxygenation wells installed in the vadose zone typically have well screens that are two to ten feet long and target horizons with the highest hydrocarbon concentrations. Oxygenation wells installed below the water table typically have a two foot screen interval set ten to fifteen ft below the water table.

AS Wells: Air sparging wells are installed below the water table and typically have a two foot screen interval set ten to fifteen ft below the water table.

VM Wells: Vapor monitoring wells are installed in the vadose zone to check for hydrocarbon vapor migration during air injection. The wells are typically constructed with short screens to target horizons through which hydrocarbon vapor migration could occur. These wells can also be constructed in borings drilled using push technologies such as the Geoprobe by using non-collapsible Teflon tubing set in small sand packed regions overlain by grout.

Well Development

Groundwater extraction wells are generally developed using a combination of groundwater surging and extraction. Surging agitates the groundwater and dislodges fine sediments from the sand pack. After about ten minutes of surging, groundwater is extracted from the well using bailing, pumping and/or reverse air-lifting through an eductor pipe to remove the sediments from the well. Surging and extraction continue until at least ten well-casing volumes of groundwater are extracted and the sediment volume in the groundwater is negligible. This process usually occurs prior to installing the sanitary surface seal to ensure sand pack stabilization. If development occurs after surface seal installation, then development occurs 24 to 72 hours after seal installation to ensure that the Portland cement has set up correctly.

All equipment is steam-cleaned prior to use and air used for air-lifting is filtered to prevent oil entrained in the compressed air from entering the well. Wells that are developed using air-lift evacuation are not sampled until at least 24 hours after they are developed.

ATTACHMENT B

Permit

Alameda County Public Works Agency - Water Resources Well Permit

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 03/13/2006 By jamesy **Receipt Number: WR2006-0118**
Permits Issued: W2006-0190 **Permits Valid from 04/05/2006 to 04/06/2006**

Application Id: 1141847405153 **City of Project Site:** Oakland
Site Location: 2170 Montana St, Oakland, CA 94600
Project Start Date: 04/05/2006 **Completion Date:** 04/06/2006

Applicant: Cambria Environmental - Stu Dalie **Phone:** 510-420-3339
5900 Hollis St #A, Emeryville, CA 94608
Property Owner: Shell Oil Products Co (US) **Phone:** 707-805-0751
209445 Wilmington, Carson, CA 90810
Client: ** same as Property Owner **

Total Due: $200.00
Total Amount Paid: $200.00
Payer Name : Cambria Paid By: CHECK **PAID IN FULL**

Works Requesting Permits:

Remedian Well Construction-Extraction - 2 Wells
Driller: Gregg Drilling - Lic #: 485165 - Method: hstem **Work Total: $200.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2006-0190	03/13/2006	07/04/2006	EW1	10.00 in.	4.00 in.	10.00 ft	30.00 ft
W2006-0190	03/13/2006	07/04/2006	EW2	10.00 in.	4.00 in.	10.00 ft	30.00 ft

Specific Work Permit Conditions

1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

2. Permitte, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.

4. Applicant shall contact George Cashen for an inspection time at 510-670-6610 at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

5. Minimum seal depth is 2 feet below ground surface (BGS).

6. Minimum surface seal thickness is two inches of cement grout placed by tremie

7. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

ATTACHMENT C

Boring Logs and Well Construction Details

Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	EW-1
JOB/SITE NAME	Shell-branded Service Station	**DRILLING STARTED**	05-Apr-06
LOCATION	2120 Montana Street, Oakland	**DRILLING COMPLETED**	05-Apr-06
PROJECT NUMBER	248-0733-008	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	10"	**SCREENED INTERVALS**	12 to 28 fbg
LOGGED BY	S. Dalie IV	**DEPTH TO WATER (First Encountered)**	13.5 fbg (05-Apr-06)
REVIEWED BY	A. Cool, P.G. #7659	**DEPTH TO WATER (Static)**	NA
REMARKS	Air knifed to 5 fbg		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							Concrete	1.0	
					GW		**Well Graded GRAVEL**; Moist; 5% silt, 10% coarse sand, 85% coarse gravel.	3.0	
0.1	3 4 6 6 4 6 9 9 10 17	EW-1-5		5	ML		**SILT**; Stiff; moist; 20% clay, 75% silt; medium to high plasticity.		Portland Type I/II; 4" diam., Schedule 40 PVC
215	3 6 6 3 5 3 5 6 7 1	EW-1-10		10			@ 8 fbg SILT with Gravel; very stiff; moist; 25% clay, 55% silt, 25% fine gravel.	11.0	Bentonite Seal
638	2 2 2 2 2 3 3	EW-1-12			GW		**Well Graded GRAVEL**; Loose; moist; 5% silt, 5% fine sand, 90% fine gravel.	13.0	
					GM		**Silty GRAVEL**; Loose; moist; 15% clay, 20% silt, 65% fine gravel.	15.3	
1,015	3 4 6 4 4 8 8 8 12 10	EW-1-15		15	SM		**Silty SAND**; Very loose; moist to wet; 20% clay, 45% silt, 55% fine sand.	18.5	
8.0		EW-1-17					No Recovery	20.0	Lonestar Sand #2/12; 4"-diam., 0.020" Slotted Schedule 40 PVC
2.1	15 8 10 11 14 11 12	EW-1-21		20	CL		**Sandy CLAY**; Stiff; wet; 55% clay, 5% silt, 35% fine sand, 5% fine gravel; medium to high plasticity.	24.0	
					SC		**Clayey SAND with Gravel**; Medium dense; wet; 25% clay, 55% fine sand, 20% coarse gravel.	25.0	
2.7	27 11 14 12	EW-1-25		25	GP		**Poorly graded GRAVEL**; Dense; wet; 5% fine sand, 95% coarse gravel.	28.5	Bentonite Seal
1.1		EW-1-29.5		30	CL		**CLAY**; Hard; wet; 75% clay, 20% silt, 5% fine sand; high plasticity.	30.0	Bottom of Boring @ 30 fbg

WELL LOG (PID) G:\OAKLAND 2120 MONTANA\GINT\GINT.GPJ DEFAULT.GDT 6/9/06

Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	EW-2
JOB/SITE NAME	Shell-branded Service Station	**DRILLING STARTED**	06-Apr-06
LOCATION	2120 Montana Street, Oakland	**DRILLING COMPLETED**	06-Apr-06
PROJECT NUMBER	248-0733-008	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	10"	**SCREENED INTERVALS**	8 to 28 fbg
LOGGED BY	S. Dalie IV	**DEPTH TO WATER (First Encountered)**	18.0 fbg (06-Apr-06)
REVIEWED BY	A. Cool, P.G. #7659	**DEPTH TO WATER (Static)**	NA
REMARKS	Air knifed to 5 fbg		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							Concrete	1.0	Portland Type I/II
					GW		**Well Graded GRAVEL**; Moist; 5% silt, 10% fine sand, 85% coarse gravel.	2.3	
					GM		**Silty GRAVEL**; Moist; 20% silt, 5% fine sand, 75% coarse gravel.	3.5	
					ML		**SILT**; Stiff; moist; 15% clay, 85% silt.		
0	4 5 8 4 6	EW-2-5		5				7.0	4" diam., Schedule 40 PVC
	4 5 6 6 3				SM		**Silty SAND** Medium dense; moist; 40% silt, 55% fine sand, 5% fine gravel.		Bentonite Seal
15	6 7 8 7	EW-2-10		10				10.5	
					GW		**Well Graded GRAVEL with Sand** Loose; moist; 20% fine sand, 80% coarse sand.	12.5	
1,485	2 4 4 5 2	EW-2-12			SC		**Clayey SAND with Gravel** Loose; moist; 15% clay, 50% fine sand, 35% coarse gravel.		
1,491	3 4 3 3 2	EW-2-15		15	GC		**Clayey GRAVEL**; Loose; moist; 25% clay, 10% fine sand, 65% coarse gravel.	15.0	
	3 4 5 3 6				ML		**SILT**; Stiff; wet; 30% clay, 65% silt, 5% fine sand; medium plasticity.	17.9 ▽	Lonestar Sand #2/12
50	6 3 5 10 9	EW-2-20		20				20.5	4"-diam., 0.020" Slotted Schedule 40 PVC
	10 12 6 17 44				CL		**CLAY with Gravel** Very stiff; wet; 85% clay, 15% fine gravel; high plasticity		
35	34 18 19 15 41	EW-2-25		25	GW		**Well Graded GRAVEL**; Very dense; wet; 10% fine sand, 90% medium gravel.	25.0	
	34 18 19 15 41				GC		**Clayey GRAVEL**; Dense; wet; 25% clay, 10% fine sand, 65% coarse gravel	28.0	
					ML		**Sandy SILT**; Hard; wet; 5% clay, 60% silt, 30% fine sand, 5% fine gravel, no plasticity.	29.0	Bentonite Seal
29	41	EW-2-29.5		30				30.0	Bottom of Boring @ 30 fbg

WELL LOG (PID) G:\OAKLAND 2120 MONTANA\GINT\GINT.GPJ DEFAULT.GDT 6/9/06

ATTACHMENT D

Laboratory Analytical Report

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

April 24, 2006

Client: Cambria Env. Tech. (Emeryville) / SHELL (13675)
5900 Hollis Street, Suite A
Emeryville, CA 94608
Attn: Anni Kreml

Work Order: NPD1300
Project Name: 2120 Montana Street, Oakland, CA
Project Nbr: SAP 135675
P/O Nbr: 98995740
Date Received: 04/12/06

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
EW-1-5	NPD1300-01	04/05/06 11:40
EW-1-10	NPD1300-02	04/05/06 12:00
EW-1-12	NPD1300-03	04/05/06 12:10
EW-2-5	NPD1300-09	04/06/06 08:10
EW-2-10	NPD1300-10	04/06/06 08:30
EW-2-12	NPD1300-11	04/06/06 09:40

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accredidation.

California Certification Number: 01168CA

The Chain(s) of Custody, 3 pages, are included and are an integral part of this report.

Report Approved By:

Jim Hatfield
Project Management

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

Client	Cambria Env. Tech. (Emeryville) / SHELL (13675)	Work Order:	NPD1300
	5900 Hollis Street, Suite A	Project Name:	2120 Montana Street, Oakland, CA
	Emeryville, CA 94608	Project Number:	SAP 135675
Attn	Anni Kreml	Received:	04/12/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPD1300-01 (EW-1-5 - Soil) Sampled: 04/05/06 11:40								
General Chemistry Parameters								
% Dry Solids	**83.9**		%	0.500	1	04/17/06 17:42	SW-846	6042592
Selected Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg	0.00200	1	04/18/06 17:38	SW846 8260B	6041973
Tertiary Butyl Alcohol	**0.848**		mg/kg	0.0500	1	04/18/06 17:38	SW846 8260B	6041973
Ethylbenzene	ND		mg/kg	0.00200	1	04/18/06 17:38	SW846 8260B	6041973
Methyl tert-Butyl Ether	**0.0497**		mg/kg	0.00200	1	04/18/06 17:38	SW846 8260B	6041973
Diisopropyl Ether	ND		mg/kg	0.00200	1	04/18/06 17:38	SW846 8260B	6041973
Toluene	ND		mg/kg	0.00200	1	04/18/06 17:38	SW846 8260B	6041973
Ethyl tert-Butyl Ether	ND		mg/kg	0.00500	1	04/18/06 17:38	SW846 8260B	6041973
Tert-Amyl Methyl Ether	ND		mg/kg	0.00200	1	04/18/06 17:38	SW846 8260B	6041973
Xylenes, total	ND		mg/kg	0.00500	1	04/18/06 17:38	SW846 8260B	6041973
Surr: 1,2-Dichloroethane-d4 (72-125%)	*104 %*					*04/18/06 17:38*	*SW846 8260B*	*6041973*
Surr: Dibromofluoromethane (73-124%)	*104 %*					*04/18/06 17:38*	*SW846 8260B*	*6041973*
Surr: Toluene-d8 (80-124%)	*103 %*					*04/18/06 17:38*	*SW846 8260B*	*6041973*
Surr: 4-Bromofluorobenzene (25-185%)	*105 %*					*04/18/06 17:38*	*SW846 8260B*	*6041973*
Purgeable Petroleum Hydrocarbons								
Gasoline Range Organics	**0.232**		mg/kg	0.100	1	04/18/06 17:38	CA LUFT GC/MS	6041973
Sample ID: NPD1300-02 (EW-1-10 - Soil) Sampled: 04/05/06 12:00								
General Chemistry Parameters								
% Dry Solids	**78.4**		%	0.500	1	04/17/06 17:42	SW-846	6042592
Selected Volatile Organic Compounds by EPA Method 8260B								
Benzene	**0.00603**		mg/kg	0.00200	1	04/18/06 18:08	SW846 8260B	6041973
Tertiary Butyl Alcohol	**0.376**		mg/kg	0.0500	1	04/18/06 18:08	SW846 8260B	6041973
Ethylbenzene	**0.00581**		mg/kg	0.00200	1	04/18/06 18:08	SW846 8260B	6041973
Methyl tert-Butyl Ether	**0.320**		mg/kg	0.100	50	04/19/06 10:31	SW846 8260B	6042726
Diisopropyl Ether	ND		mg/kg	0.00200	1	04/18/06 18:08	SW846 8260B	6041973
Toluene	ND		mg/kg	0.00200	1	04/18/06 18:08	SW846 8260B	6041973
Ethyl tert-Butyl Ether	ND		mg/kg	0.00500	1	04/18/06 18:08	SW846 8260B	6041973
Tert-Amyl Methyl Ether	ND		mg/kg	0.00200	1	04/18/06 18:08	SW846 8260B	6041973
Xylenes, total	ND		mg/kg	0.00500	1	04/18/06 18:08	SW846 8260B	6041973
Surr: 1,2-Dichloroethane-d4 (72-125%)	*108 %*					*04/18/06 18:08*	*SW846 8260B*	*6041973*
Surr: Dibromofluoromethane (73-124%)	*105 %*					*04/18/06 18:08*	*SW846 8260B*	*6041973*
Surr: Toluene-d8 (80-124%)	*100 %*					*04/18/06 18:08*	*SW846 8260B*	*6041973*
Surr: 4-Bromofluorobenzene (25-185%)	*102 %*					*04/18/06 18:08*	*SW846 8260B*	*6041973*
Purgeable Petroleum Hydrocarbons								
Gasoline Range Organics	**0.803**		mg/kg	0.100	1	04/18/06 18:08	CA LUFT GC/MS	6041973

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

Client	Cambria Env. Tech. (Emeryville) / SHELL (13675)	Work Order:	NPD1300
	5900 Hollis Street, Suite A	Project Name:	2120 Montana Street, Oakland, CA
	Emeryville, CA 94608	Project Number:	SAP 135675
Attn	Anni Kreml	Received:	04/12/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPD1300-03 (EW-1-12 - Soil) Sampled: 04/05/06 12:10								
General Chemistry Parameters								
% Dry Solids	**81.1**		%	0.500	1	04/17/06 17:42	SW-846	6042592
Selected Volatile Organic Compounds by EPA Method 8260B								
Benzene	**0.00496**		mg/kg	0.00200	1	04/18/06 18:37	SW846 8260B	6041973
Tertiary Butyl Alcohol	**0.502**		mg/kg	0.0500	1	04/18/06 18:37	SW846 8260B	6041973
Ethylbenzene	**0.00637**		mg/kg	0.00200	1	04/18/06 18:37	SW846 8260B	6041973
Methyl tert-Butyl Ether	**0.172**		mg/kg	0.00200	1	04/18/06 18:37	SW846 8260B	6041973
Diisopropyl Ether	ND		mg/kg	0.00200	1	04/18/06 18:37	SW846 8260B	6041973
Toluene	ND		mg/kg	0.00200	1	04/18/06 18:37	SW846 8260B	6041973
Ethyl tert-Butyl Ether	ND		mg/kg	0.00500	1	04/18/06 18:37	SW846 8260B	6041973
Tert-Amyl Methyl Ether	ND		mg/kg	0.00200	1	04/18/06 18:37	SW846 8260B	6041973
Xylenes, total	**0.0270**		mg/kg	0.00500	1	04/18/06 18:37	SW846 8260B	6041973
Surr: 1,2-Dichloroethane-d4 (72-125%)	*102 %*					*04/18/06 18:37*	*SW846 8260B*	*6041973*
Surr: Dibromofluoromethane (73-124%)	*99 %*					*04/18/06 18:37*	*SW846 8260B*	*6041973*
Surr: Toluene-d8 (80-124%)	*104 %*					*04/18/06 18:37*	*SW846 8260B*	*6041973*
Surr: 4-Bromofluorobenzene (25-185%)	*103 %*					*04/18/06 18:37*	*SW846 8260B*	*6041973*
Purgeable Petroleum Hydrocarbons								
Gasoline Range Organics	**0.920**		mg/kg	0.100	1	04/18/06 18:37	CA LUFT GC/MS	6041973
Sample ID: NPD1300-09 (EW-2-5 - Soil) Sampled: 04/06/06 08:10								
General Chemistry Parameters								
% Dry Solids	**80.8**		%	0.500	1	04/17/06 17:42	SW-846	6042592
Selected Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg	0.00200	1	04/18/06 19:07	SW846 8260B	6041973
Tertiary Butyl Alcohol	ND		mg/kg	0.0500	1	04/18/06 19:07	SW846 8260B	6041973
Ethylbenzene	ND		mg/kg	0.00200	1	04/18/06 19:07	SW846 8260B	6041973
Methyl tert-Butyl Ether	ND		mg/kg	0.00200	1	04/18/06 19:07	SW846 8260B	6041973
Diisopropyl Ether	ND		mg/kg	0.00200	1	04/18/06 19:07	SW846 8260B	6041973
Toluene	ND		mg/kg	0.00200	1	04/18/06 19:07	SW846 8260B	6041973
Ethyl tert-Butyl Ether	ND		mg/kg	0.00500	1	04/18/06 19:07	SW846 8260B	6041973
Tert-Amyl Methyl Ether	ND		mg/kg	0.00200	1	04/18/06 19:07	SW846 8260B	6041973
Xylenes, total	ND		mg/kg	0.00500	1	04/18/06 19:07	SW846 8260B	6041973
Surr: 1,2-Dichloroethane-d4 (72-125%)	*104 %*					*04/18/06 19:07*	*SW846 8260B*	*6041973*
Surr: Dibromofluoromethane (73-124%)	*101 %*					*04/18/06 19:07*	*SW846 8260B*	*6041973*
Surr: Toluene-d8 (80-124%)	*101 %*					*04/18/06 19:07*	*SW846 8260B*	*6041973*
Surr: 4-Bromofluorobenzene (25-185%)	*104 %*					*04/18/06 19:07*	*SW846 8260B*	*6041973*
Purgeable Petroleum Hydrocarbons								
Gasoline Range Organics	**0.158**		mg/kg	0.100	1	04/18/06 19:07	CA LUFT GC/MS	6041973

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

Client	Cambria Env. Tech. (Emeryville) / SHELL (13675)	Work Order:	NPD1300
	5900 Hollis Street, Suite A	Project Name:	2120 Montana Street, Oakland, CA
	Emeryville, CA 94608	Project Number:	SAP 135675
Attn	Anni Kreml	Received:	04/12/06 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPD1300-10 (EW-2-10 - Soil) Sampled: 04/06/06 08:30								
General Chemistry Parameters								
% Dry Solids	**78.9**		%	0.500	1	04/17/06 17:42	SW-846	6042592
Selected Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg	0.00200	1	04/18/06 19:37	SW846 8260B	6041973
Tertiary Butyl Alcohol	ND		mg/kg	0.0500	1	04/18/06 19:37	SW846 8260B	6041973
Ethylbenzene	ND		mg/kg	0.00200	1	04/18/06 19:37	SW846 8260B	6041973
Methyl tert-Butyl Ether	ND		mg/kg	0.00200	1	04/18/06 19:37	SW846 8260B	6041973
Diisopropyl Ether	ND		mg/kg	0.00200	1	04/18/06 19:37	SW846 8260B	6041973
Toluene	ND		mg/kg	0.00200	1	04/18/06 19:37	SW846 8260B	6041973
Ethyl tert-Butyl Ether	ND		mg/kg	0.00500	1	04/18/06 19:37	SW846 8260B	6041973
Tert-Amyl Methyl Ether	ND		mg/kg	0.00200	1	04/18/06 19:37	SW846 8260B	6041973
Xylenes, total	ND		mg/kg	0.00500	1	04/18/06 19:37	SW846 8260B	6041973
Surr: 1,2-Dichloroethane-d4 (72-125%)	*93 %*					*04/18/06 19:37*	*SW846 8260B*	*6041973*
Surr: Dibromofluoromethane (73-124%)	*99 %*					*04/18/06 19:37*	*SW846 8260B*	*6041973*
Surr: Toluene-d8 (80-124%)	*106 %*					*04/18/06 19:37*	*SW846 8260B*	*6041973*
Surr: 4-Bromofluorobenzene (25-185%)	*103 %*					*04/18/06 19:37*	*SW846 8260B*	*6041973*
Purgeable Petroleum Hydrocarbons								
Gasoline Range Organics	**0.488**		mg/kg	0.100	1	04/18/06 19:37	CA LUFT GC/MS	6041973
Sample ID: NPD1300-11 (EW-2-12 - Soil) Sampled: 04/06/06 09:40								
General Chemistry Parameters								
% Dry Solids	**90.2**		%	0.500	1	04/17/06 17:42	SW-846	6042592
Selected Volatile Organic Compounds by EPA Method 8260B								
Benzene	**0.00532**		mg/kg	0.00200	1	04/18/06 20:07	SW846 8260B	6041973
Tertiary Butyl Alcohol	ND		mg/kg	0.0500	1	04/18/06 20:07	SW846 8260B	6041973
Ethylbenzene	ND		mg/kg	0.00200	1	04/18/06 20:07	SW846 8260B	6041973
Methyl tert-Butyl Ether	**0.00300**		mg/kg	0.00200	1	04/18/06 20:07	SW846 8260B	6041973
Diisopropyl Ether	ND		mg/kg	0.00200	1	04/18/06 20:07	SW846 8260B	6041973
Toluene	**0.00240**		mg/kg	0.00200	1	04/18/06 20:07	SW846 8260B	6041973
Ethyl tert-Butyl Ether	ND		mg/kg	0.00500	1	04/18/06 20:07	SW846 8260B	6041973
Tert-Amyl Methyl Ether	ND		mg/kg	0.00200	1	04/18/06 20:07	SW846 8260B	6041973
Xylenes, total	ND		mg/kg	0.00500	1	04/18/06 20:07	SW846 8260B	6041973
Surr: 1,2-Dichloroethane-d4 (72-125%)	*105 %*					*04/18/06 20:07*	*SW846 8260B*	*6041973*
Surr: Dibromofluoromethane (73-124%)	*103 %*					*04/18/06 20:07*	*SW846 8260B*	*6041973*
Surr: Toluene-d8 (80-124%)	*100 %*					*04/18/06 20:07*	*SW846 8260B*	*6041973*
Surr: 4-Bromofluorobenzene (25-185%)	*105 %*					*04/18/06 20:07*	*SW846 8260B*	*6041973*
Purgeable Petroleum Hydrocarbons								
Gasoline Range Organics	**0.715**		mg/kg	0.100	1	04/18/06 20:07	CA LUFT GC/MS	6041973

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

Client	Cambria Env. Tech. (Emeryville) / SHELL (13675)	Work Order:	NPD1300
	5900 Hollis Street, Suite A	Project Name:	2120 Montana Street, Oakland, CA
	Emeryville, CA 94608	Project Number:	SAP 135675
Attn	Anni Kreml	Received:	04/12/06 08:00

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Purgeable Petroleum Hydrocarbons							
CA LUFT GC/MS	6041973	NPD1300-01	5.00	5.00	04/12/06 14:00	SNN	EPA 5035
CA LUFT GC/MS	6041973	NPD1300-02	5.00	5.00	04/12/06 14:06	SNN	EPA 5035
CA LUFT GC/MS	6041973	NPD1300-03	5.00	5.00	04/12/06 14:09	SNN	EPA 5035
CA LUFT GC/MS	6041973	NPD1300-09	5.00	5.00	04/12/06 14:13	SNN	EPA 5035
CA LUFT GC/MS	6041973	NPD1300-10	5.00	5.00	04/12/06 14:15	SNN	EPA 5035
CA LUFT GC/MS	6041973	NPD1300-11	5.00	5.00	04/12/06 14:18	SNN	EPA 5035
Selected Volatile Organic Compounds by EPA Method 8260B							
SW846 8260B	6041973	NPD1300-01	5.00	5.00	04/12/06 14:00	SNN	EPA 5035
SW846 8260B	6041973	NPD1300-02	5.00	5.00	04/12/06 14:06	SNN	EPA 5035
SW846 8260B	6041973	NPD1300-03	5.00	5.00	04/12/06 14:09	SNN	EPA 5035
SW846 8260B	6041973	NPD1300-09	5.00	5.00	04/12/06 14:13	SNN	EPA 5035
SW846 8260B	6041973	NPD1300-10	5.00	5.00	04/12/06 14:15	SNN	EPA 5035
SW846 8260B	6041973	NPD1300-11	5.00	5.00	04/12/06 14:18	SNN	EPA 5035
Volatile Organic Compounds by EPA Method 8260B							
SW846 8260B	6041973	NPD1300-01	5.00	5.00	04/12/06 14:00	SNN	EPA 5035
SW846 8260B	6041973	NPD1300-02	5.00	5.00	04/12/06 14:06	SNN	EPA 5035
SW846 8260B	6042726	NPD1300-02RE1	5.00	5.00	04/12/06 14:06	SNN	EPA 5035
SW846 8260B	6041973	NPD1300-03	5.00	5.00	04/12/06 14:09	SNN	EPA 5035
SW846 8260B	6041973	NPD1300-09	5.00	5.00	04/12/06 14:13	SNN	EPA 5035
SW846 8260B	6041973	NPD1300-10	5.00	5.00	04/12/06 14:15	SNN	EPA 5035
SW846 8260B	6041973	NPD1300-11	5.00	5.00	04/12/06 14:18	SNN	EPA 5035

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

Client	Cambria Env. Tech. (Emeryville) / SHELL (13675)	Work Order:	NPD1300
	5900 Hollis Street, Suite A	Project Name:	2120 Montana Street, Oakland, CA
	Emeryville, CA 94608	Project Number:	SAP 135675
Attn	Anni Kreml	Received:	04/12/06 08:00

PROJECT QUALITY CONTROL DATA
Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Selected Volatile Organic Compounds by EPA Method 8260B						
6041973-BLK1						
Benzene	<0.000500		mg/kg	6041973	6041973-BLK1	04/18/06 17:08
Tertiary Butyl Alcohol	<0.0178		mg/kg	6041973	6041973-BLK1	04/18/06 17:08
Ethylbenzene	<0.000500		mg/kg	6041973	6041973-BLK1	04/18/06 17:08
Methyl tert-Butyl Ether	<0.000880		mg/kg	6041973	6041973-BLK1	04/18/06 17:08
Diisopropyl Ether	<0.000640		mg/kg	6041973	6041973-BLK1	04/18/06 17:08
Toluene	<0.000970		mg/kg	6041973	6041973-BLK1	04/18/06 17:08
Ethyl tert-Butyl Ether	<0.000520		mg/kg	6041973	6041973-BLK1	04/18/06 17:08
Tert-Amyl Methyl Ether	<0.000670		mg/kg	6041973	6041973-BLK1	04/18/06 17:08
Xylenes, total	<0.00148		mg/kg	6041973	6041973-BLK1	04/18/06 17:08
Surrogate: 1,2-Dichloroethane-d4	105%			6041973	6041973-BLK1	04/18/06 17:08
Surrogate: 1,2-Dichloroethane-d4	105%			6041973	6041973-BLK1	04/18/06 17:08
Surrogate: Dibromofluoromethane	106%			6041973	6041973-BLK1	04/18/06 17:08
Surrogate: Dibromofluoromethane	106%			6041973	6041973-BLK1	04/18/06 17:08
Surrogate: Toluene-d8	101%			6041973	6041973-BLK1	04/18/06 17:08
Surrogate: Toluene-d8	101%			6041973	6041973-BLK1	04/18/06 17:08
Surrogate: 4-Bromofluorobenzene	109%			6041973	6041973-BLK1	04/18/06 17:08
Surrogate: 4-Bromofluorobenzene	109%			6041973	6041973-BLK1	04/18/06 17:08
6042726-BLK1						
Tertiary Butyl Alcohol	<0.0178		mg/kg	6042726	6042726-BLK1	04/19/06 05:04
Methyl tert-Butyl Ether	<0.000880		mg/kg	6042726	6042726-BLK1	04/19/06 05:04
Diisopropyl Ether	<0.000640		mg/kg	6042726	6042726-BLK1	04/19/06 05:04
Ethyl tert-Butyl Ether	<0.000520		mg/kg	6042726	6042726-BLK1	04/19/06 05:04
Tert-Amyl Methyl Ether	<0.000670		mg/kg	6042726	6042726-BLK1	04/19/06 05:04
Surrogate: 1,2-Dichloroethane-d4	91%			6042726	6042726-BLK1	04/19/06 05:04
Surrogate: Dibromofluoromethane	100%			6042726	6042726-BLK1	04/19/06 05:04
Surrogate: Toluene-d8	101%			6042726	6042726-BLK1	04/19/06 05:04
Surrogate: 4-Bromofluorobenzene	103%			6042726	6042726-BLK1	04/19/06 05:04
Purgeable Petroleum Hydrocarbons						
6041973-BLK1						
Gasoline Range Organics	<0.0500		mg/kg	6041973	6041973-BLK1	04/18/06 17:08
Surrogate: 1,2-Dichloroethane-d4	105%			6041973	6041973-BLK1	04/18/06 17:08
Surrogate: Dibromofluoromethane	106%			6041973	6041973-BLK1	04/18/06 17:08
Surrogate: Toluene-d8	101%			6041973	6041973-BLK1	04/18/06 17:08
Surrogate: 4-Bromofluorobenzene	109%			6041973	6041973-BLK1	04/18/06 17:08

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

Client	Cambria Env. Tech. (Emeryville) / SHELL (13675)	Work Order:	NPD1300
	5900 Hollis Street, Suite A	Project Name:	2120 Montana Street, Oakland, CA
	Emeryville, CA 94608	Project Number:	SAP 135675
Attn	Anni Kreml	Received:	04/12/06 08:00

PROJECT QUALITY CONTROL DATA
LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Selected Volatile Organic Compounds by EPA Method 8260B								
6041973-BS1								
Benzene	0.0500	0.0537		mg/kg	107%	76 - 123	6041973	04/18/06 16:38
Tertiary Butyl Alcohol	0.500	0.504		mg/kg	101%	38 - 150	6041973	04/18/06 16:38
Ethylbenzene	0.0500	0.0544		mg/kg	109%	77 - 125	6041973	04/18/06 16:38
Methyl tert-Butyl Ether	0.0500	0.0492		mg/kg	98%	63 - 140	6041973	04/18/06 16:38
Diisopropyl Ether	0.100	0.0976		mg/kg	98%	68 - 133	6041973	04/18/06 16:38
Toluene	0.0500	0.0540		mg/kg	108%	79 - 122	6041973	04/18/06 16:38
Ethyl tert-Butyl Ether	0.0500	0.0523		mg/kg	105%	64 - 138	6041973	04/18/06 16:38
Tert-Amyl Methyl Ether	0.0500	0.0509		mg/kg	102%	59 - 142	6041973	04/18/06 16:38
Xylenes, total	0.150	0.170		mg/kg	113%	71 - 129	6041973	04/18/06 16:38
Surrogate: 1,2-Dichloroethane-d4	50.0	52.9			106%	72 - 125	6041973	04/18/06 16:38
Surrogate: 1,2-Dichloroethane-d4	50.0	52.9			106%	72 - 125	6041973	04/18/06 16:38
Surrogate: Dibromofluoromethane	50.0	51.2			102%	73 - 124	6041973	04/18/06 16:38
Surrogate: Dibromofluoromethane	50.0	51.2			102%	73 - 124	6041973	04/18/06 16:38
Surrogate: Toluene-d8	50.0	52.1			104%	80 - 124	6041973	04/18/06 16:38
Surrogate: Toluene-d8	50.0	52.1			104%	80 - 124	6041973	04/18/06 16:38
Surrogate: 4-Bromofluorobenzene	50.0	52.9			106%	25 - 185	6041973	04/18/06 16:38
Surrogate: 4-Bromofluorobenzene	50.0	52.9			106%	25 - 185	6041973	04/18/06 16:38
6042726-BS1								
Tertiary Butyl Alcohol	0.500	0.427		mg/kg	85%	38 - 150	6042726	04/19/06 04:34
Methyl tert-Butyl Ether	0.0500	0.0461		mg/kg	92%	63 - 140	6042726	04/19/06 04:34
Diisopropyl Ether	0.100	0.102		mg/kg	102%	68 - 133	6042726	04/19/06 04:34
Ethyl tert-Butyl Ether	0.0500	0.0523		mg/kg	105%	64 - 138	6042726	04/19/06 04:34
Tert-Amyl Methyl Ether	0.0500	0.0483		mg/kg	97%	59 - 142	6042726	04/19/06 04:34
Surrogate: 1,2-Dichloroethane-d4	50.0	48.1			96%	72 - 125	6042726	04/19/06 04:34
Surrogate: Dibromofluoromethane	50.0	50.2			100%	73 - 124	6042726	04/19/06 04:34
Surrogate: Toluene-d8	50.0	51.0			102%	80 - 124	6042726	04/19/06 04:34
Surrogate: 4-Bromofluorobenzene	50.0	51.0			102%	25 - 185	6042726	04/19/06 04:34
Purgeable Petroleum Hydrocarbons								
6041973-BS1								
Gasoline Range Organics	3.10	2.97		mg/kg	96%	67 - 130	6041973	04/18/06 16:38
Surrogate: 1,2-Dichloroethane-d4	50.0	52.9			106%	0 - 200	6041973	04/18/06 16:38
Surrogate: Dibromofluoromethane	50.0	51.2			102%	0 - 200	6041973	04/18/06 16:38
Surrogate: Toluene-d8	50.0	52.1			104%	0 - 200	6041973	04/18/06 16:38
Surrogate: 4-Bromofluorobenzene	50.0	52.9			106%	0 - 200	6041973	04/18/06 16:38

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

Client	Cambria Env. Tech. (Emeryville) / SHELL (13675)	Work Order:	NPD1300
	5900 Hollis Street, Suite A	Project Name:	2120 Montana Street, Oakland, CA
	Emeryville, CA 94608	Project Number:	SAP 135675
Attn	Anni Kreml	Received:	04/12/06 08:00

PROJECT QUALITY CONTROL DATA
Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Selected Volatile Organic Compounds by EPA Method 8260B										
6041973-MS1										
Benzene	0.0588	0.122		mg/kg	0.0500	126%	48 - 138	6041973	NPD1296-16	04/19/06 02:35
Tertiary Butyl Alcohol	ND	0.738		mg/kg	0.500	148%	16 - 179	6041973	NPD1296-16	04/19/06 02:35
Ethylbenzene	0.00416	0.0570		mg/kg	0.0500	106%	19 - 146	6041973	NPD1296-16	04/19/06 02:35
Methyl tert-Butyl Ether	0.00855	0.0584		mg/kg	0.0500	100%	47 - 148	6041973	NPD1296-16	04/19/06 02:35
Diisopropyl Ether	0.0132	0.114		mg/kg	0.100	101%	50 - 143	6041973	NPD1296-16	04/19/06 02:35
Toluene	0.00204	0.0554		mg/kg	0.0500	107%	40 - 143	6041973	NPD1296-16	04/19/06 02:35
Ethyl tert-Butyl Ether	ND	0.0527		mg/kg	0.0500	105%	48 - 145	6041973	NPD1296-16	04/19/06 02:35
Tert-Amyl Methyl Ether	ND	0.0522		mg/kg	0.0500	104%	43 - 150	6041973	NPD1296-16	04/19/06 02:35
Xylenes, total	0.00355	0.163		mg/kg	0.150	106%	36 - 144	6041973	NPD1296-16	04/19/06 02:35
Surrogate: 1,2-Dichloroethane-d4		45.6		ug/L	50.0	91%	72 - 125	6041973	NPD1296-16	04/19/06 02:35
Surrogate: 1,2-Dichloroethane-d4		45.6		ug/L	50.0	91%	72 - 125	6041973	NPD1296-16	04/19/06 02:35
Surrogate: Dibromofluoromethane		49.0		ug/L	50.0	98%	73 - 124	6041973	NPD1296-16	04/19/06 02:35
Surrogate: Dibromofluoromethane		49.0		ug/L	50.0	98%	73 - 124	6041973	NPD1296-16	04/19/06 02:35
Surrogate: Toluene-d8		51.5		ug/L	50.0	103%	80 - 124	6041973	NPD1296-16	04/19/06 02:35
Surrogate: Toluene-d8		51.5		ug/L	50.0	103%	80 - 124	6041973	NPD1296-16	04/19/06 02:35
Surrogate: 4-Bromofluorobenzene		50.4		ug/L	50.0	101%	25 - 185	6041973	NPD1296-16	04/19/06 02:35
Surrogate: 4-Bromofluorobenzene		50.4		ug/L	50.0	101%	25 - 185	6041973	NPD1296-16	04/19/06 02:35
6042726-MS1										
Tertiary Butyl Alcohol	ND	0.659		mg/kg	0.500	132%	16 - 179	6042726	NPD1961-04	04/19/06 15:37
Methyl tert-Butyl Ether	ND	0.0519		mg/kg	0.0500	104%	47 - 148	6042726	NPD1961-04	04/19/06 15:37
Diisopropyl Ether	ND	0.107		mg/kg	0.100	107%	50 - 143	6042726	NPD1961-04	04/19/06 15:37
Ethyl tert-Butyl Ether	ND	0.0557		mg/kg	0.0500	111%	48 - 145	6042726	NPD1961-04	04/19/06 15:37
Tert-Amyl Methyl Ether	ND	0.0537		mg/kg	0.0500	107%	43 - 150	6042726	NPD1961-04	04/19/06 15:37
Surrogate: 1,2-Dichloroethane-d4		45.0		ug/L	50.0	90%	72 - 125	6042726	NPD1961-04	04/19/06 15:37
Surrogate: Dibromofluoromethane		47.4		ug/L	50.0	95%	73 - 124	6042726	NPD1961-04	04/19/06 15:37
Surrogate: Toluene-d8		51.0		ug/L	50.0	102%	80 - 124	6042726	NPD1961-04	04/19/06 15:37
Surrogate: 4-Bromofluorobenzene		53.4		ug/L	50.0	107%	25 - 185	6042726	NPD1961-04	04/19/06 15:37
Purgeable Petroleum Hydrocarbons										
6041973-MS1										
Gasoline Range Organics	0.942	3.86		mg/kg	3.10	94%	60 - 140	6041973	NPD1296-16	04/19/06 02:35
Surrogate: 1,2-Dichloroethane-d4		45.6		ug/L	50.0	91%	0 - 200	6041973	NPD1296-16	04/19/06 02:35
Surrogate: Dibromofluoromethane		49.0		ug/L	50.0	98%	0 - 200	6041973	NPD1296-16	04/19/06 02:35
Surrogate: Toluene-d8		51.5		ug/L	50.0	103%	0 - 200	6041973	NPD1296-16	04/19/06 02:35
Surrogate: 4-Bromofluorobenzene		50.4		ug/L	50.0	101%	0 - 200	6041973	NPD1296-16	04/19/06 02:35

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

Client	Cambria Env. Tech. (Emeryville) / SHELL (13675)	Work Order:	NPD1300
	5900 Hollis Street, Suite A	Project Name:	2120 Montana Street, Oakland, CA
	Emeryville, CA 94608	Project Number:	SAP 135675
Attn	Anni Kreml	Received:	04/12/06 08:00

PROJECT QUALITY CONTROL DATA

Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Selected Volatile Organic Compounds by EPA Method 8260B												
6041973-MSD1												
Benzene	0.0588	0.113		mg/kg	0.0500	108%	48 - 138	8	34	6041973	NPD1296-16	04/19/06 03:04
Tertiary Butyl Alcohol	ND	0.684		mg/kg	0.500	137%	16 - 179	8	45	6041973	NPD1296-16	04/19/06 03:04
Ethylbenzene	0.00416	0.0398		mg/kg	0.0500	71%	19 - 146	36	44	6041973	NPD1296-16	04/19/06 03:04
Methyl tert-Butyl Ether	0.00855	0.0564		mg/kg	0.0500	96%	47 - 148	3	39	6041973	NPD1296-16	04/19/06 03:04
Diisopropyl Ether	0.0132	0.104		mg/kg	0.100	91%	50 - 143	9	41	6041973	NPD1296-16	04/19/06 03:04
Toluene	0.00204	0.0713		mg/kg	0.0500	139%	40 - 143	25	41	6041973	NPD1296-16	04/19/06 03:04
Ethyl tert-Butyl Ether	ND	0.0476		mg/kg	0.0500	95%	48 - 145	10	37	6041973	NPD1296-16	04/19/06 03:04
Tert-Amyl Methyl Ether	ND	0.0460		mg/kg	0.0500	92%	43 - 150	13	39	6041973	NPD1296-16	04/19/06 03:04
Xylenes, total	0.00355	0.119		mg/kg	0.150	77%	36 - 144	31	35	6041973	NPD1296-16	04/19/06 03:04
Surrogate: 1,2-Dichloroethane-d4		46.9		ug/L	50.0	94%	72 - 125			6041973	NPD1296-16	04/19/06 03:04
Surrogate: 1,2-Dichloroethane-d4		46.9		ug/L	50.0	94%	72 - 125			6041973	NPD1296-16	04/19/06 03:04
Surrogate: Dibromofluoromethane		49.8		ug/L	50.0	100%	73 - 124			6041973	NPD1296-16	04/19/06 03:04
Surrogate: Dibromofluoromethane		49.8		ug/L	50.0	100%	73 - 124			6041973	NPD1296-16	04/19/06 03:04
Surrogate: Toluene-d8		52.9		ug/L	50.0	106%	80 - 124			6041973	NPD1296-16	04/19/06 03:04
Surrogate: Toluene-d8		52.9		ug/L	50.0	106%	80 - 124			6041973	NPD1296-16	04/19/06 03:04
Surrogate: 4-Bromofluorobenzene		52.8		ug/L	50.0	106%	25 - 185			6041973	NPD1296-16	04/19/06 03:04
Surrogate: 4-Bromofluorobenzene		52.8		ug/L	50.0	106%	25 - 185			6041973	NPD1296-16	04/19/06 03:04
6042726-MSD1												
Tertiary Butyl Alcohol	ND	0.727		mg/kg	0.500	145%	16 - 179	10	45	6042726	NPD1961-04	04/19/06 16:07
Methyl tert-Butyl Ether	ND	0.0504		mg/kg	0.0500	101%	47 - 148	3	39	6042726	NPD1961-04	04/19/06 16:07
Diisopropyl Ether	ND	0.0972		mg/kg	0.100	97%	50 - 143	10	41	6042726	NPD1961-04	04/19/06 16:07
Ethyl tert-Butyl Ether	ND	0.0522		mg/kg	0.0500	104%	48 - 145	6	37	6042726	NPD1961-04	04/19/06 16:07
Tert-Amyl Methyl Ether	ND	0.0493		mg/kg	0.0500	99%	43 - 150	9	39	6042726	NPD1961-04	04/19/06 16:07
Surrogate: 1,2-Dichloroethane-d4		46.1		ug/L	50.0	92%	72 - 125			6042726	NPD1961-04	04/19/06 16:07
Surrogate: Dibromofluoromethane		49.8		ug/L	50.0	100%	73 - 124			6042726	NPD1961-04	04/19/06 16:07
Surrogate: Toluene-d8		51.7		ug/L	50.0	103%	80 - 124			6042726	NPD1961-04	04/19/06 16:07
Surrogate: 4-Bromofluorobenzene		50.9		ug/L	50.0	102%	25 - 185			6042726	NPD1961-04	04/19/06 16:07
Purgeable Petroleum Hydrocarbons												
6041973-MSD1												
Gasoline Range Organics	0.942	4.27		mg/kg	3.10	107%	60 - 140	10	40	6041973	NPD1296-16	04/19/06 03:04
Surrogate: 1,2-Dichloroethane-d4		46.9		ug/L	50.0	94%	0 - 200			6041973	NPD1296-16	04/19/06 03:04
Surrogate: Dibromofluoromethane		49.8		ug/L	50.0	100%	0 - 200			6041973	NPD1296-16	04/19/06 03:04
Surrogate: Toluene-d8		52.9		ug/L	50.0	106%	0 - 200			6041973	NPD1296-16	04/19/06 03:04
Surrogate: 4-Bromofluorobenzene		52.8		ug/L	50.0	106%	0 - 200			6041973	NPD1296-16	04/19/06 03:04

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

Client	Cambria Env. Tech. (Emeryville) / SHELL (13675)	Work Order:	NPD1300
	5900 Hollis Street, Suite A	Project Name:	2120 Montana Street, Oakland, CA
	Emeryville, CA 94608	Project Number:	SAP 135675
Attn	Anni Kreml	Received:	04/12/06 08:00

CERTIFICATION SUMMARY

TestAmerica Analytical - Nashville

Method	Matrix	AIHA	Nelac	California
CA LUFT GC/MS	Soil			X
SW846 8260B	Soil	N/A	X	X
SW-846	Soil			

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

Client	Cambria Env. Tech. (Emeryville) / SHELL (13675)	Work Order:	NPD1300
	5900 Hollis Street, Suite A	Project Name:	2120 Montana Street, Oakland, CA
	Emeryville, CA 94608	Project Number:	SAP 135675
Attn	Anni Kreml	Received:	04/12/06 08:00

NELAC CERTIFICATION SUMMARY

TestAmerica Analytical - Nashville does not hold NELAC certifications for the following analytes included in this report

Method	Matrix	Analyte
CA LUFT GC/MS	Soil	Gasoline Range Organics
SW-846	Soil	% Dry Solids
SW846 8260B	Soil	Diisopropyl Ether

TestAmerica
ANALYTICAL TESTING CORPORATION

Nashville Division

COOLER RECEIPT FORM BC# NPD1300

Cooler Received/Opened On 04/12/06 0800

1. Indicate the Airbill Tracking Number (last 4 digits for Fedex only) and Name of Courier below: 8455

(Fed-EX) UPS Velocity DHL Route Off-street Misc.

2. Temperature of representative sample or temperature blank when opened: 2.2 Degrees Celsius

(indicate IR Gun ID#)

NA A00466 A00750 A01124 100190 (101282) Raynger ST

3. Were custody seals on outside of cooler?..... (YES)...NO...NA

a. If yes, how many and where: 1 Front

4. Were the seals intact, signed, and dated correctly?..... (YES)...NO...NA

5. Were custody papers inside cooler?..... (YES)...NO...NA

I certify that I opened the cooler and answered questions 1-5 (intial)..... DZ

6. Were custody seals on containers: YES (NO) and Intact YES NO NA

were these signed, and dated correctly?..... YES...NO...NA

7. What kind of packing material used? (Bubblewrap) Peanuts Vermiculite Foam Insert

Plastic bag Paper Other_____ None

8. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

9. Did all containers arrive in good condition (unbroken)?..... (YES)...NO...NA

10. Were all container labels complete (#, date, signed, pres., etc)?..... (YES)...NO...NA

11. Did all container labels and tags agree with custody papers?..... (YES)...NO...NA

12. a. Were VOA vials received?..... (YES)...NO...NA

b. Was there any observable head space present in any VOA vial?..... YES...NO...(NA)

I certify that I unloaded the cooler and answered questions 6-12 (intial)..... [signature]

13. a. On preserved bottles did the pH test strips suggest that preservation reached the correct pH level? YES...NO...(NA)

b. Did the bottle labels indicate that the correct preservatives were used..... YES...NO...(NA)

If preservation in-house was needed, record standard ID of preservative used here_____

14. Was residual chlorine present?..... YES...NO...(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 13-14 (intial)..... [signature]

15. Were custody papers properly filled out (ink, signed, etc)?..... (YES)...NO...NA

16. Did you sign the custody papers in the appropriate place?..... (YES)...NO...NA

17. Were correct containers used for the analysis requested?..... (YES)...NO...NA

18. Was sufficient amount of sample sent in each container?..... (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 15-18 (intial)..... [signature]

I certify that I attached a label with the unique LIMS number to each container (intial)..... DZ

Were there Non-Conformance issues at login YES NO Was a PIPE generated YES NO #_____

BS = Broken in shipment

Cooler Receipt Form LF-1 Revised 3/9/06

End of Form

SHELL Chain Of Custody Record

LAB: Test America Other_____

Lab Identification (if necessary):
- ☐ TA - Irvine, California
- ☐ TA - Morgan Hill, California
- ☑ TA - Nashville, Tennessee — Courier to pickup
- ☐ STL
- ☐ Other (location)_____

Shell Project Manager to be invoiced: Dennis Brown

☑ ENVIRONMENTAL SERVICES ☐ TECHNICAL SERVICES ☑ CRMT: HOUSTON

NPD1300

04/22/06 23:59

☐ NOT FOR ENV. REMEDIATION - NO ETTM - SEND PAPER INVOICE

INCIDENT NUMBER (ES ONLY): 98995748

SAP or CRMT NUMBER (TS/CRMT): [redacted]13575

DATE: 4/7/06

PAGE: 1 of 2

SAMPLING COMPANY: Cambria Environmental Technology, Inc.	LOG CODE: CETO
ADDRESS: 5900 Hollis Street Suite A Emeryville, CA	
PROJECT CONTACT (Hardcopy or PDF Report to): Stewart Dalie/Cynthia Vasko	
TELEPHONE: (510) 420-3339	FAX: (510) 420-9170
E-MAIL: sdalie@cambria-env.com	

SITE ADDRESS 2120 Montana Street, Oakland, CA — State: CA — GLOBAL ID NO.: T0600101805

EDF DELIVERABLE TO (Responsible Party or Designee): shell.oakland.edf@cambria-env.com	PHONE NO.: (510) 420-0700	E-MAIL: shell.oakland.edf@cambria-env.com	CONSULTANT PROJECT NO.: 207-0733-008

SAMPLER NAME(S) (Print): Stu

LAB USE ONLY

TURNAROUND TIME (STANDARD IS 10 CALENDAR DAYS): ☑ STD ☐ 5 DAY ☐ [redacted] DAY ☐ 2 DAY ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☑ UST AGENCY: _____

GC/MS MTBE CONFIRMATION: HIGHEST _____ HIGHEST per BORING _____ ALL _____

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NOT NEEDED ☐

Please cc lab results to sdalie@cambria-env.com and cvasko@cambria-env.com

[redacted]

RECEIPT VERIFICATION REQUESTED ☑

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH - Purgeable (8260B)	TPH - Extractable (8015M)	BTEX (8260B)	5 Oxygenates (8260B)	MTBE (8260B)	TBA (8260B)	DIPE (8260B)	TAME (8260B)	ETBE (8260B)	1,2 DCA (8260B)	EDB (8260B)	Ethanol (8260B)	Methanol (8015M)	TPH Diesel-	TPH - Oil & grease	Cam 17 Metals Cd, Cr, Pb, Zn, Ni				
	EW-1-5	4/5/06	1140	S.T	1	X		X	X	>										NPD1300		1			
	EW-1-10		12			X		X	X													2			
	EW-1-12		1220			X		X	X													3			
	EW-1-15		1230																			4			
	EW-1-17		1235																			5			
	EW-1-21		1245																			6			
	EW-1-25		1																			7			
	EW-1-29.5	V	1220	V	V																	8			

ANALYZE HOLD

FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes

Field point ID EW-1

TEMPERATURE ON RECEIPT C°

Relinquished by: (Signature)	Received by: (Signature)	Date: 4/7/06 Time: 8 am
Relinquished by: (Signature)	Received by: (Signature)	Date: 4/7/06 Time: 1337
Relinquished by: (Signature)	Received by: (Signature)	Date: 4/7/06 Time: 1900

Sampling 4/10/2006 12:35

C&Q Graphic (714) 998-9702

11/18/05 Revision

SHELL Chain Of Custody Record

LAB: Test America Other_____

Lab Identification (if necessary):
- ☐ TA - Irvine, California
- ☐ TA - Morgan Hill, California
- ☑ TA - Nashville, Tennessee (covered by pickup)
- ☐ STL
- ☐ Other (location)_____

Shell Project Manager to be invoiced: Dennis Brown
- ☑ ENVIRONMENTAL SERVICES
- ☐ TECHNICAL SERVICES
- ☑ CRMT HOUSTON
- ☐ NOT FOR ENV. REMEDIATION - NO ETIM - SEND PAPER INVOICE

INCIDENT NUMBER (ES ONLY): 9 8 9 9 5 7 4 0
SAP or CRMT NUMBER (TS/CRMT): [redacted] 1 3 5 6 7 5

DATE: 4/7/06
PAGE: 2 of 2

SAMPLING COMPANY: Cambria Environmental Technology, Inc.	LOG CODE: CETO	SITE ADDRESS 2120 Montana Street, Oakland, CA	State: CA
ADDRESS: 5900 Hollis Street Suite A Emeryville, CA		EDF DELIVERABLE TO (Responsible Party or Designee): shell.oakland.edf@cambria-env.com	PHONE NO.: (510) 420-0700
PROJECT CONTACT (Hardcopy or PDF Report to): Stewart Dalie/Cynthia Vasko		SAMPLER NAME(S) (Print): Stu	
TELEPHONE: (510) 420-3339	FAX: (510) 420-9170	E-MAIL: sdalie@cambria-env.com	

GLOBAL ID NO.: T0600101805
E-MAIL: shell.oakland.edf@cambria-env.com
CONSULTANT PROJECT NO.: 207-0733-008
LAB USE ONLY

TURNAROUND TIME (STANDARD IS 10 CALENDAR DAYS): ☑ STD ☐ 5 DAY ☐ 3 DAY ☐ 2 DAY ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☑ UST AGENCY: _____

GC/MS MTBE CONFIRMATION: HIGHEST _____ HIGHEST per BORING _____ ALL _____

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NOT NEEDED ☐

Please cc lab results to sdalie@cambria-env.com and cvasko@cambria-env.com

[redacted] TAT

RECEIPT VERIFICATION REQUESTED ☑

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH - Purgeable (8260B)	TPH - Extractable (8015M)	BTEX (8260B)	5 Oxygenates (8260B)	MTBE (8260B)	TBA (8260B)	DIPE (8260B)	TAME (8260B)	ETBE (8260B)	1,2 DCA (8260B)	EDB (8260B)	Ethanol (8260B)	Methanol (8015M)	TPH Diesel-	TPH - Oil & grease	Cam 17 Metals Cd, Cr, Pb, Zn, Ni			
	EW-2-5	4/6	810	Soil	1	X		X	X												MADI300	9		
	EW-2-10		830			X		X	X													10		
	EW-2-12		940			X		X	X													11		
	EW-2-15		845																			12		
	EW-2-20		9																			13		
	EW-2-25		910																			14		
	EW-2-29.5	V	940	V	V																	15		

ANALYZE
HOLD
Field Point ID EW-2

FIELD NOTES:
Container/Preservative or PID Readings or Laboratory Notes

TEMPERATURE ON RECEIPT C°

Relinquished by: (Signature)	Received by: (Signature)	Date: 4/7/6	Time: 8 am
Relinquished by: (Signature)	Received by: (Signature)	Date: 4/7/06	Time: 1337
Relinquished by: (Signature)	Received by: (Signature)	Date: 4/7/06	Time: 1900

4/10/2005 12:35

11/18/05 Revision

Q&Q Graphic (714) 898-9702

ATTACHMENT E

Soil Disposal Confirmation

Hazardous Waste Hauler (Registration # 2843)
P.O. Box 292547 * Sacramento, CA 95829 * FAX 916-381-1573

Disposal Confirmation

Request for Transportation Received: 04/05/2006

Consultant Information

Company:	Cambria
Contact:	Ron Barone
Phone:	510-420-3308
Fax:	510-420-9170

Site Information

PO #	
Street Address:	2120 Montana
City, State, ZIP:	Oakland, Ca
Customer:	Shell Oil Company RESA-0023-LDC
RIPR #:	51702
SAP # / Location:	NA
Incident #:	98995740
Location / WIC #:	NA
Environmental Engineer:	Denis Brown
Material Description:	Soil
Estimated Quantity:	~1.5 Cy
Service Requested Date:	Friday April 7th, 2006
Disposal Facility:	Forward Landfill
Contact:	Scott
Phone:	800 204-4242
Approval #:	6246
Date of Disposal:	04/07/2006
Actual Tonnage	2.36 tons
Transporter:	Manley & Sons Trucking, Inc.
Contact:	Jennifer Rogers
Phone:	916 381-6864
Fax:	916 381-1573
Invoice:	200604-6
Date of Invoice:	04/10/2006

ATTACHMENT F

Department of Water Resources Well Completion Reports

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

ATTACHMENT G

Well Development Sheets

WELL DEVELOPMENT DATA SHEET

Project #: 060505-SL1	Client: Shell 9899 5740
Developer: SC	Date Developed: 5/5/06
Well I.D. EW-1	Well Diameter: (circle one) 2 3 (4) 6
Total Well Depth: Before 27.69 After 27.86	Depth to Water: Before 15.42 After 19.04
Reason not developed:	If Free Product, thickness:
Additional Notations:	

Volume Conversion Factor (VCF):	Well dia.		VCF
$(12 \times (d^2/4) \times \pi) / 231$	2"	=	0.16
where	3"	=	0.37
12 = in / foot	4"	=	0.65
d = diameter (in.)	6"	=	1.47
π = 3.1416	10"	=	4.08
231 = in 3/gal	12"	=	6.87

8.0	X	10	=	80.0
1 Case Volume		Specified Volumes		gallons

Purging Device:
- ☐ Bailer
- ☐ Suction Pump
- ☒ Electric Submersible 3"
- ☒ Positive Air Displacement

Type of Installed Pump
Other equipment used 4" SWAB

TIME	TEMP (F)	pH	Cond. (mS or µS)	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
0755-0805	Purged well	w/ 4"	SWAB			PAD pump @ bottom after purging slightly
0830	63.8	6.69	975.9	>1000	8.0	DTW - 16.34 Dark, Odor
0843	62.9	6.71	958.9	>1000	16.0	DTW - 16.42
0855	62.8	6.50	942.7	>1000	24.0	Becoming Clearer DTW - 16.49
0905	63.7	6.65	944.5	>1000	32.0	DTW - 16.56
0918	61.8	6.68	940.8	>1000	40.0	Hard Bottom, switched to 3" Sub. Pump
0921	63.4	6.63	965.4	>1000	48.0	
0923	64.5	6.67	965.7	>1000	56.0	Fine grey silt
0925	65.1	6.67	957.4	>1000	64.0	Odor
0927	65.2	6.67	926.3	>1000	72.0	
0928	65.2	6.68	921.4	>1000	80.0	DTW - 19.04

Did Well Dewater? N — If yes, note above. — Gallons Actually Evacuated: 80.0

INL III

WELL DEVELOPMENT DATA SHEET

Project #: 060505-SL1	Client: Shell 98995740
Developer: SL	Date Developed: 5/5/06
Well I.D. EW-2	Well Diameter: (circle one) 2 3 (4) 6
Total Well Depth: Before 27.62 After 27.65	Depth to Water: Before 16.83 After 18.20 20.94
Reason not developed:	If Free Product, thickness:
Additional Notations:	

Volume Conversion Factor (VCF):	Well dia.		VCF
$\{12 \times (d^2/4) \times \pi\} / 231$	2"	=	0.16
where	3"	=	0.37
12 = in / foot	4"	=	0.65
d = diameter (in.)	6"	=	1.47
π = 3.1416	10"	=	4.08
231 = in 3/gal	12"	=	6.87

7.0	x	10	=	70.0
1 Case Volume		Specified Volumes		gallons

Purging Device:
- ☐ Bailer
- ☐ Suction Pump
- ☒ Electric Submersible 3"
- ☒ Positive Air Displacement

Type of Installed Pump _____
Other equipment used 4" swab

TIME	TEMP (F)	pH	Cond. (mS or (µS))	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
0950-1000	surged well	w/ 4" swab				Afterswabbing SP placed BAD pump @ bottom of well
1013	64.4	6.71	973.1	>1000	7.0	DTW - 18.31 (used Pump to agitate
1023	65.7	6.74	963.5	>1000	14.0	Dark, Thick bottom to remove silt)
1032	65.5	6.61	918.4	>1000	21.0	DTW - 18.46, Slight Odor
1041	65.9	6.79	914.4	>1000	28.0	DTW - 18.50, Hard Bottom
1049	65.6	6.66	889.7	>1000	35.0	Becoming clearer, switched to 3" sub.
1059	65.9	6.73	923.8	>1000	42.0	Slight Odor
1101	66.8	6.72	929.7	>1000	49.0	
1102	66.9	6.74	931.4	>1000	56.0	Grey Brown
1103	66.8	6.75	928.9	>1000	63.0	Fine Silt
1105	67.2	6.75	915.2	>1000	70.0	

Did Well Dewater? N | If yes, note above. | Gallons Actually Evacuated: 70.0

NAL