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Alameda County Environmental Health

Denis L. Brown Shell Oil Products US

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

Re:

Shell-branded Service Station 230 West MacArthur Boulevard

Oakland, California SAP Code 135676 Incident No. 98995741

ACHCSA Case No. RO0000303

Dear Mr. Wickham:

The attached document is provided for your review and comment. 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 Project Manager

19449 Riverside Drive, Suite 230, Sonoma, California 95476 Telephone: 707·935·4850 Facsimile: 707·935·6649

www.CRAworld.com

April 25, 2008

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

Re:

Site Investigation Report

Shell-branded Service Station 230 West MacArthur Boulevard Oakland, California SAP Code 135676 Incident No. 98995741 ACHCSA Case No. RO0000303

Dear Mr. Wickham:

Conestoga-Rovers & Associates (CRA) prepared this report on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell) to document the recent site investigation activities at the above referenced site. The main purpose of the investigation was to further define the extent of groundwater impact downgradient (southwest and west) of the site, along the southwestern side of West MacArthur Boulevard, and downgradient of onsite well MW-5, which consistently reports the highest concentrations of petroleum hydrocarbons in the groundwater on the site. In addition, a secondary purpose of the investigation was to research the potential for groundwater discharge into any subsurface drainage systems or sumps associated with any basements or subsurface structures located beneath the Kaiser Oakland Medical Center, located across West MacArthur Boulevard from the subject site. The investigations were requested by Alameda County Health Care Services Agency (ACHCSA) in a letter dated May 2, 2007. CRA followed the scope of work and procedures presented in our July 24, 2007 Site Investigation Work Plan, which was approved by the ACHCSA in their letter dated August 14, 2007. The work was performed in accordance with ACHCSA and San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) guidelines.

EXECUTIVE SUMMARY

- Three offsite soil borings (SB-9, SB-10, and SB-11) were drilled southwest and west of the site to further delineate the groundwater plume in the downgradient direction, and one onsite soil boring (SB-12) was drilled in the vicinity well MW-5 for groundwater data comparison.
- Three soil samples were collected from each boring, and with the exception of some very low level methyl tertiary butyl either (MTBE) reported in one of the soil samples, none of the soil samples contained detectable concentrations of petroleum hydrocarbons.

Equal Employment Opportunity Employer

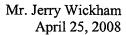


- Grab groundwater samples were collected from each of the four soil borings. Maximum concentrations of petroleum hydrocarbons from the offsite soil borings were reported in the grab groundwater sample from offsite boring SB-9 at 1,700 micrograms per liter (μg/l) total petroleum hydrocarbons as gasoline (TPHg) and 120 μg/l MTBE. No benzene was reported in any of the offsite grab groundwater samples.
- The benzene and MTBE groundwater plumes have been delineated to the west and southwest of the site by the offsite soil borings to <0.50 and 120 μg/l, respectively. The TPHg groundwater plume has been delineated to the southwest of the site to <50.0 μg/l by borings SB-10 and SB-11. The 1,700 μg/l TPHg reported in SB-9, west of the site, shows horizontal attenuation with distance from the site, relative to the 4,900 μg/l TPHg reported in onsite boring SB-12.
- Based on research and an evaluation of the two basements identified beneath the Kaiser Oakland Medical Center, the hydrocarbon groundwater plume associated with the subject site does not appear to be posing a threat to either of these two potential receptors
- Given the limitations posed by the large adjacent structure located southwest of West MacArthur Boulevard, and the constraints and safety issues posed by the numerous underground utilities that exist in both the sidewalk and southwestern most lane of West MacArthur Boulevard, and in light of the absence of benzene and the low level concentrations of MTBE reported in soil boring SB-9, along with the absence of any potential sensitive receptors at risk by the groundwater plume, Shell does not believe that additional delineation downgradient and further west to northwest of soil boring SB-9 is feasible nor warranted at this site.

SITE DESCRIPTION AND BACKGROUND

The subject property is an operating Shell-branded service station located on the northern corner of West MacArthur Boulevard and Piedmont Avenue in Oakland, California (Figure 1). The station layout includes three underground fuel storage tanks (USTs), two dispenser islands, and a station kiosk (Figure 2). The station is located in a primarily commercial area in Oakland. A former Gulf service station is located northwest and adjacent to the site. The Kaiser Oakland Medical Center occupies the portion of the building located directly across West MacArthur Boulevard from the subject site.

A summary of previous work performed at the site and additional background information is contained in Attachment A.





INVESTIGATION RESULTS

Permit: A drilling permit was obtained from the Alameda County Public Works

Agency, and a copy is provided in Attachment B.

Drilling Dates: January 31 and February 1, 2008.

Drilling Company: Gregg Drilling and Testing, Inc., of Martinez, California (C57 License

No. 485165).

Personnel: CRA geologist Peter Schaefer directed the drilling activities under the

supervision of California Professional Geologist Joe W. Neely.

Drilling Method: Air knife and hydraulic push.

Number of Borings: Four soil borings (SB-9 through SB-12) were drilled during this

investigation. Three of the borings (SB-9, SB-10, and SB-11) were drilled within the southwestern most lane of MacArthur Boulevard, southwest and west of the subject site to assist with offsite delineation, and boring SB-12 was drilled onsite in the vicinity of well MW-5 for

onsite grab groundwater data comparison.

The boring specifications and soil types encountered are described on

the boring logs contained in Attachment C. The boring locations are

shown on Figure 2.

Boring Depths: Soil borings SB-9 through SB-12 were drilled to depths ranging from 22

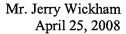
to 24 feet below grade (fbg).

Groundwater Depths: Groundwater was first encountered in borings SB-9 through SB-12 at

depths ranging from 18.5 to 21 fbg.

Soil samples for chemical analysis were collected from each boring at 7

to 7.5 fbg, at 11 to 11.5 fbg, and at 15.5 fbg.





Groundwater Sampling:

Grab groundwater samples for chemical analysis were collected from borings SB-9, SB-10, SB-11, and SB-12 at approximately 20, 18.5, 20, and 21 fbg, respectively, through a temporary well casing within the open borehole using new disposable bailers.

Soil Disposal:

The soil sludge and the soils generated during the field activities were placed in 55-gallon drums, stored onsite, and sampled and profiled for disposal. The laboratory analytical report is included in Attachment D. On February 25, 2008, American Integrated Services, Inc., transported the drum of soil sludge to Crosby & Overton, Inc., of Long Beach California for disposal. On March 12, 2008, Philip West Industrial Services transported the drum of soil to Altamont Landfill & Resource Recovery Facility of Livermore, Californian for disposal. The waste disposal confirmation documentation for the drum of soil sludge and drum of soil is provided in Attachment D.

Potential Receptor Research:

CRA contacted representatives of the Kaiser Oakland Medical Center (Kaiser), located across West MacArthur Boulevard and west and southwest of the subject site, in an effort to obtain information regarding any subsurface drainage systems or sumps existing within any basements or subsurface structures located beneath the building. numerous requests were made, Kaiser was not able to provide CRA with any construction drawings that would potentially show the location of any basements or subsurface structures located beneath the building and/or any associated subsurface drainage systems or sumps. Kaiser did allow CRA access to their building and a site reconnaissance of the Kaiser building was performed by CRA on behalf of Shell. Two subsurface basements were identified located beneath the Kaiser Oakland Medical Center, and their approximate locations are shown on Figures 2, 3, and 4. Basement #1, located closest to West Macarthur Boulevard and generally southwest of soil boring SB-11, is not currently being used for any purpose by Kaiser personnel, and has an approximately 2 feet deep sump located along the northeastern wall but contains no other subsurface drainage system. Basement #2, located furthest away from West Macarthur Boulevard and generally southwest of soil boring SB-10, is currently being partially used by Kaiser



personnel for file storage and contains no sumps or subsurface drainage system. Both basements, and the sump in Basement #1, were screened for organic vapors during the site reconnaissance by using a photo-ionization detector (PID).

FINDINGS

Soil Chemical Data: The soil chemical analytical data from the borings are summarized in Table 1, and the total petroleum hydrocarbons as gasoline (TPHg), benzene, methyl tertiary butyl ether (MTBE), and tertiary butyl alcohol (TBA) analytical results are presented on Figure 3. The laboratory analytical reports are presented in Attachment E.

Grab Groundwater Chemical Data: The grab groundwater chemical analytical data is summarized in Table 2 and TPHg, benzene, MTBE, and TBA analytical results are presented on Figure 4. The laboratory analytical reports are presented in Attachment E.

Potential Receptor Research: The two basements identified by CRA during a building reconnaissance of the Kaiser Oakland Medical Center are presented on Figures 2, 3, and 4. Basement #1, currently not being used, was described as having a 'damp' feeling to it but no obvious signs of intrusion by groundwater was evident or observed, and no petroleum hydrocarbon odors were noted in Basement #1. Basement #2, currently being partially used for storage, showed some evidence of "wet areas", but these areas appeared to be associated with older leaking water pipes, and no obvious signs of intrusion by groundwater was evident or observed, and no petroleum hydrocarbon odors were noted in Basement #2. Basement #1 and the associated sump, and Basement #2 were screened by a PID to assess for the presence of organic vapors in the basements. PID readings were collected from various select locations from within each basement for a duration of between 30 seconds to one minute at each location. The results of the vapor screening performed with the PID in each basement did not report any concentrations hydrocarbon vapor in either of the basements or the associated sump.

DISCUSSION

Offsite Delineation Discussion: Four soil borings (SB-9 through SB-12) were drilled during this investigation for the collection of soil and grab groundwater samples to assist with defining the extent of groundwater impact downgradient (southwest and west) of the site. Soil borings SB-9, SB-10, and SB-11 were drilled within the southwestern most lane of MacArthur Boulevard, southwest and west of the subject site, and soil boring SB-12 was drilled onsite for site grab groundwater data comparison.



Three soil samples for chemical analysis were collected from each of the four borings and with the exception of the 0.0053 milligrams per kilogram (mg/kg) MTBE reported in the soil sample from onsite boring SB-12 at 15.5 fbg, no detectable concentrations of petroleum hydrocarbons were reported in any of the soil sample collected during this investigation.

Grab groundwater samples were collected from each of the four soil borings. Detectable concentrations of TPHg were reported in the grab groundwater samples collected from borings SB-9 and S-12 at 1,700 and 4,900 μ g/l, respectively. Detectable concentrations of benzene were reported only in the grab groundwater sample collected from onsite boring SB-12 at 120 μ g/l. MTBE was reported in all four grab groundwater samples at concentrations ranging from 2.6 μ g/l to 120 μ g/l (SB-9). In addition, the grab groundwater sample from onsite boring SB-12 also contained 100 μ g/l tertiary butyl alcohol and 11 μ g/l di-isopropyl ether.

The benzene groundwater plume has been effectively delineated to west and southwest of the site by borings SB-9, SB-10, and SB-11. The MTBE groundwater plume has been delineated to the west and southwest of the site by borings SB-9, SB-10, and SB-11 to a maximum concentration of 120 µg/l reported in boring SB-9. The TPHg groundwater plume has been effectively delineated to the southwest of the site by borings SB-10 and SB-11, and although the 1,700 µg/l TPHg reported in boring SB-9 shows horizontal attenuation of the TPHg plume relative to the 4,900 TPHg reported in onsite boring SB-12, complete delineation of the TPHg groundwater plume does not appear to have been accomplished to the west of the site by SB-9.

Due to the fact that the entire block across West MacArthur Boulevard from the subject site is comprised of essentially one large structure that extends down past the intersection of Howe Street and on through to Broadway, drilling additional borings or wells on any offsite private property to further delineate the plume beyond soil boring SB-9 is not feasible. Further, as was discovered during this investigation, because the sidewalk along the southwest side of West MacArthur Boulevard, as well as the southwestern most lane of West MacArthur Boulevard, contains numerous underground utilities, and because of the typically very high traffic volume experienced on West MacArthur Boulevard, drilling additional borings or wells in the public right-of-way to further delineate the plume beyond soil boring SB-9 is severely constrained and poses high safety concerns. Given this situation, and that the benzene and MTBE plumes have been delineated to <0.50 and 120 μg/l, respectively by the borings, that the TPHg plume attenuates with distance from the subject site, and that there are no sensitive receptors in the vicinity at risk (reference Cambria Environmental Technology, Inc.'s October 31, 2002 Sensitive Receptor Survey, Conduit Study Report and Subsurface Investigation Work Plan, and the receptor



discussion below), Shell does not believe that additional delineation downgradient and further west to northwest of soil boring SB-9 is feasible nor warranted at this site.

Potential Receptor Discussion: Two basements were identified (see Basement #1 and Basement #2 on Figure 4) beneath the Kaiser Oakland Medical Center and were further evaluated to determine if the hydrocarbon plume associated with the subject site could pose a potential risk to either of these two receptors. Given that no obvious signs of intrusion by groundwater was evident in either basement, no petroleum hydrocarbon odors were noted and no PID readings were reporting in either basement, and that only low level concentrations of MTBE and toluene were reported in the grab groundwater samples from the respective adjacent soil borings SB-10 and SB-11 (Figure 4), the hydrocarbon plume associated with the subject site does not appear to be posing a threat to either of these two potential receptors.

CLOSING

If you have any questions regarding the contents of this document, please call Dennis Baertschi at (707) 268-3813.

Sincerely,

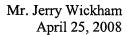
Conestoga-Rovers & Associates

Dennis Baertschi Project Manager

Joe W. Neely, PG

Justelly







Figures:

1 - Vicinity Map

2 - Site Map

3 - Soil Chemical Concentration Map

4- Grab Groundwater Chemical Concentration Map

Tables:

1 - Soil Analytical Data

2- Grab Groundwater Analytical Data

Attachments:

A - Site History

B - Permits C - Boring Logs

D -Waste Disposal Documentation E - Certified Analytical Reports

cc: Mr. Denis Brown, Shell Oil Products US

Conestoga-Rovers & Associates (CRA) prepared this document for use by our client and appropriate regulatory agencies. It is based partially on information available to CRA from outside sources and/or in the public domain, and partially on information supplied by CRA and its subcontractors. CRA makes no warranty or guarantee, expressed or implied, included or intended in this document, with respect to the accuracy of information obtained from these outside sources or the public domain, or any conclusions or recommendations based on information that was not independently verified by CRA. This document represents the best professional judgment of CRA. None of the work performed hereunder constitutes or shall be represented as a legal opinion of any kind or nature.

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Shell-branded Service Station

230 West MacArthur Boulevard Oakland, California



Vicinity Map

FIGURE

EXPLANATION SB-9 ■ Soil boring location MW-1 • Monitoring well location (Shell, 7/11-12/88) **MW-1** ❖ Monitoring well location (240 W. MacArthur) Oakland Auto Works MW¹5 Flow direction 240 W. MacArthur Former W/O sump Shell-branded Service Station ■ Storm drain inlet 230 W. MacArthur → Sump Existing USTs (rounded) MW₁1 ()Storm drain line (SD) Former W/O UST Former Fuel USTs — — – Sanitary sewer line (SS) MW-2 - Water line (W) MW-4 Gas line (G) ₩W-6 MW-7 Electrical line (E) Telecommunications line (T) MW-2 Unknown (UKN) SB-12 — Property and structure boundry line MW-5 MW-3 FL Flow line elevation, in feet above mean sea level benchmark elev. 75.96' msl fbg Feet below grade MW-8_ Product dispenser number FL = ~66, ~10 fbg Basement locations are approximate and based on field reconnaissance done $MH = \sim 11' \text{ fbg}$ by CRA, and are not based on any actual as-built drawings for the building. WEST MACARTHUR BOULEVARD UNKNOWN METAL UTILITY ■ SB-9 ■ SB-10 ■ SB-11 SS 24" (abandoned) (abandoned) BUILDING OVERHANG /

G SUMP (approximatly 2 f

Approximate location of

basement #1

Approximate location of basement #2

Kaiser Medical Center

230 W. MacArthur

Note: Entire block is one structure comprised

of numerous commercial uses.

Scale (ft)

Site features for 240 W. MacArthur based on figure provided by Stellar Environmental Solutions, Inc.

Groundwater Flow Direction

(Shell, 4Q96 through 4Q06)

Soil Chemical Concentration Map

CONESTOGA-ROVERS

Shell-branded Service Station

230 West MacArthur Boulevard Oakland, Caliornia

230 West MacArthur Boulevard Oakland, Caliornia

Table 1. Soil Analytical Data, Shell-branded Service Station, 230 West MacArthur Boulevard, Oakland, California

Sample	Date	Depth	TPHg	В	Т	Е	X	MTBE	TBA	DIPE	ETBE	TAME
ID	Sampled	feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
				,		•						
SB-9-7	01-Feb-08	7.0	< 0.50	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.050	< 0.010	< 0.010	< 0.010
SB-9-11.5	01-Feb-08	11.5	< 0.50	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.050	< 0.010	< 0.010	< 0.010
SB-9-15.5	01-Feb-08	15.5	<0.50	<0.0050	<0.0050	<0.0050	< 0.010	<0.0050	< 0.050	< 0.010	< 0.010	<0.010
SB-10-7	01-Feb-08	7.0	<0.50	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.050	< 0.010	< 0.010	< 0.010
SB-10-11.5	01-Feb-08	11.5	< 0.50	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.050	< 0.010	< 0.010	< 0.010
SB-10-15.5	01-Feb-08	15.5	<0.50	<0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	<0.050	< 0.010	< 0.010	< 0.010
SB-11-7.5	01-Feb-08	7.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	< 0.050	< 0.010	< 0.010	< 0.010
SB-11-11.5	01-Feb-08	11.5	< 0.50	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.050	< 0.010	< 0.010	< 0.010
SB-11-15.5	01-Feb-08	15.5	<0.50	<0.0050	< 0.0050	<0.0050	<0.010	<0.0050	< 0.050	< 0.010	<0.010	< 0.010
SB-12-7.5	01-Feb-08	7.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	< 0.010	<0.010
SB-12-11	01-Feb-08	11.0	< 0.50	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.050	< 0.010	< 0.010	< 0.010
SB-12-15.5	01-Feb-08	15.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010	0.0053	<0.050	<0.010	< 0.010	<0.010

Abbreviations:

TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8015M

The following constituents analyzed by EPA Method 8260B:

BTEX = Benzene, toluene, ethylbenzene, and xylenes

MTBE = Methyl tertiary butyl ether

TBA = Tertiary-amyl methyl ether

DIPE = Di-isopropyl ether

ETBE = Ethyl tertiary-butyl ether

TAME = Tertiary-amyl methyl ether

mg/kg = Milligrams per kilogram

< x =Not detected at reporting limit x

Table 2. Grab Groundwater Analytical Data, Shell-branded Service Station, 230 West MacArthur Boulevard, Oakland, California

Sample ID	Date Sampled	TPHg ug/L	B ug/L	T ug/L	E ug/L	X ug/L	MTBE ug/L	TBA ug/L	DIPE ug/L	ETBE ug/L	TAME ug/L
SB-9	01-Feb-08	1,700	<0.50	<1.0	<1.0	<1.0	120	<10	<2.0	<2.0	<2.0
SB-10	01-Feb-08	<50	<0.50	<1.0	<1.0	<1.0	94	<10	<2.0	<2.0	<2.0
SB-11	01-Feb-08	<50	<0.50	14	<1.0	<1.0	2.6	<10	<2.0	<2.0	<2.0
SB-12	01-Feb-08	4,900	120	11	170	42.2	33	100	11	<2.0	<2.0

Abbreviations:

TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8015M

The following constituents analyzed by EPA Method 8260B:

BTEX = Benzene, toluene, ethylbenzene, and xylenes

MTBE = Methyl tertiary butyl ether

TBA = Tertiary-amyl methyl ether

DIPE = Di-isopropyl ether

ETBE = Ethyl tertiary-butyl ether

TAME = Tertiary-amyl methyl ether

ug/L = Micrograms per liter

< x =Not detected at reporting limit x

Attachment A Site History

SITE HISTORY & PREVIOUS WORK

Shell-Branded Service Station 230 West MacArthur Boulevard Oakland, California

1986 Site Investigation: In April 1986, Emcon Associates of San Jose, California drilled four exploratory borings (S-A through S-D) within the tank complex to total depths of 20.5 feet below grade (fbg). Groundwater was encountered at approximately 13 fbg. Total hydrocarbon concentrations up to 5,700 parts per million (ppm) were detected in soil samples collected at depths ranging from 4 to 15 fbg. The report for this investigation could not be located at the time of this writing.

1986 Additional Site Assessment: In December 1986, W.W. Irwin, Inc. analyzed soil gas vapors from 38 probe locations throughout the site. The highest hydrocarbon concentrations were reported in the area of the tank complex and dispenser islands. Cambria was unable to locate a report of this investigation.

1987 Recovery Well Installation: In March 1987, Wayne Perry Construction, Inc. (Wayne Perry) installed three 4-inch-diameter, 13-foot-deep, soil-vapor recovery wells (VR-1, VR-2, and VR-3). A soil venting system utilizing an activated carbon scrubber operated between April and November 1987. On August 28, 1987, soil borings B-1 and B-2 were advanced to characterize petroleum hydrocarbons remaining in the soil. The maximum total hydrocarbon concentration of 1,870 ppm was detected in boring B-1 at a depth of 8 fbg. In their January 26, 1988 Review of Venting Operations, Wayne Perry concluded that the venting operation had significantly decreased the contamination levels.

1987 UST Removal: On November 2, 1987, the USTs were removed, and soil samples were collected in native soil from the bottom of the UST excavation. Hydrocarbon concentrations ranged from 8.6 to 480 ppm, as documented in Kaprealian Associates December 1, 1987 Soil Sampling Investigation report. New USTs were installed in the same excavation.

1988 Soil and Groundwater Investigation: On July 11 and 12, 1988, Ensco Environmental Services Inc. (Ensco) of Fremont, California installed three groundwater monitoring wells (MW-1 through MW-3). Soil samples were collected during well installation for laboratory analysis, and total petroleum hydrocarbons as gasoline (TPHg) were detected at a concentration

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of 278 ppm in the boring for MW-3 at 10 fbg. Ensco's September 30, 1988 Soil and Groundwater Investigation report documents this investigation.

1989 Phase II Supplemental Soil Investigation: On August 16, 1989, Ensco advanced three soil borings (SB-1, SB-2, and SB-3) to investigate possible hydrocarbon impacts to soil adjacent to the pump islands. TPHg was detected in boring SB2-3 only, at a concentration of 490 ppm at 15.5 fbg. Benzene was not detected in any soil samples collected during this investigation. Ensco's October 9, 1989 September Quarterly Report documents investigation results.

1989 Phase II Shallow Groundwater Survey: On October 10, 1989, Ensco subcontractor NET Pacific of Santa Rosa, California advanced three probes (GS-1, GS-2, and GS-3) to sample the shallow groundwater adjacent to the pump islands. TPHg was detected in samples from GS-2 and GS-3 at concentrations of 5,600 parts per billion (ppb) and 8,800 ppb, respectively. Benzene was detected in samples GS-2 and GS-3 at concentrations of 340 ppb and 380 ppb, respectively. Neither TPHg nor benzene was detected in sample GS-1. Ensco's January 19, 1990, December Quarterly Report presents the investigation results.

1990 Well Installation: On January 9, 1990, Ensco drilled one exploratory boring at the site and converted it to monitoring well MW-4. Well MW-4 is screened from 15 to 25 fbg. Ensco's March 29, 1990 March Quarterly Report documents the well installation.

1990 Shallow Groundwater Investigation: On May 19, 1990, Exceltech subcontractor CHIPS Environmental Consulting, Inc. advanced six probes (Probe 1 through Probe 6) in the sidewalk along West MacArthur Boulevard and collected shallow groundwater samples. TPHg was detected in Probe 2 and Probe 6 at concentrations of 25,000 ppb and 31,000 ppb, respectively. Benzene was detected in Probes 2, 4, 5, and 6 at concentrations ranging from 1 to 430 ppb. Exceltech's July 3, 1990 June Quarterly Report documents investigation results.

1998 Dispenser and Turbine Sump Upgrades: In February 1998, Paradiso Mechanical of San Leandro, California upgraded fuel-related equipment at the service station. Secondary containment was added to the existing dispensers and the turbine sumps above the USTs. Cambria inspected the dispenser and tank excavation areas. The City of Oakland required sampling at dispensers only if there was evidence of hydrocarbon impact. No field indications of hydrocarbons, such as staining or odor, were observed during the site visit; so no samples were collected. Cambria's March 10, 1998 1998 Upgrade Site Inspection Report presents details.

2002 Sensitive Receptor Survey (SRS), Conduit Study Report, and Subsurface Investigation Work Plan: The October 31, 2002 Sensitive Receptor Survey, Conduit Study Report, and Subsurface Investigation Work Plan included a conduit study which reported that a storm drain

located just west of the site, along West MacArthur Boulevard, might intersect groundwater, and that the conduit backfill material may act as a preferential pathway for contaminant migration. The SRS identified two wells of unknown use located approximately ½-mile downgradient of the site and one well of unknown use located approximately 1,500 feet upgradient of the site. Due to the distance from the site to the nearest identified wells, the site is unlikely to impact the identified wells. Glen Echo Creek, the nearest surface water body identified by Cambria, is located approximately 600 feet south of the site. Since calculated groundwater flow direction at the site has been to the west-southwest, petroleum hydrocarbons and fuel oxygenates from the site are not expected to impact Glen Echo Creek.

2003 SRS: In October 2003, Cambria completed an SRS for the site at Shell's request. The SRS targeted the following as potential sensitive receptors: basements within 200 feet, surface water and sensitive habitats within 500 feet, hospitals, residential care and childcare facilities within 1,000 feet, and water wells within ½ mile. No basements were observed within 200 feet, nor were any surface water or sensitive habitats observed within 500 feet. Snow White Day Care (214 West MacArthur Boulevard) is located approximately 150 feet from the site. Kaiser Permanente Hospital (280 West MacArthur Boulevard) is located approximately 450 feet from the site. National Hispanic University (262 Grand Avenue) is located approximately 825 feet from the site. No water wells in addition to those mentioned above were identified within ½ mile of the site.

2004 Subsurface Investigation: In March 2004, two soil borings (SB-1 and SB-2) were advanced to 20 fbg adjacent to the storm drain located just west of the site, and soil and groundwater samples were collected. TPHg was detected in only three soil samples at concentrations ranging from 10 ppm to 43 ppm. Benzene was not detected in any soil sample collected during this investigation. Methyl tertiary-butyl ether (MTBE) was detected in only two soil samples at concentrations of 0.0078 ppm and 0.0099 ppm. All soil samples with detectable TPHg and/or MTBE concentrations were from saturated soils or from within the capillary fringe. TPHg was detected in both grab groundwater samples SB-1-W and SB-2-W at concentrations of 10,000 ppb and 520 ppb, respectively. Benzene was detected in both grab groundwater samples at concentrations of 430 ppb and 4.9 ppb, respectively. MTBE was detected in both grab groundwater samples at concentrations of 110 ppb and 320 ppb, respectively. Cambria's July 2, 2004 Subsurface Investigation Report details the investigation.

2005 Fueling System Upgrade: In April 2005, Cambria collected soil samples from beneath the site's dispensers and at selected piping locations following an upgrade of the site's fueling system. Five dispenser soil samples were collected at depths of between 1.5 and 4 fbg and into native soil, and five piping trench soil samples were collected at depths of between 2 and 4.5 fbg

and into native soil. Field indications of hydrocarbons, including staining and odor, were observed in the vicinity of the sample locations in the western portion of the site. TPHg was detected in three of five dispenser samples, at a maximum concentration of 1,700 ppm. TPHg was detected in three of five piping samples, at a maximum concentration of 2,700 ppm. Benzene was detected at a maximum concentration of 4.2 ppm. Based on the field observations and laboratory results, Cambria, at Shell's request, directed over-excavation. Due to the Oakland Fire Department's concern over encountering shallow groundwater, the vertical extent of overexcavation was limited to 6 fbg. The lateral extent of over-excavation was limited by the proximity of the site's canopy supports and the site kiosk foundation. Cambria collected eight over-excavation bottom and side-wall samples. Staining and odors were observed in all overexcavation sample locations. TPHg was detected in six of eight over-excavation samples, at a maximum concentration of 830 ppm. Benzene and MTBE concentrations were below the laboratory detection limits in all eight over-excavation samples. Details of the sampling are included in Cambria's June 23, 2005 Dispenser and Piping Upgrade and Limited Over-Excavation Soil Sampling Report.

2005 Site Conceptual Model (SCM): Cambria submitted an SCM to the ACHCSA on September 23, 2005. Cambria concluded that the current groundwater conditions appear to be low-risk for all identified potential receptors and that current soil conditions in previously impacted and remediated areas are not known. Based on the site's history and current conditions, Cambria recommended additional soil sampling, a semi-annual groundwater monitoring schedule for all site wells, continued coordinated monitoring with 240 W. MacArthur Blvd., and the evaluation of site soil and groundwater conditions versus RWQCB environmental screening levels (ESLs) and City of Oakland risk-based screening levels (RBSLs).

2006 Subsurface Investigation: In April of 2006, Cambria oversaw the installation of four soil borings at the site (SB-4, SB-6, SB-7, and SB-8). Originally proposed soil boring (and monitoring well) location SB-9 was not attempted due to conflicts with underground utilities. Soil boring SB-5 was attempted several times at its proposed location, but because it could not be cleared to the required depth or moved to a location that would comply with Shell's safety protocols, it was not completed to the proposed depth. Soil boring SB-8 was converted into onsite groundwater monitoring well MW-5. Soil and groundwater samples were collected from each boring. TPHg was detected in seven soil samples at concentrations ranging from 0.452 ppm (SB-7-5) to 1,510 ppm (SB-5-3). Benzene was detected in five soil samples at concentrations ranging from 0.00340 ppm (SB-8-10) and 2.90 ppm (SB-5-3). Toluene was detected in three soil samples at concentrations ranging from 0.00325 ppm (SB-5-3). Ethylbenzene was detected in six soil samples at concentrations ranging from 0.00325 ppm (SB-7-5) to 9.46 ppm (SB-5-3). Xylenes were detected in four soil samples at concentrations ranging

from 0.0199 ppm (SB-7-5) to 70.6 ppm (SB-5-3). MTBE was detected in six soil samples at concentrations ranging from 0.00221 ppm (SB-7-10) to 0.00970 (SB-6-9.5). Di-isopropyl ether (DIPE) was detected in two soil samples at concentrations of 0.0132 ppm (SB-8-14) and 0.0142 No other analytes were detected in soil samples collected during this investigation. TPHg was detected in the groundwater sample from SB-8 at a concentration of 34,000 ppb and benzene was detected in the groundwater sample from SB-8 at a concentration of 404 ppb. Toluene was detected in groundwater samples from SB-4 and SB-8 at concentrations of 50.4 ppb and 22.5 ppb, respectively. Ethylbenzene was detected in the groundwater sample from SB-4 and SB-8 at concentrations of 3.92 ppb and 110 ppb, respectively. Xylenes were detected in groundwater samples from SB-4 and SB-8 at concentrations of 13.3 ppb and 56.8 ppb, respectively. Tertiary-butyl alcohol (TBA) was detected in the groundwater samples from SB-4 and SB-8 at concentrations of 15.1 ppb and 40.2 ppb, respectively. MTBE was detected in the groundwater samples from SB-4 and SB-8 at concentrations of 29.2 ppb and 15.0 ppb, respectively. DIPE was detected in the groundwater sample from SB-8 at a concentration of 26.6 ppb. No other analytes were detected in grab groundwater samples collected during this Cambria's May 30, 2006 Subsurface Investigation and Monitoring Well investigation. Installation Report details the investigation.

Groundwater Monitoring Program: Quarterly and semi-annual groundwater monitoring has been performed at the site since July 1988. Depth to water has ranged historically between 11.31 and 16.76 fbg. During the fourth quarter 2007 monitoring and sampling event, the depth to water in the wells ranged from 15.15 to19.24 fbg, The groundwater flow direction, as calculated from depth-to-water measurements in on-site monitoring wells, is typically toward the west to southwest, but has occasionally ranged to the northwest. During the fourth quarter 2007 monitoring and sampling event, monitoring well MW-5 contained 6,900 ppb TPHg, 58 ppb benzene, and <5.0 ppb MTBE. Since the fourth quarter of 2003, coordinated monitoring and sampling has been conducted with the adjacent former gas station (currently Oakland Auto Works) at 240 West MacArthur Boulevard.

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: 04/08/2008 By jamesy

Permit Numbers: W2008-0181

Permits Valid from 04/18/2008 to 04/18/2008

Application Id: 1207584693523

City of Project Site:Oakland

Site Location: 230 W MacArthur Blvd, Oakland, CA

Completion Date: 04/18/2008

Project Start Date: 04/18/2008 Requested Inspection: 04/18/2008

Scheduled Inspection: 04/18/2008 at 8:30 AM (Contact your inspector, NO INSPECTOR ASSIGNED-EMAIL ACPWA AT

wells@acpwa.org WHEN COMPLETED or call at (510) 670-6633, to confirm.)

Applicant: Conestoga-Rovers & Associates - Peter

Phone: 510-420-3319

Schaefer

000 Hallia Ct #A Eman

5900 Hollis St. #A, Emeryville, CA 94608

Property Owner: Equilon Enterprise LLC c/o Stewart Tituk Denis Phone: 707-865-0251

Brown (Shell)

1980 Post Oak BI #110, Houston, TX 77506

Client: ** same as Property Owner **

Total Due: \$200.00

Receipt Number: WR2008-0107 Total Amount Paid: Payer Name: Conestoga - Rovers & Paid By: CHECK

PAID IN FULL

\$200.00

Associates

Works Requesting Permits:

Borehole(s) for Investigation-Contamination Study - 4 Boreholes

Driller: RSI - Lic #: 802335 - Method: other Work Total: \$200.00

Specifications

Permit	Issued Dt	Expire Dt	#	Hole Diam	Max Depth
Number			Boreholes		
W2008-	04/08/2008	07/17/2008	4	3.00 in.	24.00 ft
0181					

Specific Work Permit Conditions

- 1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
- 2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
- 3. 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.
- 4. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits

Alameda County Public Works Agency - Water Resources Well Permit

and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

- 5. 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.
- 6. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.
- 7. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.
- 8. No Inspector Assigned to this site.

 Applicant shall contact this office by email at wells@acpwa.org and certify in writing that work was completed and according to County Standards within 5 working days after the completion of work.
- 9. After the Fact permit-Work was completed on Jan 31 to Feb 1 2008.

Attachment C Boring Logs

Boring/Well Log Legend

KEY TO SYMBOLS/ABBREVIATIONS

First encountered groundwater

▼ Static groundwater

Soils logged by hand-auger or air-knife cuttings

Soils logged by drill cuttings or disturbed sample

Undisturbed soil sample interval

Soil sample retained for submittal to analytical laboratory

O No recovery within interval

Hydropunch or vapor sample screen interval

PID = Photo-ionization detector or organic vapor meter reading in parts per million (ppm)

fbg = Feet below grade

Blow Counts = Number of blows required to drive a
California-modified split-spoon sampler using
a 140-pound hammer falling freely 30 inches,
recorded per 6-inch interval of a total 18-inch
sample interval

(10YR 4/4) = Soil color according to Munsell Soil Color Charts

msl = Mean sea level

Soils logged according to the USCS.

UNIFIED SOILS CLASSIFICATION SYSTEM (USCS) SUMMARY

	Major Divisions		Graphic	Group Symbol	Typical Description
		Clean Gravels		GW [*]	Well-graded gravels, gravel-sand mixtures, little or no fines
	Gravel and	(≤5% fines)		GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines
	Gravelly Soils	Gravels with Fines		GM	Silty gravels, gravel-sand-silt mixtures
Coarse-Grained Soils		(≥15% fines)		GC	Clayey gravels, gravel-sand-clay mixtures
(>50% Sands and/or Gravels)		Clean Sands		SW	Well-graded sands, gravelly sands, little or no fines
, ·	Sand and Sandy	(≤5% fines)		SP	Poorly-graded sands, gravelly sand, little or no fines
	Soils	Sands with Fines		SM	Silty sands, sand-silt mixtures
		(≥15% fines)		sc	Clayey sands, sand-clay mixtures
				ML	Inorganic silts, very fine sands, silty or clayey fine sands, clayey silts with slight plasticity
Fine-Grained	Silts an	d Clays		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
Soils (>50% Silts				OL	Organic silts and organic silty clays of low plasticity
and/or Clays)				МН	Inorganic silts, micaceous or diatomaceous fine sand or silty soils
	Silts ar	nd Clays		СН	Inorganic clays of high plasticity
				ОН	Organic clays of medium to high plasticity, organic silts
Hig		* * * * * * * * * * * * * * * * *	PT	Peat, humus, swamp soils with high organic contents	



Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, California 95476 Telephone: 707-935-4850

Fax: 707-935-6649

CLIENT NAME	Shell Oil Products US	BORING/WELL NAME SB-9
JOB/SITE NAME	Shell-branded Service Station	DRILLING STARTED 01-Feb-08
LOCATION _	230 W. MacArthur Blvd, Oakland, CA	DRILLING COMPLETED 01-Feb-08
PROJECT NUMBER _	240902-007	WELL DEVELOPMENT DATE (YIELD) NA
DRILLER	Gregg Drilling	GROUND SURFACE ELEVATION NA
DRILLING METHOD _	Hydraulic push	TOP OF CASING ELEVATION NA
BORING DIAMETER _	2.5"	SCREENED INTERVAL NA
LOGGED BY	P. Schaefer CEG 1940	DEPTH TO WATER (First Encountered) 20.0 ft (01-Feb-08)
REVIEWED BY	P. Schaefer CEG 1940	DEPTH TO WATER (Static) NA
REMARKS	Airknife to 5 fbg	

CONTACT DEPTH (fbg) SAMPLE ID GRAPHIC LOG PID (ppm) BLOW U.S.C.S. **EXTENT** DEPTH (fbg) SOIL DESCRIPTION **WELL DIAGRAM** CONCRE CONCRETE 8.0 Silty CLAY (CL) CL 2.0 No recovery 4.0 Silty CLAY with Gravel (CL) CL 5.0 No recovery 7.0 Sandy SILT with Clay (ML); reddish yellow (7.5YR 6/6); 5% clay, 65% silt, 35% sand. No recovery 0 SB-9-7.0 ML 8.0 10.0 Sandy SILT with Gravel & Clay (ML); 5% clay, 65% silt, 20% sand, 10% gravel. ML 12.0 SB-9-11.5 0 Portland Type I/II No recovery 13.5 Clayey SILT (ML); 30% clay, 70% silt. ML 16.0 0 SB-9-15.5 No recovery
Sandy SILT with Clay (ML); yellowish brown (10YR 5/4);
5% clay, 40% silt, 55% sand. 16.5 WELL LOG (PID) I:\SONOMA~1.SHE\OA29F3~1\GINT5\230 W MAC.GPJ DEFAULT.GDT 4/25/08 ML 18.0 SP SAND (SP); yellowish brown (10YR 5/4). 18.8 GRAVEL (GP); brownish yellow (10YR 6/8) GP 19.5 Gravelly SAND (SP); light olive brown (2.5Y 5/3); 80% sand, 20% gravel. SP 23.0 Clayey SILT with Sand (ML); yellowish brown (10YR 5/6); 40% clay, 60% silt. ML 24.0 25 Bottom of Boring @ 24 ft 30 35 PAGE 1 OF



Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, California 95476 Telephone: 707-935-4850 Fax: 707-935-6649

CLIENT NAME Shell Oil Products US BORING/WELL NAME **SB-10** JOB/SITE NAME **Shell-branded Service Station** 01-Feb-08 **DRILLING STARTED** LOCATION 230 W. MacArthur Blvd, Oakland, CA DRILLING COMPLETED 01-Feb-08 240902-007 **PROJECT NUMBER** NA WELL DEVELOPMENT DATE (YIELD)_ **DRILLER Gregg Drilling** NA **GROUND SURFACE ELEVATION DRILLING METHOD** Hydraulic push TOP OF CASING ELEVATION NA BORING DIAMETER 2.5" SCREENED INTERVAL NA P. Schaefer CEG 1940 **LOGGED BY DEPTH TO WATER (First Encountered)** 18.5 ft (01-Feb-08) **REVIEWED BY** P. Schaefer CEG 1940 **DEPTH TO WATER (Static)** NA **REMARKS** Airknife to 5 fbg

Column C
1



Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, California 95476 Telephone: 707-935-4850 Fax: 707-935-6649

CLIENT NAME _	Shell Oil Products US	BORING/WELL NAME SB-11	
JOB/SITE NAME	Shell-branded Service Station	DRILLING STARTED01-Feb-08	
LOCATION	230 W. MacArthur Blvd, Oakland, CA	DRILLING COMPLETED 01-Feb-08	
PROJECT NUMBER _	240902-007	WELL DEVELOPMENT DATE (YIELD) N	Α
DRILLER _	Gregg Drilling	GROUND SURFACE ELEVATIONN	Α
DRILLING METHOD _	Hydraulic push	TOP OF CASING ELEVATION NA	
BORING DIAMETER _	2.5"	SCREENED INTERVAL NA	
LOGGED BY	P. Schaefer CEG 1940	DEPTH TO WATER (First Encountered)	20.0 ft (01-Feb-08) ∑
REVIEWED BY	P. Schaefer CEG 1940	DEPTH TO WATER (Static)	NA 💆

REMAR	rks _	A	irkn	ife to 5	fbg					
PID (ppm)	BLOW	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	SOIL DESCRIPTION	CONTACT DEPTH (fbg)	WEL	.L DIAGRAM
WELL LOG (PID) I:\SONOMA~1.SHE\OA28F3~1\GINT5\Z30 WMAC.GPJ DEFAULT.GDT 4\Z5\08\OQUUE \qquad \qquad \qquad \qquad \qqqqq \qqqqqqqqqqqqqqqqqqqqqqqqqqqqq		SB-11-7.5 SB-11-11.5 SB-15.5			SP ML SP CL SP CL GP CL GP CL GP CL GP CL GP CL GP CL CL CL CL CL CL CL CL CL C		CONCRETE GRAVEL (GP) Silty CLAY (CL) GRAVEL (GP) Silty CLAY (CL) GRAVEL with Sand (GP) No recovery Gravelly SAND (SP); brown/reddish brown/greenish gray; 60% sand, 40% gravel. Clayey SILT with Sand (ML); light yellowish brown (2.5Y 6/4); 25% clay, 65% silt, 10% sand. No recovery Clayey SILT with Sand (ML); light yellowish brown (2.5Y 6/4); 25% clay, 65% silt, 10% sand; carbon specks. Silty SAND (SM); dark yellowish brown (10YR 4/6); 40% silt, 60% sand. Clayey SILT with Sand (ML); light yellowish brown (2.5Y 6/4) SAND (SP); dark yellowish brown (10YR 4/6); 100% sand. Silty Clay (CL); dark yellowish brown (10YR 4/6); 20% silt, 80% sand. Silty Clay (CL); dark yellowish brown (10YR 4/6); 20% silt, 80% sand. Silty Clay (CL); dark yellowish brown; 60% clay, 40% silt. Silty Clay (CL); dark yellowish brown; 60% clay, 40% silt.	0.8 1.0 2.0 3.0 4.0 5.0 7.0 10.0 13.0 14.0 15.5 16.0 19.0 20.0		■ Portland Type I/II Bottom of Boring @ 24 ft
Ĭ <u></u>	<u>.</u>			35 -	1			 		PAGE 1 OF 1



Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, California 95476 Telephore: 707-935-4850

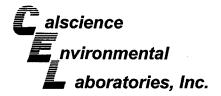
Fax: 707-935-6649

CLIENT NAME	Shell Oil Products US	BORING/WELL NAME SB-12		
JOB/SITE NAME	Shell-branded Service Station	DRILLING STARTED 01-Feb-08		
LOCATION	230 W. MacArthur Blvd, Oakland, CA	DRILLING COMPLETED 01-Feb-08		
PROJECT NUMBER	240902-007	WELL DEVELOPMENT DATE (YIELD)	NA	
DRILLER _	Gregg Drilling	GROUND SURFACE ELEVATION	NA	
DRILLING METHOD _	Hydraulic push	TOP OF CASING ELEVATION NA		
BORING DIAMETER _	2.5"	SCREENED INTERVAL NA		
LOGGED BY	P. Schaefer CEG 1940	DEPTH TO WATER (First Encountered)	21.0 ft (01-Feb-08)	$\overline{\nabla}$
REVIEWED BY	P. Schaefer CEG 1940	DEPTH TO WATER (Static)	NA	Y
REMARKS	Airknife to 2 fbg, then waterknife to 6.0 fbg	· · · · · · · · · · · · · · · · · · ·		

CONTACT DEPTH (fbg) PID (ppm) GRAPHIC LOG BLOW COUNTS EXTENT U.S.C.S. DEPTH (fbg) SAMPLE SOIL DESCRIPTION **WELL DIAGRAM** SPHAL **ASPHALT** 0.8 Silty Clay (CL) CL 2.0 No recovery 6.0 Silty Clay (CL); 60% clay, 40% silt. CL 7.0 Clayey SILT with Sand (ML); dark brown (10YR 3/3); 15% clay, 85% silt. 0 SB-12-7.5 8.5 GP **GRAVEL** with Sand (GP) Clayey SILT with Sand (ML); dark brown (10YR 3/3); 15% clay, 85% silt. ML 0 SB-12-11 Portland Type I/II 13.0 SAND with Gravel (SP) dark brown (10YR 3/3); 80% 13.5 sand, 20% gravel. Silty Clay (CL); greenish gray (10Y 5/1); 55% clay, 45% CL 16.0 0 SB-12-WELL LOG (PID) I:\SONOMA~1.SHE\OA29F3~1\GINT5\Z30 W MAC.GPJ DEFAULT.GDT 4/25/08 No recovery 16.5 Silty SAND with Gravel (SP); brown (10YR 4/3); 30% SP 17.5 SILT (ML); brown (10YR 5/3); 100% silt. ML. 19.0 GRAVEL with Sand (GP); mottled gray/brown; 40% sand, 60% gravel. GP 19.5 CL 20.5 Silty Clay (CL); 40% clay, 60% silt. GP 21.0 GRAVEL with Sand (GP); brown (10YR 5/3); 40% sand, 60% gravel.

SAND with Silt (SP); reddish brown (5YR 5/3); 5% silt, SP 23.0 ML SILT (ML); dark brown (10YR 3/3); 100% silt. 24.0 25 Bottom of Boring @ 24 ft 30 35

Attachment D Waste Disposal Documentation





February 12, 2008

Dennis Baertschi Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955

Subject:

Calscience Work Order No.:

Client Reference:

08-02-0098

230 W. MacArthur Bl. Oakland, CA

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 2/2/2008 and analyzed in accordance with the attached chain-of-custody.

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

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

Sincerely,

Calscience Environmental

Laboratories, Inc.

Jessie Kim

Project Manager

NELAP ID: 03220CA

CSDLAC ID: 10109

SCAQMD ID: 93LA0830 FAX: (714) 894-7501

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





Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received:

02/02/08

Work Order No:

08-02-0098

Preparation:

EPA 3050B / EPA 7471A Total

Method:

EPA 6010B / EPA 7471A

Units:

mg/kg

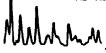
Project: 230 W. MacArthur Bl. Oakland, CA

Page 1 of 1

Client Sample Nu	ımber		Lab Sample Number		Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Ba	tch ID
D-3			08-02-0098-	I-A	02/01/08	Solid	ICP 5300	02/05/08	02/06/08 19:11	08020	5L02
Comment(s):	-Mercury was analyze	ed on 2/5/2008 12	2:51:07 PM with	batch 08	30205L02						
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	Qual	<u>Parameter</u>		Result	<u>RL</u>		<u>DF</u>	Qua
Antimony	ND	0.750	1		Mercury		0.107	0.083	5	1	
Arsenic	2.20	0.750	1		Molybdenum		ND	0.250		1	
Barium	109	0.500	1		Nickel		41.2	0.250		1	
Beryllium	0.365	0.250	1		Selenium		ND	0.750		1	
Cadmium	ND	0.500	1		Silver		ND	0.250		1	
Chromium	23.1	0.250	1		Thallium		ND '	0.750		1	
Cobalt	5.62	0.250	1		Vanadium		16.6	0.250		1	
Copper	13.3	0.500	1		Zinc		35.9	1.00		1	
Lead	4.87	0.500	1							•	
Method Blank			099-04-007-	5,290	N/A	Solid	Mercury	02/05/08	02/05/08 12:44	08020	5L02
	• .		· ·		· · · · · · · · · · · · · · · · · · ·	·····					·
Parameter	Result	<u>RL</u>	<u>DF</u>	Qual							
Mercury	ND	0.0835	1								
Method Blank			007.04.000								51.02
		·	097-01-002-	10,417	N/A	Solid	ICP 5300	02/05/08	02/06/08 11:51	08020	JLU2
Parameter	Result	RL	097-01-002-	10,417 	N/A Parameter	Solid	ICP 5300				•
	Result ND	<u>RL</u> 0.750	:		Parameter	Solid	Result	RL	11:51	080209 DF 1	Qua
Antimony			:		Parameter Lead	Solid			11:51		
Antimony Arsenic	ND	0.750	:		<u>Parameter</u> Lead Molybdenum	Solid	Result ND	RL 0.500 0.250	11:51		
Antimony Arsenic Barium	ND ND	0.750 0.750	:		Parameter Lead Molybdenum Nickel	Solid	Result ND ND	<u>RL</u> 0.500 0.250 0.250	11:51		
Antimony Arsenic Barium Beryllium	ND ND ND	0.750 0.750 0.500	:		Parameter Lead Molybdenum Nickel Selenium	Solid	Result ND ND ND	RL 0.500 0.250	11:51		
Antimony Arsenic Barium Beryllium Cadmium	ND ND ND ND	0.750 0.750 0.500 0.250	:		Parameter Lead Molybdenum Nickel Selenium Silver	Solid	Result ND ND ND ND	RL 0.500 0.250 0.250 0.750 0.250	11:51		
Parameter Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt	ND ND ND ND ND	0.750 0.750 0.500 0.250 0.500	:		Parameter Lead Molybdenum Nickel Selenium	Solid	Result ND ND ND ND ND	RL 0.500 0.250 0.250 0.750	11:51		

RL - Reporting Limit ,

DF - Dilution Factor ,







Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: 02/02/08 08-02-0098 EPA 3550B EPA 8015B

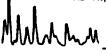
Project: 230 W. MacArthur Bl. Oakland, CA

Page 1 of 1

Client Sample Number		Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-3		08-02-0098-1-A	02/01/08	Solid	GC 23	02/04/08	02/11/08 23:46	080204B07
Comment(s): -The sample extract wa	s subjected to	Silica Gel treatment	prior to analys	is.				
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
Diesel Range Organics	ND	5.0	1		mg/kg			
Surrogates:	REC (%)	Control Limits		<u>Qual</u>				
Decachlorobiphenyl	91	61-145						
Method Blank		099-12-025-121	N/A	Solid	GC 23	02/04/08	02/11/08 22:59	080204B07
<u>Parameter</u>	Result	<u>RL</u>	DF	Qual	<u>Units</u>			
Diesel Range Organics	ND	5.0	1		mg/kg			
Surrogates:	REC (%)	Control Limits		Qual				
Decachlorobiphenyl	97	61-145						

RL - Reporting Limit ,

DF - Dilution Factor







Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: 02/02/08 08-02-0098 EPA 3550B EPA 8015B (M)

Project: 230 W. MacArthur Bl. Oakland, CA

Page 1 of 1

Client Sample Numbe	er		Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-3			08-02-0098-1-A	02/01/08	Solid	GC 23	02/04/08	02/05/08 3:26	080204B10
Comment(s):	-The sample extract wa	s subjected to	Silica Gel treatment	prior to analys	is.				
<u>Parameter</u>		Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
TPH as Motor Oil		ND	25	1		mg/kg			
Surrogates:		REC (%)	Control Limits	•	<u>Qual</u>				
Decachlorobiphenyl		105	61-145						
Method Blank			099-12-254-367	N/A	Solid	GC 23	02/04/08	02/05/08 4:04	080204B10
<u>Parameter</u>		Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
TPH as Motor Oil		ND	25	1		mg/kg			
Surrogates:		REC (%)	Control Limits		Qual				
Decachlorobiphenyl		104	61-145						

RL - Reporting Limit ,

DF - Dilution Factor ,





Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: 02/02/08 08-02-0098 EPA 5030B EPA 8015B (M)

Project: 230 W. MacArthur Bl. Oakland, CA

Page 1 of 1

Client Sample Number		Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-3 (08-02-0098-1-A	02/01/08	Solid	GC 24	02/02/08	02/02/08 23:51	080201B04
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
TPH as Gasoline	ND	0.50	1		mg/kg			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Bromofluorobenzene - FID	80	42-126						
Method Blank		099-12-279-1,479	N/A	Solid	GC 24	02/02/08	02/02/08 21:38	080201B04
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
TPH as Gasoline	ND	0.50	1		mg/kg			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Bromofluorobenzene - FID	81	42-126						

RL - Reporting Limit ,

DF - Dilution Factor





Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method:

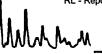
Units:

02/02/08 08-02-0098 EPA 5030B EPA 8260B mg/kg

Project: 230 W. MacArthur Bl. Oakland, CA

Page 1 of 1

Client Sample Number				b Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Ti Analyz		QC Batch ID
D-3			08-02-0	0098-1-A	02/01/08	Solid	GC/MS S	02/05/08	02/06/0 5:20		080205L03
Parameter	Result	<u>RL</u>	<u>DF</u>	Qual	Parameter			Result	RL	DF	Qual
Benzene	ND	0.0050	1		p/m-Xylene			ND	0.0050	1	
Ethylbenzene	ND	0.0050	1		o-Xylene			ND	0.0050	1	
Toluene	ND	0.0050	1								
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:			REC (%)	Control Limits		<u>Qual</u>
Dibromofluoromethane	97	73-139			1,2-Dichloroet	hane-d4		110	73-145		
Toluene-d8	98	90-108			1,4-Bromofluo	robenzene		99	71-113		
Method Blank			099-10	-005-15,4	05 N/A	Solid	GC/MS S	02/05/08	02/06/0 2:18		080205L03
<u>Parameter</u>	Result	<u>RL</u>	DF	<u>Qual</u>	<u>Parameter</u>			Result	<u>RL</u>	DF	<u>Qual</u>
Benzene	ND	0.0050	1		p/m-Xylene			ND	0.0050	1	
Ethylbenzene	ND	0.0050	1		o-Xylene			ND	0.0050	1	
Toluene	ND	0.0050	1								
Surrogates:	REC (%)	Control Limits		<u>Qual</u>	Surrogates:			REC (%)	Control Limits		Qual
Dibromofluoromethane	97	73-139			1,2-Dichloroet	hane-d4		104	73-145		
Toluene-d8	96	90-108			1,4-Bromofluo	robenzene		98	71-113		







Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: 02/02/08 08-02-0098 EPA 3050B EPA 6010B

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number	
D-3	Solid	ICP 5300	02/05/08		02/06/08	080205802	
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers	
Antimony	48	50	50-115	5	0-20	3	
Arsenic	90	89	75-125	1	0-20	J	
Barium	4X	4X	75-125	4X	0-20	Q	
Beryllium	99	97	75-125	1	0-20	_	
Cadmium	94	95	75-125	1	0-20		
Chromium	91	82	75-125	5	0-20		
Cobalt	90	92	75-125	2	0-20		
Copper	93	87	75-125	4	0-20		
Lead	94	92	75-125	2	0-20		
Molybdenum	93	92	75-125	1	0-20		
Nickel .	80	80	75-125	0	0-20		
Selenium	87	87	75-125	0	0-20		
Silver	96	95	75-125	1	0-20		
Thallium	94	93	75-125	1	0-20		
Vanadium	87	82	75-125	4	0-20		
Zinc	93	77	75-125	7	0-20		

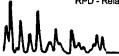






Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: 02/02/08 08-02-0098 EPA 3550B EPA 8015B

Quality Control Sample ID	Matrix	Instrument	Date Prepared			MS/MSD Batch Number
D-3	Solid	GC 23	02/04/08		02/11/08	080204\$07
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Diesel Range Organics	70	78	64-130	11	0-15	







Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: 02/02/08 08-02-0098 EPA 3550B EPA 8015B (M)

Project 230 W. MacArthur Bl. Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared 02/04/08		Date Analyzed	MS/MSD Batch Number
08-02-0124-18	Solid	GC 23			02/05/08	080204\$10
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
TPH as Motor Oil	92	86	64-130	7	0-15	

MMMM_





Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: 02/02/08 08-02-0098 EPA 5030B EPA 8015B (M)

Project 230 W. MacArthur Bl. Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
D-3	Solid	GC 24	02/02/08	02/03/08	080201503
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	RPD RPD C	L Qualifiers
TPH as Gasoline	85	85	48-114	1 0-23	

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Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: 02/02/08 08-02-0098 EPA 7471A Total EPA 7471A

Project 230 W. MacArthur Bl. Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
D-3	Solid	Mercury	02/05/08	02/05/08	080205802
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	RPD RPD C	L Qualifiers
Mercury	88	88	84-138	0 0-7	

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Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: 02/02/08 08-02-0098 EPA 5030B EPA 8260B

Project 230 W. MacArthur Bl. Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number
08-01-1973-1	Solid	GC/MS S	02/05/08		02/06/08	080205S01
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	90	90	79-115	0	0-13	
Carbon Tetrachloride	98	99	55-139	1	0-15	
Chlorobenzene	96	98	79-115	3	0-17	
1,2-Dibromoethane	101	103	70-130	2	0-30	
1,2-Dichlorobenzene	99	101	63-123	2	0-23	
1,1-Dichloroethene	96	98	69-123	2	0-16	
Ethylbenzene	100	103	70-130	3	0-30	
Toluene	91	93	79-115	2	0-15	
Trichloroethene	108	115	66-144	6	0-14	
Vinyi Chloride	82	81	60-126	0	0-14	
Methyl-t-Butyl Ether (MTBE)	90	88	68-128	3	0-14	
Tert-Butyl Alcohol (TBA)	82	80	44-134	2	0-37	
Diisopropyl Ether (DIPE)	86	84	75-123	2	0-12	

91

96

80

75-117

79-115

42-138

0

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0-12

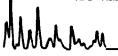
0-12

0-28

91

97

88



Ethyl-t-Butyl Ether (ETBE)

Ethanol

Tert-Amyl-Methyl Ether (TAME)

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nvironmental Quality Control - Laboratory Control Sample



Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation:

08-02-0098 EPA 3050B EPA 6010B

N/A

Method:

Project: 230 W. MacArthur Bl. Oakland, CA

aboratories, Inc.

Quality Control Sample ID	Matrix	Instrument	Instrument Date Analyzed		e ID Lo	LCS Batch Number	
097-01-002-10,417	Solid	ICP 5300	02/06/08	080205-I-02			
<u>Parameter</u>		Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers	
Antimony		25.0	24.8	99	80-120		
Arsenic		25.0	25.7	103	80-120		
Barium		25.0	26.5	106	80-120		
Beryllium		25.0	25.7	103	80-120		
Cadmium		25.0	27.1	109	80-120		
Chromium		25.0	27.0	108	80-120		
Cobalt		25.0	27.5	110	80-120		
Copper		25.0	25.3	101	80-120		
Lead		25.0	27.0	108	80-120		
Molybdenum	•	25.0	26.8	107	80-120		
Nickel		25.0	28.0	112	80-120		
Selenium		25.0	24.6	98	80-120		
Silver		12.5	12.4	99	80-120		
Thallium		25.0	26.0	104	80-120		
Vanadium		25.0	26.1	105	80-120		
Zinc		25.0	27.0	108	80-120		





Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: N/A 08-02-0098 EPA 3550B EPA 8015B

Quality Control Sample ID	Matrix	Matrix Instrument			ate llyzed	LCS/LCSD Bate Number	h
099-12-025-121	Solid	GC 23	02/04/	08 02/1	1/08	080204B07	
Parameter	LCS %	REC LCSI	%REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Diesel Range Organics	82	9	4	75-123	14	0-12	х





Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: N/A 08-02-0098 EPA 3550B EPA 8015B (M)

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed		LCS/LCSD Bato Number	h
099-12-254-367	Solid	GC 23	02/04/08	02/05/08	3	080204B10	
<u>Parameter</u>	LCS %	6REC LCS	D %REC %	6REC CL	<u>RPD</u>	RPD CL	Qualifiers
TPH as Motor Oil	119	1	18	75-123	1	0-12	







Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955

Date Received: Work Order No: Preparation: Method: N/A 08-02-0098 EPA 5030B EPA 8015B (M)

Quality Control Sample ID	Matrix	Matrix Instrument		Date Prepared		Date Analyzed		LCS/LCSD Bate Number	ch
099-12-279-1,479	Solid	GC	24	02/02	/08	02/02	/08	080201B04	
<u>Parameter</u>	LCS %	%REC	LCSD %	REC	%RE	C CL	<u>RPD</u>	RPD CL	Qualifiers
TPH as Gasoline	108	3	108		70	-124	0	0-18	





Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: N/A 08-02-0098 EPA 7471A Total EPA 7471A

Project: 230 W. MacArthur Bl. Oakland, CA

Quality Control Sample ID	Matrix	Matrix Instrument		ate ared	Date Analyzed	LCS/LCSD Bate Number	ch
099-04-007-5,290	Solid	Mercur	y 02/0	5/08	02/05/08	080205L02	
<u>Parameter</u>	LCS %	<u>6REC L</u>	CSD %REC	%REC	CL RPI	<u> RPD CL</u>	Qualifiers
Mercury	95		97	87-1 ⁻	17 2	0-3	

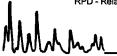
MMM RPD-Rela





Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: N/A 08-02-0098 EPA 5030B EPA 8260B

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed		LCS/LCSD Bato Number	h
099-10-005-15,405	Solid	GC/MS S	02/05/08	02/05/08		080205L03	
<u>Parameter</u>	LCS %RE	C LCSD %F	REC %RE	C CL F	RPD	RPD CL	Qualifiers
Benzene	97	97	84-	114	0	0-7	
Carbon Tetrachloride	104	105	66-	132	1	0-12	
Chlorobenzene	107	104	87-	111	2	0-7	
1,2-Dibromoethane	109	110	80-	120	1	0-20	
1,2-Dichlorobenzene	111	106	79-	115	4	0-8	
1,1-Dichloroethene	102	105	73-	121	3	0-12	
Ethylbenzene	113	112	80-	120	1	0-20	
Toluene	97	98	78-	114	1	0-7	
Trichloroethene	105	103	84-	114	2	0-8	
Vinyl Chloride	89	91	63-	129	3	0-15	
Methyl-t-Butyl Ether (MTBE)	86	88	77-	125	2	0-11	
Tert-Butyl Alcohol (TBA)	91	94	47-	137	3	0-27	
Diisopropyl Ether (DIPE)	85	87	76-	130	3	0-8	
Ethyl-t-Butyl Ether (ETBE)	85	88	76-	124	3	0-12	
Tert-Amyl-Methyl Ether (TAME)	95	95	82-	118	0	0-11	
Ethanol	90	90	59-	131	0	0-21	





Glossary of Terms and Qualifiers



Work Order Number: 08-02-0098

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

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																										05/02/06 Re	vision		



WORK ORDER #: 08 - 0 2 - 0 0 9 8

Cooler ____ of __/_

SAMPLE RECEIPT FORM

CLIENT: CRA	DATE: 02-02-08
TEMPERATURE - SAMPLES RECEIVED BY:	
CALSCIENCE COURIER: Chilled, cooler with temperature blank provided. Chilled, cooler without temperature blank. Chilled and placed in cooler with wet ice. Ambient and placed in cooler with wet ice. Ambient temperature. C Temperature blank.	LABORATORY (Other than Calscience Courier): C Temperature blank. C IR thermometer. Ambient temperature.
CUSTODY SEAL INTACT:	
Sample(s): Cooler: No (Not I	ntact) : Not Present: Initial:/
SAMPLE CONDITION:	
Chain-Of-Custody document(s) received with samples	
COMMENTS:	

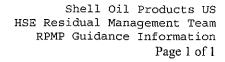


NON-HAZARDOUS RESIDUAL COMPLETED PACKAGE CHECKLIST

RIPR # 66894	
Consultant Company Name:	Conestoga-Rovers & Associates
Consultant Contact Name:	Kari Dupler
Consultant Phone Number:	510-420-3308
Date Package Completed:	March 31, 2008
Date Package Sent to RDC:	March 31, 2008
No. Of Loads/Containers Shippe	ed: 1 drum
	ubmit in place of the original manifest with a written hal is not included in the package oplicable)
A. Analytical Results B. Signed Coversheet fro C. Chain of Custody wit	
	or acceptance into the TSDF. (If Applicable) file approval. (Letter, Approval # , ect)
Package completed by	(Signature)
Printed Name Kari Dunle	

30030808

. T	NON	HAZADDOHO	1. Generator ID Nur	mber	12	2. Page 1 of	3. Emerger	cy Response	Phone	4. Waste T	racking Numbe	r 0	005	00
1	WAST	HAZARDOUS TE MANIFEST		NOT REQUIRE		1		888-4	23-6060	<u> </u>	.	U	095	02
	5. Genera Sh	tor's Name and Maili eli Oil Produ	ng Address Lits US				denerator's	one Address	s (if different tha	an malling addi	ess)			
	127	'00 Northboro	ugh Drive, Hau	ston, TX 77067			230	W. Mac	:Arthur					
	Generator						Oal	tand, C	A 94611	· · ·				
	•	orter 1 Company Nan	^{ne} rated Service	a las						U.S. EPA ID		DAAA.	148338	
ŀ		orter 2 Company Nan		rs, Inc.						U.S. EPA ID		RUUU	140000	
	71 Transpi	onto: 2 pompany man												
	8. Designa	ated Facility Name ar	nd Site Address	-1,						U.S. EPA ID	Number			
		30 W. 16th S	treet								CA	D028	409019	-
L	Facility's I	Phone:	Long Be	ach, CA. 90813	562-432	2-5445				·				
		. U.S. DOT Description d Packing Group (if a		hipping Name, Hazard Class	s, ID Number,			10. Conta	Type	11. Total Quantity	12. Unit Wt./Vol.			
	1.								1					
		Non-Hazar	dous Waste i	Liquid (Water Kni	le Sludge))	DHA	1	1/2			
-	2.						•		, t	7)				
İ	3.													
-	4.													
İ														
L	10 Cno.	ial Handling Instructi	ons and Additional Inf	iormotion					<u></u>					
	10. Орвс	nai i ianuing menucu	ons and Additional III	omation				1	RIF	PR 668	94			
	·W	sar protectiv	e acuioment	while handling. V	Neights o	r volum:	95 210		SAI					
		-		gency number (8	_				Inciden		95741			
	Die	spatcher).							Profile Project		78 01-29	1	1	
,	14 GENE	FRATOR'S CERTIFIC	CATION: I certify the	materials described above o	n this manifest a	are not subje	ct to federal	regulations fo				te.	M M	\sim
-	Generato	r's/Offeror's Printed/	Typed Name				gnature	g	// <				onth Day	Year
1			of SOPUS - J	Sherman			•			\times			2 2	308
1		ational Shipments	Import to	U.S.		Export from	U.S.		ntry/exit:					<u></u>
\rightarrow	16 Trans	ter Signature (for exp	ont of Descipt of Mate	erials	· .			Date lea	ving U.S.:	•	*			
<u>i</u>	Transport	ter 1 Printed/Typed N	lame LAN ERENCE	70 w. —		S	gnature	•	1			Mo	onth Day	Year
ز ة					Buc	ر کور			-				7/25	708
חשויחטייטייי	Transpor	ter 2 Printed/Typed N	RELATION	PROTECTS DEPARTS	OF FOREIGN TO THE TOP	δ το STAN	gnature		THE FEDERA			М 	onth Day	Year
+	17. Discr	epancy	ROPOSITION WAST	FANO OLDO	ACT ONLY	CHEC CODE	R PURATE	LOS ANO	THE FEDE		<u></u>	.		
`	17a. Disc	crepancy Indication S	pace Quanti	CH THAT THE OCCUPANTE	Type#	Ex William	HE PROPE	Residue	O CROSEL	Partial F	Rejection		Full Rej	ection
				- CKTHICA	TE HOLDER'S	AACH ST	$ARY \frac{P_{IJ}}{P_{IGH}}$	PLUIUNA	F RESCUE		-			
	17b. Alto	rnate Facility (or Gen	erator)	N. MELTON ADMIT TANCE OF DESCRIPTION THAT THE CERTIFICA.		-MBUTTY I	Man)fe	st Reference	Number: RCRA AND	U.S. EPA	D Number			
[•	MINATED	ARA AND					
	Facility's	Phone:				<u> </u>					-			
וַנ	17c. Sigr	nature of Alternate Fa	cility (or Generator)			. 1						M I	onth Day	Year
5	. 1													
DESIGNALED FACILITY	H	-135												
ارَ	, ,						,							
				ation of receipt of hazardous	materials cover					1/	1 1.			.,
	Printed/T	yped Name	Cha	Krabor	TY	S	ignature	mal	2 ch	akya	bosty		lonth Day フスレグ	Year V
7	<i> </i>		-		/		-					<u> </u>		ששוט





NON-HAZARDOUS RESIDUAL COMPLETED PACKAGE CHECKLIST

RIPR # 66896	
Consultant Company Name:	Conestoga-Rovers & Associates
Consultant Contact Name:	Kari Dupler
Consultant Phone Number:	510-420-3308
Date Package Completed:	April 17, 2008
Date Package Sent to RDC:	April 17, 2008
No. Of Loads/Containers Shipp	ed: 1 Drum
a copy from the TSDF and sexplanation of why the origin. 2. Analytical Package (When Apple A. Analytical Results B. Signed Coversheet from C. Chain of Custody with	om Lab
1	file approval. (Letter, Approval #, ect)
Package completed by	(Signature)
Printed Name Kari Dupler	



WEIGHMASTER-Altamont Landfill & RRF 10840 Altamont Pass Road Livermore, CA, 94551 Ph: (925)455-7300

Original Ticket# 786850

Customer Name Shell230WMacarthur66896 Shell Carrier

03/12/2006

Payment Type Credit Account

Manual Ticket#

Ticket Date

Billing # 0387664 GEN Altamont Generic

Vehicle# UP82819

Container

Licenses

Manifest

00000-1

PO

66896

Profile Generator 55491200 (~*Class II *Drum* Disposal/Shell Oil Products, US~Shell Oil, (230

164-ShellOil230 Shell Oil Products, US (230 W. Macarthur~Oakland)RIPR#: 6689

Rate

Time

In 03/12/2008 12:59:48 Out 03/12/2008 12:59:48

Scale Scalel In R Montoya

L1)%

Deputy Weighmaster

Inbound

Grass

Tare Net

Tons

Comments

Product

		********		 w.z	wr:	**************************************
وإناع	114		Cathell B	 es la	. 1.1	1 (20)A

Uty

R Montoya

Tax

Amount

Origin

Each

UOM

Uakland

Trans - Drums-Tran 100

Each

Oakland

DRIVER:

lotal Tax Total Ticket

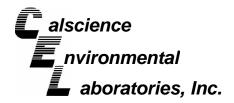
Weighmaster Certificate

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

404WMCA

	nuse print of type orn designed for use on elite (12-pilch) typewnier.)	20 0 e 0					
	NON-HAZARDOUS 1. General	itor's US EPA ID No.	Manifest Doc. No	1 .			
A	3. Generator's Name and Mailing Address EQ_iten Ex	Trenphises, LLC	100.00.1				
	4. Generator's Phone () 5900 Hollis	Products Dupler J. Kari Dupler ST., Swite A He CA 9460	Ş				
	5. Transporter 1. Company Name	GONACO US EPAID		A. Transporter			
	7. Transporter 2 Company Name	12 CACO.00. 8. US EPA ID	· · · · · · · · · · · · · · · · · · ·	B. Transporter	5 <u>321</u> s Phone	1030	
		<u> </u>		-			
	Designated Facility Name and Site Address ALTAMONT LANDFILL 10840 ALTAMONT PASS RD.	10. US EPA ID	Number	C. Facility's Ph	one		
	LIVERMORE, CA 94550	C·A·D·9·8·1·	<u>3·8·2·7·3·2</u>				
	11. Waste Shipping Name and Description				Containers I	13. Total	14. Unit
	a.	******		No.	Туре	Quantity	Wt/Vol
	Soil with GASoline (Now HA	2 Andrew , NON 1	Regulate	<u> 00</u>	IID!M	200	2
GENE							
R	C.						
A T O							
R	d.		····				· .
	,						
	D. Additional Descriptions for Materials Listed Above			F Handling Co.	des for Was	tes Listed Above	<u></u>
	Dr- IO! D-3			E. Harding Co	ues (V) ***as	ies Listed Above	
	15. Special Handling Instructions and Additional Information	**************************************					
	PROFILE # 55491200		RIPR!	66896			
	CUSTOMER NAME Shell		+ Locato 330	10N ."			
			3-3 c	W. MA	CANT	hun	
		~~ Y **********************************	OAK	Ima,	CA		
	16. GENERATOR'S CERTIFICATION: I certify the materials described.	1	subject to ederal regul	ations for reporting	proper dispos		~
M	Printed Typed Name 45 on behalf of 5	will Signature	of Vetrad	/ ጌ		Month Day	Year
Ť	17. Transporter 1 Acknowledgement of Receipt of Materials			1 .	~~~~		JIC/ O
AN	Printed/Typed-Nafne	Signature	und ha	resort		Month Day	Year
P	18. Transporter 2 Acknowledgement of Receipt of Materials	- Fee	new year) Office fi		10666	7 ().33
TRANSPORT-ER	Printed/Typed Name	Signature				Month Day	Year
	19. Discrepancy Indication Space	I			/1/4/4/-/		1 '
FAC							a dia
) — L — T Y	20. Facility Owner or Operator; Certification of receipt of waste m	aterials covered by this manifest	t except as noted in i	tem 19.		<u> </u>	
Y	Printed/Typed Name	Signature	1			Month Day	Vane
	Ruby MontayA	Ru	5m			13 /2°	

Attachment E Certified Analytical Reports





February 11, 2008

Dennis Baertschi Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955

Subject: Calscience Work Order No.: 08-02-0097

Client Reference: 230 W. MacArthur Bl. Oakland, CA

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 2/2/2008 and analyzed in accordance with the attached chain-of-custody.

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

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

Sincerely,

Calscience Environmental Laboratories, Inc.

Jessie Kim Project Manager

CA-ELAP

• NELAP ID: 03220CA

CSDLAC ID: 10109

SCAQMD ID: 93LA0830

7440 Lincoln Way, Garden Grove, CA 92841-1427 ·

TEL:(714) 895-5494 ·

FAX: (714) 894-7501



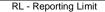


Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: 02/02/08 08-02-0097 EPA 5030B EPA 8015B (M)

Project: 230 W. MacArthur Bl. Oakland, CA

Page 1 of 4

Troject. 250 W. MacArthan	Di. Cakiana,	O/A					1 6	ige i oi i
Client Sample Number		Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB-12-7.5		08-02-0097-5-A	02/01/08	Solid	GC 24	02/02/08	02/03/08 1:31	080201B04
<u>Parameter</u>	Result	<u>RL</u>	DF	<u>Qual</u>	<u>Units</u>			
TPH as Gasoline	ND	0.50	1		mg/kg			
Surrogates:	<u>REC (%)</u>	Control Limits		Qual				
1,4-Bromofluorobenzene - FID	82	42-126						
SB-12-11		08-02-0097-6-A	02/01/08	Solid	GC 24	02/02/08	02/03/08 2:04	080201B04
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
TPH as Gasoline	ND	0.50	1		mg/kg			
Surrogates:	<u>REC (%)</u>	Control Limits		<u>Qual</u>				
1,4-Bromofluorobenzene - FID	82	42-126						
SB-12-15.5		08-02-0097-7-A	02/01/08	Solid	GC 24	02/02/08	02/03/08 2:37	080201B04
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
TPH as Gasoline	ND	0.50	1		mg/kg			
Surrogates:	<u>REC (%)</u>	Control Limits		<u>Qual</u>				
1,4-Bromofluorobenzene - FID	82	42-126						
SB-9-7		08-02-0097-8-A	02/01/08	Solid	GC 24	02/02/08	02/03/08 3:11	080201B04
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
TPH as Gasoline	ND	0.50	1		mg/kg			
<u>Surrogates:</u>	<u>REC (%)</u>	Control Limits		Qual				
1,4-Bromofluorobenzene - FID	82	42-126						







Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: 02/02/08 08-02-0097 EPA 5030B EPA 8015B (M)

Project: 230 W. MacArthur Bl. Oakland, CA

Page 2 of 4

Client Sample Number		Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB-9-11.5		08-02-0097-9-A	02/01/08	Solid	GC 24	02/02/08	02/03/08 3:44	080201B04
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
TPH as Gasoline	ND	0.50	1		mg/kg			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Bromofluorobenzene - FID	80	42-126						
SB-9-15.5		08-02-0097-10-A	02/01/08	Solid	GC 24	02/02/08	02/03/08 4:17	080201B04
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
TPH as Gasoline	ND	0.50	1		mg/kg			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Bromofluorobenzene - FID	80	42-126						
SB-10-7		08-02-0097-11-A	02/01/08	Solid	GC 24	02/02/08	02/03/08 4:51	080201B04
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
TPH as Gasoline	ND	0.50	1		mg/kg			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Bromofluorobenzene - FID	82	42-126						
SB-10-11.5		08-02-0097-12-A	02/01/08	Solid	GC 24	02/02/08	02/03/08 5:24	080201B04
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
TPH as Gasoline	ND	0.50	1		mg/kg			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Bromofluorobenzene - FID	81	42-126						







Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: 02/02/08 08-02-0097 EPA 5030B EPA 8015B (M)

Project: 230 W. MacArthur Bl. Oakland, CA

Page 3 of 4

Client Sample Number		Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB-10-15.5		08-02-0097-13-A	02/01/08	Solid	GC 24	02/02/08	02/03/08 5:57	080201B04
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
TPH as Gasoline	ND	0.50	1		mg/kg			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Bromofluorobenzene - FID	83	42-126						
SB-11-7.5		08-02-0097-14-A	02/01/08	Solid	GC 24	02/02/08	02/03/08 7:04	080201B04
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
TPH as Gasoline	ND	0.50	1		mg/kg			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Bromofluorobenzene - FID	80	42-126						
SB-11-11.5		08-02-0097-15-A	02/01/08	Solid	GC 24	02/02/08	02/03/08 7:37	080201B04
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
TPH as Gasoline	ND	0.50	1		mg/kg			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Bromofluorobenzene - FID	83	42-126						
SB-11-15.5		08-02-0097-16-A	02/01/08	Solid	GC 24	02/02/08	02/03/08 8:10	080201B04
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
TPH as Gasoline	ND	0.50	1		mg/kg			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Bromofluorobenzene - FID	82	42-126						



DF - Dilution Factor , Qual -





Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: 02/02/08 08-02-0097 EPA 5030B EPA 8015B (M)

Project: 230 W. MacArthur Bl. Oakland, CA

Page 4 of 4

Client Sample Number		Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank		099-12-279-1,479	N/A	Solid	GC 24	02/02/08	02/02/08 21:38	080201B04
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			_
TPH as Gasoline	ND	0.50	1		mg/kg			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Bromofluorobenzene - FID	81	42-126						





Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: 02/02/08 08-02-0097 EPA 5030B EPA 8015B (M)

Project: 230 W. MacArthur Bl. Oakland, CA

Page 1 of 2

Client Sample Number		Lab Sample Number	Date Collected	Matrix	Instrument GC 29	-	Date/Time Analyzed	QC Batch ID 080204B05
30-9		08-02-0097-1-D	02/01/08	Aqueous	GC 29	02/04/08	3:06	060204603
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
TPH as Gasoline	1700	50	1		ug/L			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Bromofluorobenzene	107	38-134						
SB-10		08-02-0097-2-D	02/01/08	Aqueous	GC 29	02/04/08	02/05/08 3:40	080204B05
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
TPH as Gasoline	ND	50	1		ug/L			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Bromofluorobenzene	80	38-134						
SB-11		08-02-0097-3-D	02/01/08	Aqueous	GC 29	02/04/08	02/05/08 4:13	080204B05
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
TPH as Gasoline	ND	50	1		ug/L			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Bromofluorobenzene	76	38-134						
SB-12		08-02-0097-4-E	02/01/08	Aqueous	GC 29	02/04/08	02/05/08 17:39	080204B05
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
TPH as Gasoline	4900	1200	25		ug/L			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Bromofluorobenzene	81	38-134						







Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: 02/02/08 08-02-0097 EPA 5030B EPA 8015B (M)

Project: 230 W. MacArthur Bl. Oakland, CA

Page 2 of 2

Client Sample Number		Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank		099-12-436-1,433	N/A	Aqueous	GC 29	02/04/08	02/05/08 1:23	080204B05
Parameter	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			_
TPH as Gasoline	ND	50	1		ug/L			
Surrogates:	REC (%)	Control Limits		<u>Qual</u>				
1,4-Bromofluorobenzene	69	38-134						

Page 1 of 5



Analytical Report



Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: 02/02/08
Work Order No: 08-02-0097
Preparation: EPA 5030B
Method: EPA 8260B
Units: mg/kg

Project: 230 W. MacArthur Bl. Oakland, CA

1 ago 1								,			
Client Sample Number				ab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Ti I Analyz		QC Batch ID
SB-12-7.5			08-02-	0097-5-A	02/01/08	Solid	GC/MS W	02/08/08	02/09/ 1:52		080208L03
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Parameter</u>			Result	<u>RL</u>	DF	<u>Qual</u>
Benzene	ND	0.0050	1		Methyl-t-Butyl	Ether (MTB	BE)	ND	0.0050	1	
Ethylbenzene	ND	0.0050	1		Tert-Butyl Alco	` ,		ND	0.050	1	
Toluene	ND	0.0050	1		Diisopropyl Eth			ND	0.010	1	
p/m-Xylene	ND	0.0050	1		Ethyl-t-Butyl E	ther (ETBE)	ND	0.010	1	
o-Xylene	ND	0.0050	1		Tert-Amyl-Met	hyl Ether (T	AME)	ND	0.010	1	
Surrogates:	REC (%)	Control		<u>Qual</u>	Surrogates:			REC (%)	Control		Qual
		<u>Limits</u>							<u>Limits</u>		
Dibromofluoromethane	102	73-139			1,2-Dichloroeth			107	73-145		
Toluene-d8	96	90-108			1,4-Bromofluo	robenzene		97	71-113		
SB-12-11			08-02-	0097-6-A	02/01/08	Solid	GC/MS W	02/07/08	02/07/ 16:3		080207L01
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	Parameter			Result	<u>RL</u>	DF	Qual
Benzene	ND	0.0050	1		Methyl-t-Butyl	Ether (MTE	SF)	ND	0.0050	1	
Ethylbenzene	ND	0.0050	1		Tert-Butyl Alco	,	-/	ND	0.050	1	
Toluene	ND	0.0050	1		Diisopropyl Eth	` ,		ND	0.010	1	
p/m-Xylene	ND	0.0050	1		Ethyl-t-Butyl E)	ND	0.010	1	
o-Xylene	ND	0.0050	1		Tert-Amyl-Met			ND	0.010	1	
Surrogates:	REC (%)	Control		Qual	Surrogates:	,. = (.	,	REC (%)	Control	•	Qual
<u> </u>		Limits		<u> </u>	<u>ourrogatoor</u>			1120 (70)	Limits		<u> </u>
Dibromofluoromethane	101	73-139			1,2-Dichloroeth	hane-d4		107	73-145		
Toluene-d8	99	90-108			1,4-Bromofluo	robenzene		101	71-113		
SB-12-15.5			08-02-	0097-7-A	02/01/08	Solid	GC/MS W	02/07/08	02/07/ 22:3		080207L01
Parameter	Result	<u>RL</u>	DF	Qual	<u>Parameter</u>			Result	RL	DF	Qual
Benzene	ND	0.0050	1		Methyl-t-Butyl	Ether (MTP	SE)	0.0053	0.0050	1	
Ethylbenzene	ND	0.0050	1		Tert-Butyl Alco		-,	ND	0.050	1	
Toluene	ND	0.0050	1		Diisopropyl Eth			ND	0.010	1	
p/m-Xylene	ND	0.0050	1		Ethyl-t-Butyl E	,)	ND	0.010	1	
o-Xylene	ND	0.0050	1		Tert-Amyl-Met			ND	0.010	1	
Surrogates:	REC (%)	Control	'	Qual	Surrogates:	,. = (1		REC (%)	Control	'	Qual
<u></u>	1120 (70)	Limits		Q uui	Surroguios.			0 (70)	Limits		<u> </u>
Dibromofluoromethane	104	73-139			1,2-Dichloroeth	hane-d4		108	73-145		
Toluene-d8	98	90-108			1,4-Bromofluo			100	71-113		
		30 .00			,						

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DF - Dilution Factor ,

Page 2 of 5



Analytical Report



Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: 02/02/08
Work Order No: 08-02-0097
Preparation: EPA 5030B
Method: EPA 8260B
Units: mg/kg

Project: 230 W. MacArthur Bl. Oakland, CA

Client Sample Number				Sample umber	Date Collected	Matrix	Instrument	Date Prepared	Date/Tir d Analyze		Batch ID
SB-9-7			08-02-00	97-8-A	02/01/08	Solid	GC/MS W	02/08/08	02/09/0 2:22	8 080	208L03
Parameter	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Parameter</u>			Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>
Benzene	ND	0.0050	1		Methyl-t-Butyl E	Ether (MTB	E)	ND	0.0050	1	
Ethylbenzene	ND	0.0050	1		Tert-Butyl Alco	hol (TBA)		ND	0.050	1	
Toluene	ND	0.0050	1		Diisopropyl Eth	er (DIPE)		ND	0.010	1	
p/m-Xylene	ND	0.0050	1		Ethyl-t-Butyl Et	her (ETBE))	ND	0.010	1	
o-Xylene	ND	0.0050	1		Tert-Amyl-Meth	nyl Ether (T	AME)	ND	0.010	1	
Surrogates:	REC (%)	<u>Control</u>		Qual	Surrogates:			REC (%)	Control	Qı	<u>ual</u>
		<u>Limits</u>							<u>Limits</u>		
Dibromofluoromethane	102	73-139			1,2-Dichloroeth	ane-d4		112	73-145		
Toluene-d8	97	90-108			1,4-Bromofluor	obenzene		99	71-113		
SB-9-11.5			08-02-00	97-9-A	02/01/08	Solid	GC/MS W	02/08/08	02/09/0 2:52	8 080	208L03

36-9-11.3			00-02-	0097-3-A	02/01/00	John	GC/WIS VV	02/00/00	2:5		000200L03
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Parameter</u>			Result	<u>RL</u>	<u>DF</u>	Qual
Benzene	ND	0.0050	1		Methyl-t-Butyl E	Ether (MTBE)		ND	0.0050	1	
Ethylbenzene	ND	0.0050	1		Tert-Butyl Alcol	hol (TBA)		ND	0.050	1	
Toluene	ND	0.0050	1		Diisopropyl Eth	er (DIPE)		ND	0.010	1	
p/m-Xylene	ND	0.0050	1		Ethyl-t-Butyl Et	her (ETBE)		ND	0.010	1	
o-Xylene	ND	0.0050	1		Tert-Amyl-Meth	nyl Ether (TA	ΛE)	ND	0.010	1	
Surrogates:	REC (%)	Control		Qual	Surrogates:			REC (%)	Control		Qual
		<u>Limits</u>							<u>Limits</u>		
Dibromofluoromethane	104	73-139			1,2-Dichloroeth	ane-d4		113	73-145		
Toluene-d8	97	90-108			1,4-Bromofluor	obenzene		97	71-113		
									00/00		

SB-9-15.5			08-02-0	0097-10-A	02/01/08	Solid	GC/MS W	02/08/08	02/09/08 3:22	3	080208L03
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Parameter</u>			Result	<u>RL</u>	<u>DF</u>	Qual
Benzene	ND	0.0050	1		Methyl-t-Butyl E	Ether (MTBE	<u>:</u>)	ND	0.0050	1	
Ethylbenzene	ND	0.0050	1		Tert-Butyl Alco	hol (TBA)		ND	0.050	1	
Toluene	ND	0.0050	1		Diisopropyl Eth	er (DIPE)		ND	0.010	1	
p/m-Xylene	ND	0.0050	1		Ethyl-t-Butyl Et	her (ETBE)		ND	0.010	1	
o-Xylene	ND	0.0050	1		Tert-Amyl-Meth	nyl Ether (TA	ME)	ND	0.010	1	
Surrogates:	REC (%)	Control Limits		<u>Qual</u>	Surrogates:		<u> </u>	REC (%)	Control Limits		<u>Qual</u>
Dibromofluoromethane	104	73-139			1,2-Dichloroeth	ane-d4		108	73-145		
Toluene-d8	97	90-108			1,4-Bromofluor	obenzene		98	71-113		

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DF - Dilution Factor , Qual - Qualifiers





Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955

Date Received: 02/02/08 Work Order No: 08-02-0097 Preparation: **EPA 5030B** Method: **EPA 8260B** Units: mg/kg

Project: 230 W. Mac	Arthur Bl. Oa	ıkland,	CA						Р	age 3 of 5
Client Sample Number				ab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	000 0 4 1 10
SB-10-7			08-02-	0097-11-A	02/01/08	Solid	GC/MS W	02/07/08	02/08/08 0:30	080207L01
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Parameter</u>			Result	<u>RL</u>	OF Qual
Benzene	ND	0.0050	1		Methyl-t-Butyl	Ether (MTB	E)	ND	0.0050	1
Ethylbenzene	ND	0.0050	1		Tert-Butyl Alco	hol (TBA)		ND	0.050	1
Toluene	ND	0.0050	1		Diisopropyl Eth	ner (DIPE)		ND	0.010	1
p/m-Xylene	ND	0.0050	1		Ethyl-t-Butyl Et	ther (ETBE))	ND	0.010	1
o-Xylene	ND	0.0050	1		Tert-Amyl-Met	hyl Ether (T.	AME)	ND	0.010	1
Surrogates:	REC (%)	Control		<u>Qual</u>	Surrogates:			REC (%)	Control	Qual
		<u>Limits</u>							<u>Limits</u>	
Dibromofluoromethane	106	73-139			1,2-Dichloroeth			109	73-145	
Toluene-d8	99	90-108			1,4-Bromofluo	robenzene		100	71-113	
SB-10-11.5			08-02-	0097-12-A	02/01/08	Solid	GC/MS W	02/08/08	02/09/08 3:51	080208L03
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	Qual	<u>Parameter</u>			Result	<u>RL</u>	OF Qual
Benzene	ND	0.0050	1		Methyl-t-Butyl	Ether (MTB	E)	ND	0.0050	1
Ethylbenzene	ND	0.0050	1		Tert-Butyl Alco	hol (TBA)		ND	0.050	1
Toluene	ND	0.0050	1		Diisopropyl Eth	ner (DIPE)		ND	0.010	1
p/m-Xylene	ND	0.0050	1		Ethyl-t-Butyl Et	ther (ETBE))	ND	0.010	1
o-Xylene	ND	0.0050	1		Tert-Amyl-Met	hyl Ether (T.	AME)	ND	0.010	1
Surrogates:	<u>REC (%)</u>	Control Limits		<u>Qual</u>	Surrogates:			REC (%)	Control Limits	<u>Qual</u>
Dibromofluoromethane	101	73-139			1,2-Dichloroeth	nane-d4		106	73-145	
Toluene-d8	97	90-108			1,4-Bromofluoi			95	71-113	
SB-10-15.5			08-02-	0097-13-A	02/01/08	Solid	GC/MS W	02/08/08	02/09/08 4:21	080208L03
									4.21	
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Parameter</u>			Result	<u>RL</u>	OF Qual
Benzene	ND	0.0050	1		Methyl-t-Butyl	Ether (MTB	E)	ND	0.0050	1
Ethylbenzene	ND	0.0050	1		Tert-Butyl Alco	,	,	ND	0.050	1
Toluene	ND	0.0050	1		Diisopropyl Eth	ner (DIPE)		ND	0.010	1
p/m-Xylene	ND	0.0050	1		Ethyl-t-Butyl Et	ther (ETBE))	ND	0.010	1
o-Xylene	ND	0.0050	1		Tert-Amyl-Met	hyl Ether (T	AME)	ND	0.010	1
Surrogates:	REC (%)	Control	-	Qual	Surrogates:	,		REC (%)	Control	Qual
		Limits					•	•	Limits	
Dibromofluoromethane	101	73-139			1,2-Dichloroeth	nane-d4		105	73-145	
Toluene-d8	96	90-108			1,4-Bromofluo	robenzene		98	71-113	

DF - Dilution Factor Qual - Qualifiers





Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: 02/02/08
Work Order No: 08-02-0097
Preparation: EPA 5030B
Method: EPA 8260B
Units: mg/kg

Project: 230 W. MacArthur Bl. Oakland, CA

Page 4 d

Client Sample Number				ib Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Tir Analyze		QC Batch ID
SB-11-7.5			08-02-	0097-14-A	02/01/08	Solid	GC/MS W	02/08/08	02/09/0 5:51		080208L03
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Parameter</u>			Result	<u>RL</u>	DF	Qual
Benzene	ND	0.0050	1		Methyl-t-Butyl E	ther (MTBI	E)	ND	0.0050	1	
Ethylbenzene	ND	0.0050	1		Tert-Butyl Alcol	hol (TBA)	•	ND	0.050	1	
Toluene	ND	0.0050	1		Diisopropyl Eth	er (DIPE)		ND	0.010	1	
p/m-Xylene	ND	0.0050	1		Ethyl-t-Butyl Et	her (ETBE)		ND	0.010	1	
o-Xylene	ND	0.0050	1		Tert-Amyl-Meth	nyl Ether (T	AME)	ND	0.010	1	
Surrogates:	REC (%)	Control		Qual	Surrogates:			REC (%)	Control		Qual
_		<u>Limits</u>							<u>Limits</u>		
Dibromofluoromethane	101	73-139			1,2-Dichloroeth	ane-d4		105	73-145		
Toluene-d8	97	90-108			1,4-Bromofluor	obenzene		98	71-113		
SB-11-11.5			08-02-	0097-15-A	02/01/08	Solid	GC/MS W	02/08/08	02/09/0 6:21		080208L03
Parameter	Result	RL	DF	Qual	Parameter			Result	<u>RL</u>	DF	Qual
Benzene	ND	0.0050	1	·	Methyl-t-Butyl E	ther (MTBI	F)	ND	0.0050	1	
Ethylbenzene	ND	0.0050	1		Tert-Butyl Alcol		_,	ND	0.050	1	
Toluene	ND	0.0050	1		Diisopropyl Eth			ND	0.010	1	
p/m-Xylene	ND	0.0050	1		Ethyl-t-Butyl Et			ND	0.010	1	
o-Xylene	ND	0.0050	1		Tert-Amyl-Meth	,		ND	0.010	1	
Surrogates:	REC (%)	Control Limits		<u>Qual</u>	Surrogates:	,	,	REC (%)	Control Limits		<u>Qual</u>
Dibromofluoromethane	101	73-139			1,2-Dichloroeth	ane-d4		102	73-145		
Toluene-d8	97	90-108			1,4-Bromofluor	obenzene		98	71-113		
SB-11-15.5			08-02-	0097-16-A	02/01/08	Solid	GC/MS JJ	02/09/08	02/09/0 21:20		080209L01
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Parameter</u>			Result	<u>RL</u>	<u>DF</u>	Qual
Benzene	ND	0.0050	1		Methyl-t-Butyl E	ther (MTBI	E)	ND	0.0050	1	
Ethylbenzene	ND	0.0050	1		Tert-Butyl Alcol	hol (TBA)	,	ND	0.050	1	
Toluene	ND	0.0050	1		Diisopropyl Eth	er (DIPE)		ND	0.010	1	
p/m-Xylene	ND	0.0050	1		Ethyl-t-Butyl Et	` ,		ND	0.010	1	
o-Xylene	ND	0.0050	1		Tert-Amyl-Meth	nyl Ether (T	AME)	ND	0.010	1	
Surrogates:	REC (%)	Control Limits		<u>Qual</u>	Surrogates:			REC (%)	Control Limits		<u>Qual</u>
Dibromofluoromethane	125	73-139			1.2-Dichloroeth	ane-d4		125	73-145		
Toluene-d8	107	90-108			1,4-Bromofluor			92	71-113		

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DF - Dilution Factor , Qual - Qualifiers





Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955

Date Received: 02/02/08 Work Order No: 08-02-0097 Preparation: **EPA 5030B** Method: **EPA 8260B** Units: mg/kg

86

71-113

Project: 230 W. MacAr	rthur Bl. Oa	ıkland,	CA							Pag	ge 5 of 5
Client Sample Number				ib Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Ti Analyz		QC Batch ID
Method Blank			099-10	-005-15,41	1 N /A	Solid	GC/MS W	02/07/08	02/07/0 15:30		080207L01
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Parameter</u>			Result	<u>RL</u>	DF	<u>Qual</u>
Benzene	ND	0.0050	1		Methyl-t-Butyl	Ether (MTBI	E)	ND	0.0050	1	
Ethylbenzene	ND	0.0050	1		Tert-Butyl Alco	hol (TBA)		ND	0.050	1	
Toluene	ND	0.0050	1		Diisopropyl Eth	ner (DIPE)		ND	0.010	1	
p/m-Xylene	ND	0.0050	1		Ethyl-t-Butyl Et	ther (ETBE)		ND	0.010	1	
o-Xylene	ND	0.0050	1		Tert-Amyl-Met	hyl Ether (T	AME)	ND	0.010	1	
Surrogates:	<u>REC (%)</u>	Control Limits		Qual	Surrogates:			REC (%)	Control Limits		<u>Qual</u>
Dibromofluoromethane	106	73-139			1,2-Dichloroeth	nane-d4		107	73-145		
Toluene-d8	101	90-108			1,4-Bromofluoi			101	71-113		
Method Blank			099-10	-005-15,41	4 N/A	Solid	GC/MS W	02/08/08	02/09/0 0:52		080208L03
Parameter	Result	RL	DF	Qual	Parameter			Result	RL	DF	Qual
Benzene	ND	0.0050			Methyl-t-Butyl	Ethor (MTD)	= \	ND	0.0050	1	<u>Quai</u>
Ethylbenzene	ND ND	0.0050	1		Tert-Butyl Alco	,	L)	ND	0.050		
Toluene	ND ND	0.0050	1 1		Diisopropyl Eth			ND	0.050	1 1	
p/m-Xylene	ND ND	0.0050			Ethyl-t-Butyl Et	,		ND	0.010	-	
o-Xylene	ND ND	0.0050	1 1		Tert-Amyl-Met	,		ND		1 1	
•			1		•	nyı ⊑ülei (17	,		0.010	1	Ougl
Surrogates:	<u>REC (%)</u>	Control Limits		<u>Qual</u>	Surrogates:			REC (%)	Control Limits		<u>Qual</u>
Dibromofluoromethane	102	73-139			1,2-Dichloroeth	nane-d4		104	73-145		
Toluene-d8	96	90-108			1,4-Bromofluoi			95	71-113		
		30-100	000.40	005 45 44	•	Solid	00/140 11		02/09/	10	080209L01
Method Blank			099-10	-005-15,41	o N/A	Solia	GC/MS JJ	02/09/08	16:48		080209L01
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Parameter</u>			Result	<u>RL</u>	DF	Qual
Benzene	ND	0.0050	1		Methyl-t-Butyl	Ether (MTBI	E)	ND	0.0050	1	
Ethylbenzene	ND	0.0050	1		Tert-Butyl Alco	`	,	ND	0.050	1	
Toluene	ND	0.0050	1		Diisopropyl Eth	` ,		ND	0.010	1	
p/m-Xylene	ND	0.0050	1		Ethyl-t-Butyl Et			ND	0.010	1	
o-Xylene	ND	0.0050	1		Tert-Amyl-Met	, ,		ND	0.010	1	
Surrogates:	REC (%)	Control		Qual	Surrogates:	,	,	REC (%)	Control		Qual
Dibromofluoromethane	130	<u>Limits</u> 73-139			1,2-Dichloroeth	nane-d4		134	<u>Limits</u> 73-145		

Toluene-d8

DF - Dilution Factor Qual - Qualifiers

90-108

106

1,4-Bromofluorobenzene





Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: 02/02/08
Work Order No: 08-02-0097
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: 230 W. MacArthur Bl. Oakland, CA

Page 1 of 2

Client Sample Number				ab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Tir Analyze		QC Batch ID
SB-9			08-02-	0097-1-A	02/01/08	Aqueous	GC/MS CC	02/06/08	02/06/0 15:39		080206L01
Parameter	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Parameter</u>			Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl	Ether (MTB	E)	120	1.0	1	
Ethylbenzene	ND	1.0	1		Tert-Butyl Alc	ohol (TBA)		ND	10	1	
Toluene	ND	1.0	1		Diisopropyl Et	ther (DIPE)		ND	2.0	1	
p/m-Xylene	ND	1.0	1		Ethyl-t-Butyl E	Ether (ETBE)		ND	2.0	1	
o-Xylene	ND	1.0	1		Tert-Amyl-Me	thyl Ether (T.	AME)	ND	2.0	1	
Surrogates:	REC (%)	Control		Qual	Surrogates:			REC (%)	Control		<u>Qual</u>
-		<u>Limits</u>			-				<u>Limits</u>		
Dibromofluoromethane	104	74-140			1,2-Dichloroet	thane-d4		116	74-146		
Toluene-d8	114	88-112		2	1,4-Bromofluc	orobenzene		95	74-110		
SB-10			08-02-	0097-2-A	02/01/08	Aqueous	GC/MS CC	02/06/08	02/06/0 16:08		080206L01
Parameter	Result	RL	DF	Qual	Parameter			Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl	Ether (MTR	F)	94	1.0	1	
Ethylbenzene	ND	1.0	1		Tert-Butyl Alc		_,	ND	10	1	
Toluene	ND	1.0	1		Diisopropyl Et			ND	2.0	1	
p/m-Xylene	ND	1.0	1		Ethyl-t-Butyl E			ND	2.0	1	
o-Xylene	ND	1.0	1		Tert-Amyl-Me	,		ND	2.0	1	
Surrogates:	REC (%)	Control	•	Qual	Surrogates:	(,	REC (%)	Control	•	Qual
<u>oan ogatoo.</u>	(70)	Limits		<u> </u>	Garrogatoo.		. -	(70)	Limits		<u> </u>
Dibromofluoromethane	118	74-140			1,2-Dichloroet	thane-d4		129	74-146		
Toluene-d8	101	88-112			1,4-Bromofluc	orobenzene		92	74-110		
SB-11			08-02-	0097-3-A	02/01/08	Aqueous	GC/MS CC	02/06/08	02/06/0 13:44		080206L01
Parameter	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Parameter</u>			Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl	Ether (MTB	E)	2.6	1.0	1	
Ethylbenzene	ND	1.0	1		Tert-Butyl Alc	ohol (TBA)	,	ND	10	1	
Toluene	14	1.0	1		Diisopropyl Et	ther (DIPE)		ND	2.0	1	
p/m-Xylene	ND	1.0	1		Ethyl-t-Butyl E	` ,		ND	2.0	1	
o-Xylene	ND	1.0	1		Tert-Amyl-Me	` ,		ND	2.0	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	` ` `	,	REC (%)	Control Limits		<u>Qual</u>
Dibromofluoromethane	116	74-140			1.2-Dichloroet	thane-d4		123	74-146		
Toluene-d8	101	88-112			1,4-Bromofluc			90	74-110		
		00 112			.,. 2.0	. 32020110					

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DF - Dilution Factor , Qual - Qualifiers





Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: 02/02/08
Work Order No: 08-02-0097
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: 230 W. MacArthur Bl. Oakland, CA

Page 2 of 2

Client Sample Number				ab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date/Tir Analyze		QC Batch ID
SB-12			08-02-	0097-4-C	02/01/08	Aqueous	GC/MS CC	02/07/08	02/07/0 20:59		080207L01
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Parameter</u>			Result	<u>RL</u>	<u>DF</u>	Qual
Benzene	120	0.50	1		Methyl-t-Buty	l Ether (MTB	E)	33	1.0	1	
Ethylbenzene	170	1.0	1		Tert-Butyl Al	cohol (TBA)	•	100	10	1	
Toluene	11	1.0	1		Diisopropyl E	ther (DIPE)		11	2.0	1	
p/m-Xylene	36	1.0	1		Ethyl-t-Butyl	Ether (ETBE)		ND	2.0	1	
o-Xylene	6.2	1.0	1			ethyl Ether (T		ND	2.0	1	
Surrogates:	<u>REC (%)</u>	Control Limits		<u>Qual</u>	Surrogates:	,	<u> </u>	REC (%)	Control Limits		Qual
Dibromofluoromethane	97	74-140			1,2-Dichloroe	ethane-d4		104	74-146		
Toluene-d8	112	88-112			1,4-Bromoflu	orobenzene		97	74-110		
Method Blank			099-10	-006-24,3	53 N/A	Aqueous	GC/MS CC	02/06/08	02/06/0 13:16		080206L01
Parameter	Result	<u>RL</u>	DF	Qual	Parameter			Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Buty	l Ether (MTB	F)	ND	1.0	1	<u> </u>
Ethylbenzene	ND	1.0	1		Tert-Butyl Al		_,	ND	10	1	
Toluene	ND	1.0	1		Diisopropyl E			ND	2.0	1	
p/m-Xylene	ND	1.0	1			Ether (ETBE)		ND	2.0	1	
o-Xylene	ND	1.0	1		, ,	ethyl Ether (T		ND	2.0	1	
Surrogates:	REC (%)	Control Limits	•	<u>Qual</u>	Surrogates:	, (,	REC (%)	Control Limits		<u>Qual</u>
Dibromofluoromethane	114	74-140			1,2-Dichloroe	ethane-d4		120	74-146		
Toluene-d8	102	88-112			1,4-Bromoflu	orobenzene		89	74-110		
Method Blank			099-10	-006-24,3	62 N/A	Aqueous	GC/MS CC	02/07/08	02/07/0 13:49		080207L01
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Parameter</u>			Result	<u>RL</u>	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Buty	I Ether (MTB	E)	ND	1.0	1	
Ethylbenzene	ND	1.0	1		Tert-Butyl Al	cohol (TBA)		ND	10	1	
Toluene	ND	1.0	1		Diisopropyl E	ther (DIPE)		ND	2.0	1	
p/m-Xylene	ND	1.0	1		Ethyl-t-Butyl	Ether (ETBE)		ND	2.0	1	
o-Xylene	ND	1.0	1		Tert-Amyl-M	ethyl Ether (T		ND	2.0	1	
Surrogates:	<u>REC (%)</u>	Control Limits		Qual	Surrogates:	·	<u>.</u>	REC (%)	Control Limits		<u>Qual</u>
Dibromofluoromethane	115	74-140			1.2-Dichloroe	ethane-d4		125	74-146		
Toluene-d8	101	88-112			1,4-Bromoflu			89	74-110		

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DF - Dilution Factor , Qual - Qualifiers





Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: 02/02/08 08-02-0097 EPA 5030B EPA 8015B (M)

Project 230 W. MacArthur Bl. Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number
08-02-0098-1	Solid	GC 24	02/02/08		02/03/08	080201S03
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
TPH as Gasoline	85	85	48-114	1	0-23	

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Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: 02/02/08 08-02-0097 EPA 5030B EPA 8015B (M)

Project 230 W. MacArthur Bl. Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number
SB-10	Aqueous	GC 29	02/04/08		02/05/08	080204S03
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
TPH as Gasoline	107	107	68-122	0	0-18	

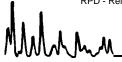
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Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: 02/02/08 08-02-0097 EPA 5030B EPA 8260B

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number	
SB-12-11	Solid	GC/MS W	02/07/08		02/07/08	080207S01	
						-	
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers	
Benzene	96	96	79-115	0	0-13		
Carbon Tetrachloride	98	104	55-139	6	0-15		
Chlorobenzene	92	93	79-115	1	0-17		
1,2-Dibromoethane	97	100	70-130	3	0-30		
1,2-Dichlorobenzene	93	93	63-123	0	0-23		
1,1-Dichloroethene	100	101	69-123	1	0-16		
Ethylbenzene	93	94	70-130	1	0-30		
Toluene	95	97	79-115	2	0-15		
Trichloroethene	96	98	66-144	2	0-14		
Vinyl Chloride	96	91	60-126	6	0-14		
Methyl-t-Butyl Ether (MTBE)	97	101	68-128	4	0-14		
Tert-Butyl Alcohol (TBA)	75	86	44-134	13	0-37		
Diisopropyl Ether (DIPE)	105	109	75-123	3	0-12		
Ethyl-t-Butyl Ether (ETBE)	99	103	75-117	4	0-12		
Tert-Amyl-Methyl Ether (TAME)	96	100	79-115	4	0-12		
Ethanol	78	85	42-138	9	0-28		



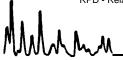




Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: 02/02/08 08-02-0097 EPA 5030B EPA 8260B

Project 230 W. MacArthur Bl. Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed		MS/MSD Batch Number	
SB-10-15.5	Solid	GC/MS W	02/08/08	02/09/08		080208S02	
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers	
Benzene	86	87	79-115	1	0-13		
Carbon Tetrachloride	92	97	55-139	6	0-15		
Chlorobenzene	92	94	79-115	1	0-17		
1,2-Dibromoethane	102	102	70-130	0	0-30		
1,2-Dichlorobenzene	94	91	63-123	3	0-23		
1,1-Dichloroethene	81	84	69-123	4	0-16		
Ethylbenzene	90	92	70-130	2	0-30		
Toluene	87	88	79-115	1	0-15		
Trichloroethene	88	90	66-144	2	0-14		
Vinyl Chloride	79	76	60-126	3	0-14		
Methyl-t-Butyl Ether (MTBE)	90	88	68-128	3	0-14		
Tert-Butyl Alcohol (TBA)	72	72	44-134	1	0-37		
Diisopropyl Ether (DIPE)	89	90	75-123	1	0-12		
Ethyl-t-Butyl Ether (ETBE)	90	90	75-117	0	0-12		
Tert-Amyl-Methyl Ether (TAME)	94	92	79-115	2	0-12		
Ethanol	78	73	42-138	6	0-28		







Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: 02/02/08 08-02-0097 EPA 5030B EPA 8260B

Project 230 W. MacArthur Bl. Oakland, CA

Quality Control Sample ID	Matrix	Matrix Instrument			Date Analyzed	MS/MSD Batch Number	
08-02-0525-9	Solid	GC/MS JJ	02/09/08		02/09/08	080209S01	
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers	
Benzene	81	84	79-115	3	0-13		
Carbon Tetrachloride	75	77	55-139	3	0-15		
Chlorobenzene	86	88	79-115	2	0-17		
1,2-Dibromoethane	94	94	70-130	0	0-30		
1,2-Dichlorobenzene	89	91	63-123	1	0-23		
1,1-Dichloroethene	79	80	69-123	1	0-16		
Ethylbenzene	88	92	70-130	4	0-30		
Toluene	83	85	79-115	3	0-15		
Trichloroethene	84	86	66-144	2	0-14		
Vinyl Chloride	69	70	60-126	2	0-14		
Methyl-t-Butyl Ether (MTBE)	93	94	68-128	1	0-14		
Tert-Butyl Alcohol (TBA)	81	80	44-134	2	0-37		
Diisopropyl Ether (DIPE)	91	94	75-123	4	0-12		
Ethyl-t-Butyl Ether (ETBE)	98	101	75-117	3	0-12		
Tert-Amyl-Methyl Ether (TAME)	101	102	79-115	1	0-12		
Ethanol	97	97	42-138	0	0-28		

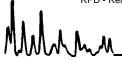
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Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: 02/02/08 08-02-0097 EPA 5030B EPA 8260B

Quality Control Sample ID	Matrix	Matrix Instrument			Date Analyzed	MS/MSD Batch Number	
SB-11	Aqueous	GC/MS CC	02/06/08	02/06/08		080206S01	
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers	
Benzene	108	108	88-118	1	0-7		
Carbon Tetrachloride	111	108	67-145	2	0-11		
Chlorobenzene	111	110	88-118	1	0-7		
1,2-Dibromoethane	113	112	70-130	1	0-30		
1,2-Dichlorobenzene	108	112	86-116	4	0-8		
1,1-Dichloroethene	101	102	70-130	1	0-25		
Ethylbenzene	116	114	70-130	2	0-30		
Toluene	117	115	87-123	1	8-0		
Trichloroethene	108	109	79-127	0	0-10		
Vinyl Chloride	96	96	69-129	0	0-13		
Methyl-t-Butyl Ether (MTBE)	110	113	71-131	2	0-13		
Tert-Butyl Alcohol (TBA)	108	114	36-168	6	0-45		
Diisopropyl Ether (DIPE)	103	103	81-123	1	0-9		
Ethyl-t-Butyl Ether (ETBE)	108	111	72-126	2	0-12		
Tert-Amyl-Methyl Ether (TAME)	107	112	72-126	4	0-12		
Ethanol	103	106	53-149	3	0-31		







Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: 02/02/08 08-02-0097 EPA 5030B EPA 8260B

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number
08-02-0018-2	Aqueous	GC/MS CC	02/07/08		02/07/08	080207S01
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	98	110	88-118	11	0-7	4
Carbon Tetrachloride	102	112	67-145	9	0-11	
Chlorobenzene	102	112	88-118	9	0-7	4
1,2-Dibromoethane	104	115	70-130	11	0-30	
1,2-Dichlorobenzene	101	113	86-116	11	0-8	4
1,1-Dichloroethene	87	100	70-130	15	0-25	
Ethylbenzene	104	115	70-130	10	0-30	
Toluene	105	118	87-123	12	0-8	4
Trichloroethene	103	111	79-127	8	0-10	
Vinyl Chloride	88	87	69-129	1	0-13	
Methyl-t-Butyl Ether (MTBE)	98	114	71-131	15	0-13	4
Tert-Butyl Alcohol (TBA)	106	125	36-168	17	0-45	
Diisopropyl Ether (DIPE)	90	104	81-123	14	0-9	4
Ethyl-t-Butyl Ether (ETBE)	94	110	72-126	15	0-12	4
Tert-Amyl-Methyl Ether (TAME)	97	111	72-126	13	0-12	4
Ethanol	100	113	53-149	10	0-31	







Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: N/A 08-02-0097 EPA 5030B EPA 8015B (M)

Project: 230 W. MacArthur Bl. Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Dat Analy		LCS/LCSD Batc Number	h
099-12-279-1,479	Solid	GC 24	02/02/08	02/02	/08	080201B04	
<u>Parameter</u>	LCS %	6REC LCSD	%REC 9	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	108	108	}	70-124	0	0-18	

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Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: N/A 08-02-0097 EPA 5030B EPA 8015B (M)

Project: 230 W. MacArthur Bl. Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyz		LCS/LCSD Batc Number	h
099-12-436-1,433	Aqueous	GC 29	02/04/08	02/05/0	8	080204B05	
<u>Parameter</u>	LCS %	6REC LCSD	<u>%REC</u> <u>%</u>	REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	109	103		78-120	6	0-10	

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Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: N/A 08-02-0097 EPA 5030B EPA 8260B

Quality Control Sample ID	Matrix	Instrument	Date Prepared		ate lyzed	LCS/LCSD Bate Number	ch
099-10-005-15,411	Solid	GC/MS W	02/07/08	02/0	7/08	080207L01	
<u>Parameter</u>	LCS %RE	C LCSD %	6REC 9	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Benzene	100	99		84-114	0	0-7	
Carbon Tetrachloride	106	106		66-132	0	0-12	
Chlorobenzene	98	98		87-111	0	0-7	
1,2-Dibromoethane	104	103		80-120	1	0-20	
1,2-Dichlorobenzene	98	96		79-115	1	0-8	
1,1-Dichloroethene	105	104		73-121	1	0-12	
Ethylbenzene	99	98		80-120	0	0-20	
Toluene	101	100		78-114	1	0-7	
Trichloroethene	101	100		84-114	1	0-8	
Vinyl Chloride	92	91		63-129	1	0-15	
Methyl-t-Butyl Ether (MTBE)	109	110		77-125	1	0-11	
Tert-Butyl Alcohol (TBA)	84	88		47-137	4	0-27	
Diisopropyl Ether (DIPE)	116	116		76-130	0	0-8	
Ethyl-t-Butyl Ether (ETBE)	112	112		76-124	0	0-12	
Tert-Amyl-Methyl Ether (TAME)	107	107		82-118	0	0-11	
Ethanol	88	97		59-131	10	0-21	





Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: N/A 08-02-0097 EPA 5030B EPA 8260B

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Da Anal		LCS/LCSD Ba	tch
099-10-005-15,414	Solid	GC/MS W	02/08/08	02/08	3/08	080208L03	
<u>Parameter</u>	LCS %	REC LCSD	%REC %	REC CL	<u>RPD</u>	RPD CL	Qualifiers
Benzene	87	94		84-114	8	0-7	Χ
Carbon Tetrachloride	92	101		66-132	9	0-12	
Chlorobenzene	93	98		87-111	5	0-7	
1,2-Dibromoethane	104	106	5	80-120	1	0-20	
1,2-Dichlorobenzene	94	99		79-115	5	0-8	
1,1-Dichloroethene	83	91		73-121	10	0-12	
Ethylbenzene	90	97		80-120	7	0-20	
Toluene	88	95		78-114	8	0-7	X
Trichloroethene	88	94		84-114	6	0-8	
Vinyl Chloride	75	86		63-129	14	0-15	
Methyl-t-Butyl Ether (MTBE)	93	97		77-125	4	0-11	
Tert-Butyl Alcohol (TBA)	81	83		47-137	3	0-27	
Diisopropyl Ether (DIPE)	95	100)	76-130	5	0-8	
Ethyl-t-Butyl Ether (ETBE)	96	100)	76-124	4	0-12	
Tert-Amyl-Methyl Ether (TAME)	99	101		82-118	2	0-11	
Ethanol	92	87		59-131	5	0-21	





Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: N/A 08-02-0097 EPA 5030B EPA 8260B

Quality Control Sample ID	Matrix	Instrument	Date Prepared		ate alyzed	LCS/LCSD Bate Number	ch
099-10-005-15,416	Solid	GC/MS JJ	02/09/08	02/0	9/08	080209L01	
<u>Parameter</u>	LCS %RE	C LCSD %	REC_	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Benzene	97	94		84-114	3	0-7	
Carbon Tetrachloride	93	91		66-132	2	0-12	
Chlorobenzene	102	101		87-111	1	0-7	
1,2-Dibromoethane	101	100		80-120	1	0-20	
1,2-Dichlorobenzene	105	103		79-115	2	0-8	
1,1-Dichloroethene	97	95		73-121	2	0-12	
Ethylbenzene	109	108		80-120	1	0-20	
Toluene	99	96		78-114	3	0-7	
Trichloroethene	101	97		84-114	4	0-8	
Vinyl Chloride	87	86		63-129	1	0-15	
Methyl-t-Butyl Ether (MTBE)	94	91		77-125	3	0-11	
Tert-Butyl Alcohol (TBA)	95	90		47-137	6	0-27	
Diisopropyl Ether (DIPE)	98	96		76-130	2	0-8	
Ethyl-t-Butyl Ether (ETBE)	104	102		76-124	2	0-12	
Tert-Amyl-Methyl Ether (TAME)	102	99		82-118	3	0-11	
Ethanol	100	97		59-131	3	0-21	





Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: N/A 08-02-0097 EPA 5030B EPA 8260B

Quality Control Sample ID	Matrix	Instrument	Date Prepared		ate lyzed	LCS/LCSD Bate Number	ch		
099-10-006-24,353	Aqueous	GC/MS CC	02/06/08	02/0	6/08	080206L01			
							_		
<u>Parameter</u>	LCS %R	EC LCSD S	%REC %	REC CL	<u>RPD</u>	RPD CL	Qualifiers		
Benzene	107	108		84-120	1	0-8			
Carbon Tetrachloride	109	109		63-147	0	0-10			
Chlorobenzene	107	108		89-119	1	0-7			
1,2-Dibromoethane	108	111		80-120	3	0-20			
1,2-Dichlorobenzene	111	112		89-119	0	0-9			
1,1-Dichloroethene	103	103		77-125	0	0-16			
Ethylbenzene	114	115		80-120	1	0-20			
Toluene	114	114		83-125	0	0-9			
Trichloroethene	108	108		89-119	0	0-8			
Vinyl Chloride	97	98		63-135	0	0-13			
Methyl-t-Butyl Ether (MTBE)	109	110		82-118	2	0-13			
Tert-Butyl Alcohol (TBA)	108	112		46-154	3	0-32			
Diisopropyl Ether (DIPE)	103	104		81-123	1	0-11			
Ethyl-t-Butyl Ether (ETBE)	110	110		74-122	0	0-12			
Tert-Amyl-Methyl Ether (TAME)	107	109		76-124	1	0-10			
Ethanol	104	102		60-138	2	0-32			





Conestoga-Rovers & Associates 19449 Riverside Drive, Suite 230 Sonoma, CA 95476-6955 Date Received: Work Order No: Preparation: Method: N/A 08-02-0097 EPA 5030B EPA 8260B

Quality Control Sample ID	Matrix	Instrument	Date Prepared		ate lyzed	LCS/LCSD Bate Number	ch
099-10-006-24,362	Aqueous	GC/MS CC	02/07/08	02/0	7/08	080207L01	
<u>Parameter</u>	LCS %I	REC LCSD 9	%REC 9	%REC CL	RPD	RPD CL	Qualifiers
Benzene	91	88		84-120	4	0-8	
Carbon Tetrachloride	92	89		63-147	4	0-10	
Chlorobenzene	93	90		89-119	3	0-7	
1,2-Dibromoethane	96	92		80-120	4	0-20	
1,2-Dichlorobenzene	93	91		89-119	3	0-9	
1,1-Dichloroethene	85	83		77-125	3	0-16	
Ethylbenzene	98	94		80-120	4	0-20	
Toluene	96	95		83-125	1	0-9	
Trichloroethene	91	90		89-119	1	0-8	
Vinyl Chloride	82	89		63-135	8	0-13	
Methyl-t-Butyl Ether (MTBE)	94	89		82-118	6	0-13	
Tert-Butyl Alcohol (TBA)	109	90		46-154	19	0-32	
Diisopropyl Ether (DIPE)	83	84		81-123	1	0-11	
Ethyl-t-Butyl Ether (ETBE)	90	87		74-122	2	0-12	
Tert-Amyl-Methyl Ether (TAME)	90	88		76-124	2	0-10	
Ethanol	90	82		60-138	10	0-32	



Glossary of Terms and Qualifiers



Work Order Number: 08-02-0097

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

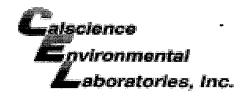
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	is Baertschi	ortw).	Ballard, Fellicia, CRA, Sonoma 707 933 2360 sonomaedf@craworld.com 240902-007 SAMPLER NAME(S) (Print): LAB USE ONLY																											
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Cooler ______ of __(___

SAMPLE RECEIPT FORM

CLIENT: CRA	DATE: 02-02-08										
TEMPERATURE - SAMPLES RECEIVED BY:											
CALSCIENCE COURIER: Chilled, cooler with temperature blank provided. Chilled, cooler without temperature blank. Chilled and placed in cooler with wet ice. Ambient and placed in cooler with wet ice. Ambient temperature.	LABORATORY (Other than Calscience Courier): °C Temperature blank. °C IR thermometer. Ambient temperature.										
°C Temperature blank.	Initial: <u>MH</u>										
CUSTODY SEAL INTACT:											
Sample(s): Cooler: No (Not In	Not Present:										
SAMPLE CONDITION:											
Chain-Of-Custody document(s) received with samples	//										
COMMENTS:											