RO261

cook

271 Las Juntas Way, Walnut Creek, CA 94597 Phone 925.937.1759 Cell 925.787.6869 cookenvironmental@att.net

August 16, 2006

Don Hwang
Alameda County Environmental Health
1311 Harbor Bay Pkwy, Ste 250
Alameda, California 94502-6577

Subject: **Addendum No 2 to Request for Site Closure**
Express Gas & Mart, 2951 High Street, Oakland
LOP Case No. 1038

Dear Mr. Hwang:

In a letter dated May 5, 2006, you responded with technical comments to the *Request for Site Closure* for the subject site dated October 20, 2005 and the *Addendum to Request for Site Closure*, dated February 16, 2006. We responded to your technical comments in *Response to Technical Comments and Work Plan for Additional Site Investigation,* dated June 12, 2006. You approved the work plan for the installation of three additional Geoprobe borings next to the existing USTs in a letter dated July 12, 2006. This *Addendum No. 2 to Request for Site Closure* provides the results of the Geoprobe boring investigation.

On July 27, 2006, three Geoprobe borings were advanced to a total depth of 20 feet below grade in the locations shown on **Figure 1**. Boring B-1 and B-2 were located downgradient and within 5 feet of the existing USTs and boring B-3 was located approximately 15 feet downgradient of the USTs.

Soils were logged using the unified soil classification system. A photo-ionization detector (PID) was brought to the site but was found to be inoperable thus PID readings were not recorded. Pea-gravel backfill was encountered in borings B-1 and B-2 to a depth of 6.5 feet. This pea-gravel is commonly used as a bedding material for USTs. Gravelly sandy clay to gravelly sandy claystone was encountered below the pea-gravel. This same gravelly sandy clay to claystone was encountered in boring B-3. Boring logs for the three Geoprobe borings are presented in **Appendix A**.

The photo-ionization detector (PID) brought to the site to select the soil sample with the highest PID reading was inoperable, therefore soil samples were collected in each boring from 10, 14 and 18 feet below grade and all three soil samples were analyzed. Samples were collected in acrylic tubes retrieved from the dual tube sampling system. The tubes were cut to approximately 6 inches in length using a hack saw. The ends of the tube were covered with Teflon film and plastic caps. The tube was then marked with the sample ID and immediately placed in a cooler

chilled to 4 degrees Celsius until delivered to the laboratory. Soil sample results from the three borings at depths of 10, 14 and 18 feet are summarized in **Table 1**.

After each boring was advanced to the total depth of 20 feet, a temporary monitoring well was constructed by placing 5 feet of slotted screen and 15 feet of blank PVC casing in the boring. Groundwater samples were collected using a disposable bailer. The saturated soil was extremely slow in yielding water to the wells due to its low permeability. It was not possible to retrieve groundwater samples from the wells on July 27. CES returned to the site on July 28 and the wells were still dry. CES returned again on August 1 and retrieved 120 ml from boring B-3 and only 60 ml from borings B-2 and B-3. Each water sample was poured from the bailer into 40 ml VOA vials preserved with concentrated hydrochloric acid. The samples were labeled and stored in a cooler chilled to 4 degrees Celsius until delivered to the laboratory. Groundwater results from the three borings are summarized in **Table 2**.

Results of soil and groundwater sampling show that MtBE was detected in all three groundwater samples and seven of the nine soil samples. In addition, TPH-g was detected in two of the three water samples and TAME was detected in boring B-3.

Site specific target levels (SSTLs) were established for this site in a *Tier 2 Risk Based Corrective Action Report* by Christopher Palmer dated August 22, 1997. The Alameda County Department of Environmental Health approved the SSTLs in a letter dated October 21, 1997. All of the hydrocarbons detected in this investigation are below SSTLs. The county determined that concentrations below SSTLs pose no hazard to human health or the environment. Thus, none of the detected hydrocarbons should prevent the ACEH from granting case closure.

Previously, the ACEH requested to know the source of MtBE in the vicinity of the new USTs. The ACEH was concerned that the new USTs may be a source of an ongoing leak. Based on the results of this and previous investigations, the only constituent of concern is MtBE. MtBE was banned from California gasoline on January 1, 2004. The presence of MtBE in the subsurface could not possibly be related to an ongoing leak from the new USTs. In addition, the new UST system is continuously monitored with a TLS-350 leak detection system. If a leak of greater than 0.05 gallons per hour occurred, an alarm would occur and the entire fuel system would automatically shut down.

A more logical reason for the presence of MtBE in the vicinity of the new USTs is a former product line leak discovered near pump dispenser #8 during the excavation and removal of the dispenser islands in February 2001. W.A. Craig, Inc. collected six soil samples in the vicinity of the pump island in front of the store in the presence of the ACEH caseworker, Amir Gholami on February 28, 2001. Soil samples yielded MtBE at concentrations ranging from 0.3 to 85 mg/kg. The results of this investigation were provided to ACEH in a letter report dated March 9, 2001 are included with a figure showing the sample locations in **Appendix B** to this report. Contaminated soil in this locale was excavated and disposed offsite during soil excavation activities in 2001.

I trust that this letter along with previous submittals respond to all your concerns related to site closure. In summary the following can be stated with a high degree of certainty:

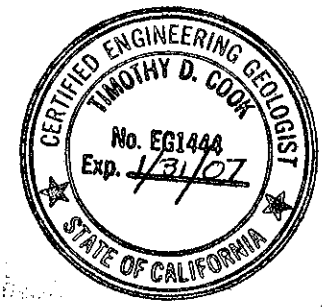
1. All constituents of concern (petroleum hydrocarbons) are significantly below SSTLs which ACEH agreed are protective of human health and the environment.
2. MtBE is the only constituent consistently detected in groundwater.
3. The extent of MtBE in shallow groundwater has been accurately delineated and is being further reduced by natural attenuation.
4. MtBE has been banned from use in California gasoline since January 1, 2004.
5. The source of MtBE at this site is not from an ongoing leak from the existing fuel system.
6. MtBE at the site does not pose a significant risk to groundwater quality

Based on these findings we <u>strongly</u> recommend case closure for LOP case #1038. Please call me at (925) 937-1759 if you have questions relative to this request for site closure.

Very truly yours,

Cook Environmental Services, Inc.

Tim Cook, P.E., CEG
Principal



cc: Aziz Kandahari, Express Gas & Mart
Cherie McCaulou, San Francisco Bay RWQCB
Jennifer Rice, Esq.

TABLES

Table 1. Soil Analytical Results
2951 High Street, Oakland

Sample ID	Depth (ft)	TPH-g	MtBE	benzene	toluene	ethyl-benzene	xylenes
B-1	10	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005
B-1	14	<1.0	0.048	<0.005	<0.005	<0.005	<0.005
B-1	18	<1.0	0.012	<0.005	<0.005	<0.005	<0.005
B-2	10	<1.0	0.068	<0.005	<0.005	<0.005	<0.005
B-2	14	<1.0	0.015	<0.005	<0.005	<0.005	<0.005
B-2	18	<1.0	0.015	<0.005	<0.005	<0.005	<0.005
B-3	10	<1.0	0.017	<0.005	<0.005	<0.005	<0.005
B-3	14	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005
B-3	18	<1.0	0.017	<0.005	<0.005	<0.005	<0.005
SSTL		NE	9.7	2.6	1.6	1.9	2.8

Notes:

Units are milligrams per kilogram (mg/Kg). <0.005 = less than the specified laboratory detection limit
TPH-g = total petroleum hydrocarbons as gasoline, MtBE = methyl tert butyl ether
SSTL = site specific threshold level established in a Tier 2 Risk-Based Corrective Action (RBCA) analysis (Christopher Palmer, August 1997) approved by ACEH in a letter dated October 21, 1997.

Table 2. Groundwater Analytical Results
2951 High Street, Oakland

Sample ID	TPH-g	benzene	toluene	ethyl-benzene	xylenes	MtBE	TAME	tBA	DIPE
B-1	<50	<0.5	<0.5	<0.5	<0.5	590	<17	<170	<17
B-2	59	<0.5	<0.5	<0.5	<0.5	570	<17	<170	<17
B-3	51	<0.5	<0.5	<0.5	<0.5	700	18	<120	<12
SSTL	NE	200	270	180	470	8,400	NE	NE	NE

Notes:

Units are micrograms per liter (ug/L). <0.005 = less than the specified laboratory detection limit

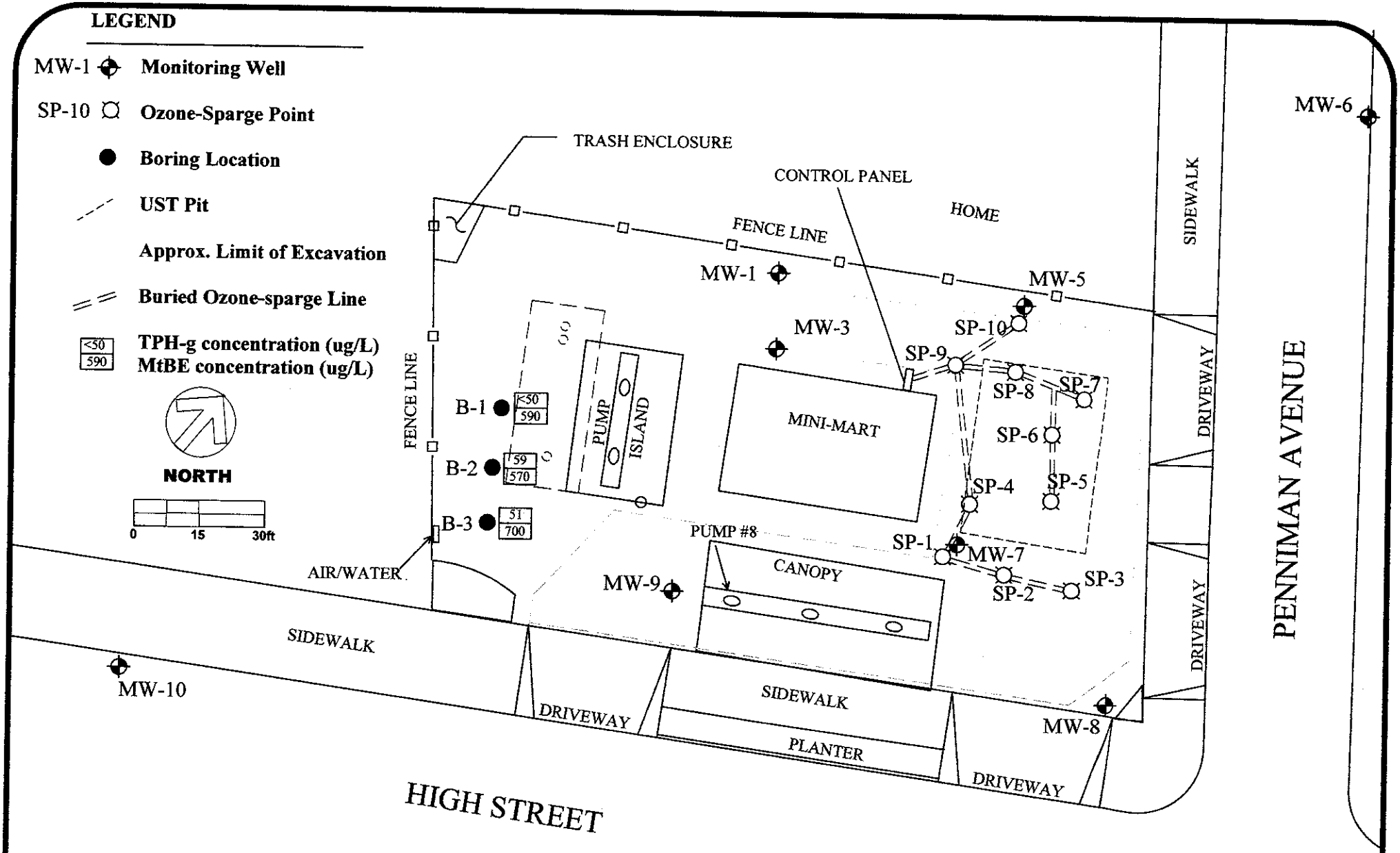
TPH-g = total petroleum hydrocarbons as gasoline, MtBE = methyl tert

TAME = tert-amyl methyl ether, TBA = tert-butyl alcohol, DIPE = di-isopropyl ether

SSTL = site specific threshold level established in a Tier 2 Risk-Based Corrective Action (RBCA) analysis (Christopher Palmer, August 1997) approved by ACEH in a letter dated October 21, 1997.

NE = no SSTL established

FIGURES



Cook Environmental Services, Inc.
271 Las Juntas Way
Walnut Creek, CA 94597
(925) 937-1759 work
(925) 937-6869 cell
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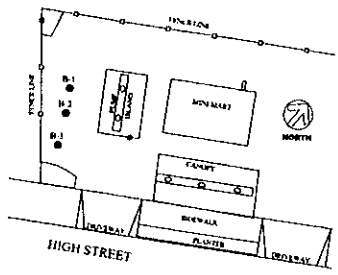
Groundwater Results from Geoprobe Borings

Express Gas & Mart
2951 High Street
Oakland, California

Project #: 1004	Figure: 1
Date: 8/17/06	
Scale: 1"=30'	

APPENDIX A

Geoprobe Boring Logs



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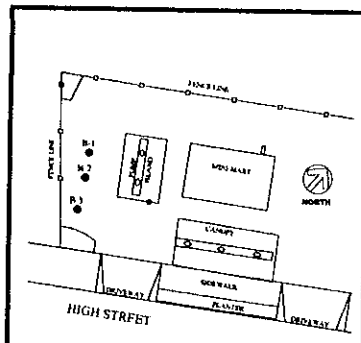
271 Las Juntas Way, Walnut Creek, CA 94597, (925) 937-1759
(925) 787-6869 cell, cookenvironmental@att.net

PROJECT: Express Gas & Mart, 2951 High St.	**PROJECT NO.** 1004	**BORING NO:** B-1
DRILLING CONTRACTOR: RSI	**START TIME:** 0930 **FINISH TIME:** 1100	**DATE:** 7/27/06
DRILLING METHOD: GeoProbe	**TOTAL DEPTH:** 20'	**DEPTH TO WATER:**
SAMPLER: 4Ft. Dual Tube	**SCREEN INT.:** 15-20'	**CASING:** (Temp) 3/4" PVC
HAMMER WEIGHT: NA **DROP:** NA	**FIELD GEOLOGIST:** T. Cook	

DEPTH (FEET)	SAMPLE No	INTERVAL	BLOWS/ 0.5 FOOT	PID [ppm]	BORING/WELL CONSTRUCTION DETAIL	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
0							Asphalt to 4 inches
							Pea Gravel Backfill
2.5						Fill	
5							
7.5							Gravelly Sandy Claystone - reddish brown, moist, firm, no odor, gravel to 1" dia.
	B-1 @10'					CL	
10							Gravelly Sandy Claystone - reddish brown, moist, firm, no odor, gravel to 1" dia.
							Gravelly Sandy Claystone - reddish brown, wet, firm, no odor, increasing clay content, gravel to 1" dia.
12.5	B-1 @14'						Claystone with some gravel to 1/8" dia., reddish brown, moist, very firm, no odor
15							Gravelly Claystone - reddish brown, moist, very firm to hard, no odor
	B-1 @18'						
17.5							
20							Gravelly Claystone - reddish brown, moist, very firm to hard, no odor

Checked by: TC



Cook Environmental Services, Inc.

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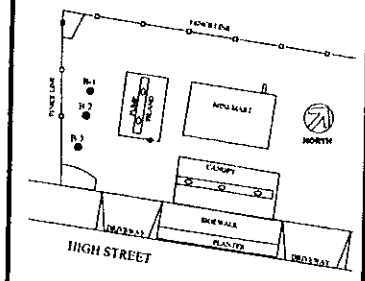
(925) 787-6869 cell, cookenvironmental@att.net

PROJECT: Express Gas & Mart, 2951 High St.	PROJECT NO. 1004	BORING NO: B-2
DRILLING CONTRACTOR: RSI	START TIME: 1100 FINISH TIME: 1210	DATE: 7/27/06
DRILLING METHOD: GeoProbe	TOTAL DEPTH: 20'	DEPTH TO WATER:
SAMPLER: 4Ft. Dual Tube	SCREEN INT.: 15-20'	CASING: (Temp) 3/4" PVC
HAMMER WEIGHT: NA DROP: NA	FIELD GEOLOGIST: T. Cook	

DEPTH (FEET)	SAMPLE No	INTERVAL	BLOWS/ 0.5 FOOT	PID [ppm]	BORING/WELL CONSTRUCTION DETAIL	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
0							Asphalt to 4 inches
							Pea Gravel Backfill
2.5						Fill	
5							
7.5							Gravelly Sandy Claystone with some pea gravel - brown to dark brown, moist, soft to moderately firm, no odor
							Claystone with some gravel to 1/8" dia., reddish brown, moist, very firm, no odor
	B-2 @10'					CL	
10							Gravelly Sandy Claystone - reddish brown, moist, firm, no odor, gravel to 1/2" dia.
12.5							Gravelly Sandy Claystone - reddish brown, moist, very firm, gravel to 1/4" dia., no odor
	B-2 @14'						Gravelly Sandy Claystone - reddish brown, increasing moisture, soft, gravel to 1/4" dia., no odor
15							Gravelly Sandy Claystone - reddish brown, decreasing moisture, hard, gravel to 1/4" dia., no odor
	B-2 @18'						Claystone - reddish brown, moist, firm to hard, decreasing gravel, no sand, no odor
17.5							
20							Gravelly Claystone - reddish brown, moist, very firm to hard, no odor

Checked by: TDC



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PROJECT: Express Gas & Mart, 2951 High St.	PROJECT NO. 1004	BORING NO: B-3
DRILLING CONTRACTOR: RSI	START TIME: 1100 FINISH TIME: 1210	DATE: 7/27/06
DRILLING METHOD: GeoProbe	TOTAL DEPTH: 20'	DEPTH TO WATER:
SAMPLER: 4Ft. Dual Tube	SCREEN INT.: 15-20'	CASING: (Temp) 3/4" PVC
HAMMER WEIGHT: NA DROP: NA	FIELD GEOLOGIST: T. Cook	

DEPTH (FEET)	SAMPLE No	INTERVAL	BLOWS/ 0.5 FOOT	PID [ppm]	BORING/WELL CONSTRUCTION DETAIL	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
2.5						CL	Asphalt to 4 inches, AB Fill to 8 inches, Apahalt to 10 inches Gravelly Sandy Clay - reddish brown, moist, soft Clay - tan, moist, soft, no odor
5							Clay - reddish brown, gravelly
7.5							Clay with some gravel to 1/4" dia. - reddish brown, moist, very firm, no odor
10	B-3 @10'						Gravelly Claystone - reddish brown, moist, hard, no odor, gravel to >1" dia.
12.5	B-3 @14'						Gravelly Claystone - reddish brown, moist, stiff, no odor, gravel to >1" dia.
15							Claystone with trace gravel to 1/8" dia. - reddish brown, very stiff, no odor
17.5							
20							Claystone with trace gravel to 1/4" dia. - reddish brown, hard, no odor

Checked by: TDC

APPENDIX B

Laboratory Analytical Reports

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Cook Environmental Services, Inc	Client Project ID: #1004; High Street	Date Sampled: 07/27/06
271 Las Juntas Way		Date Received: 07/28/06
Walnut Creek, CA 94596	Client Contact: Tim Cook	Date Reported: 08/03/06
	Client P.O.:	Date Completed: 08/03/06

WorkOrder: 0607531

August 03, 2006

Dear Tim:

Enclosed are:

1). the results of 9 analyzed samples from your **#1004; High Street project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Cook Environmental Services, Inc.	Client Project ID: #1004; High Street	Date Sampled: 07/27/06
271 Las Juntas Way		Date Received: 07/28/06
Walnut Creek, CA 94596	Client Contact: Tim Cook	Date Extracted: 07/28/06
	Client P.O.:	Date Analyzed: 07/29/06-08/01/06

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0607531

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	B-1@10'	S	ND	ND	ND	ND	ND	ND	1	97
002A	B-2@10'	S	ND	0.063	ND	ND	ND	ND	1	102
003A	B-3@10'	S	ND	ND	ND	ND	ND	ND	1	100
004A	B-1@14'	S	ND	ND	ND	ND	ND	ND	1	98
005A	B-2@14'	S	ND	ND	ND	ND	ND	ND	1	96
006A	B-3@14'	S	ND	ND	ND	ND	ND	ND	1	97
007A	B-1@18'	S	ND	ND	ND	ND	ND	ND	1	107
008A	B-2@18'	S	ND	ND	ND	ND	ND	ND	1	101
009A	B-3@18'	S	ND	ND	ND	ND	ND	ND	1	99
Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	NA	NA	NA	NA	1	ug/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	1	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) value derived using a client specified carbon range; o) results are reported on a dry weight basis.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Cook Environmental Services, Inc.	Client Project ID: #1004; High Street	Date Sampled: 07/27/06
271 Las Juntas Way		Date Received: 07/28/06
Walnut Creek, CA 94596	Client Contact: Tim Cook	Date Extracted 07/28/06
	Client P.O.:	Date Analyzed: 07/29/06

Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0607531

Lab ID	0607531-001A	0607531-002A	0607531-003A	0607531-004A	Reporting Limit for DF =1	
Client ID	B-1@10'	B-2@10'	B-3@10'	B-1@14'		
Matrix	S	S	S	S		
DF	1	1	1	1	S	W
Compound	**Concentration**				mg/kg	ug/L
tert-Amyl methyl ether (TAME)	ND	ND	ND	ND	0.005	NA
t-Butyl alcohol (TBA)	ND	ND	ND	ND	0.05	NA
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	0.005	NA
1,2-Dichloroethane (1,2-DCA)	ND	ND	ND	ND	0.005	NA
Diisopropyl ether (DIPE)	ND	ND	ND	ND	0.005	NA
Ethanol	ND	ND	ND	ND	0.25	NA
Ethyl tert-butyl ether (ETBE)	ND	ND	ND	ND	0.005	NA
Methanol	ND	ND	ND	ND	2.5	NA
Methyl-t-butyl ether (MTBE)	ND	0.068	0.017	0.048	0.005	NA
Surrogate Recoveries (%)						
%SS1:	108	109	114	114		
Comments						

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

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"When Quality Counts"

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Cook Environmental Services, Inc.	Client Project ID: #1004; High Street	Date Sampled: 07/27/06
271 Las Juntas Way		Date Received: 07/28/06
Walnut Creek, CA 94596	Client Contact: Tim Cook	Date Extracted 07/28/06
	Client P.O.:	Date Analyzed: 07/29/06

Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0607531

Lab ID	0607531-005A	0607531-006A	0607531-007A	0607531-008A	Reporting Limit for DF =1	
Client ID	B-2@14'	B-3@14'	B-1@18'	B-2@18'		
Matrix	S	S	S	S		
DF	1	1	1	1	S	W
Compound	**Concentration**				mg/kg	ug/L
tert-Amyl methyl ether (TAME)	ND	ND	ND	ND	0.005	NA
t-Butyl alcohol (TBA)	ND	ND	ND	ND	0.05	NA
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	0.005	NA
1,2-Dichloroethane (1,2-DCA)	ND	ND	ND	ND	0.005	NA
Diisopropyl ether (DIPE)	ND	ND	ND	ND	0.005	NA
Ethanol	ND	ND	ND	ND	0.25	NA
Ethyl tert-butyl ether (ETBE)	ND	ND	ND	ND	0.005	NA
Methanol	ND	ND	ND	ND	2.5	NA
Methyl-t-butyl ether (MTBE)	0.015	ND	0.012	0.015	0.005	NA
Surrogate Recoveries (%)						
%SS1:	118	113	114	114		
Comments						

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

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Cook Environmental Services, Inc. 271 Las Juntas Way Walnut Creek, CA 94596	Client Project ID: #1004; High Street	Date Sampled: 07/27/06
		Date Received: 07/28/06
	Client Contact: Tim Cook	Date Extracted 07/28/06
	Client P.O.:	Date Analyzed: 07/29/06

Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0607531

		Reporting Limit for DF =1	
Lab ID	0607531-009A		
Client ID	B-3@18'		
Matrix	S	S	W
DF	1		
Compound	**Concentration**	mg/kg	ug/L
tert-Amyl methyl ether (TAME)	ND	0.005	NA
t-Butyl alcohol (TBA)	ND	0.05	NA
1,2-Dibromoethane (EDB)	ND	0.005	NA
1,2-Dichloroethane (1,2-DCA)	ND	0.005	NA
Diisopropyl ether (DIPE)	ND	0.005	NA
Ethanol	ND	0.25	NA
Ethyl tert-butyl ether (ETBE)	ND	0.005	NA
Methanol	ND	2.5	NA
Methyl-t-butyl ether (MTBE)	0.017	0.005	NA
Surrogate Recoveries (%)			
%SS1:	110		
Comments			

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder: 0607531

EPA Method: SW8021B/8015Cm **Extraction: SW5030B** **BatchID: 22900** **Spiked Sample ID: 0607515-118A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(btex)£	ND	0.60	115	113	1.78	118	113	4.48	70 - 130	70 - 130
MTBE	ND	0.10	113	108	3.94	103	118	13.3	70 - 130	70 - 130
Benzene	ND	0.10	95.8	90	6.21	91.1	95.4	4.58	70 - 130	70 - 130
Toluene	ND	0.10	90.2	85.8	4.94	85.4	88.2	3.26	70 - 130	70 - 130
Ethylbenzene	ND	0.10	101	97.8	3.27	94.3	99.2	5.14	70 - 130	70 - 130
Xylenes	ND	0.30	96.7	92.7	4.23	91.7	96.7	5.31	70 - 130	70 - 130
%SS:	84	0.10	87	80	8.38	84	87	3.51	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 22900 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0607531-001A	7/27/06	7/28/06	7/29/06 2:05 PM	0607531-002A	7/27/06	7/28/06	7/29/06 2:38 PM
0607531-003A	7/27/06	7/28/06	7/30/06 6:53 AM	0607531-004A	7/27/06	7/28/06	7/29/06 3:12 PM
0607531-005A	7/27/06	7/28/06	7/29/06 3:46 PM	0607531-006A	7/27/06	7/28/06	7/30/06 7:24 AM
0607531-007A	7/27/06	7/28/06	7/29/06 4:54 PM	0607531-008A	7/27/06	7/28/06	7/29/06 5:27 PM
0607531-009A	7/27/06	7/28/06	7/29/06 4:19 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification N° 1644

QA/QC Officer

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder: 0607531

EPA Method: SW8260B **Extraction: SW5030B** **BatchID: 22867** **Spiked Sample ID: 0607488-001A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
tert-Amyl methyl ether (TAME)	ND	0.050	102	103	0.792	103	104	0.976	70 - 130	70 - 130
t-Butyl alcohol (TBA)	ND	0.25	85.9	88.4	2.85	90.6	91	0.380	70 - 130	70 - 130
1,2-Dibromoethane (EDB)	ND	0.050	96.9	97.3	0.427	96.7	99.2	2.55	70 - 130	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	0.050	114	116	2.02	112	112	0	70 - 130	70 - 130
Diisopropyl ether (DIPE)	ND	0.050	117	118	0.789	118	118	0	70 - 130	70 - 130
Ethanol	ND	2.5	112	108	3.66	104	118	12.0	70 - 130	70 - 130
Ethyl tert-butyl ether (ETBE)	ND	0.050	110	111	0.978	107	110	3.23	70 - 130	70 - 130
Methanol	ND	12.5	100	106	5.74	104	107	2.60	70 - 130	70 - 130
Methyl-t-butyl ether (MTBE)	ND	0.050	109	112	2.74	105	108	2.59	70 - 130	70 - 130
%SS1:	100	0.050	97	98	1.21	93	93	0	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 22867 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0607531-001A	7/27/06	7/28/06	7/29/06 4:54 PM	0607531-002A	7/27/06	7/28/06	7/29/06 5:38 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification N° 1644

QA/QC Officer

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder: 0607531

EPA Method: SW8260B **Extraction: SW5030B** **BatchID: 22913** **Spiked Sample ID: 0607534-001A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
tert-Amyl methyl ether (TAME)	ND	0.050	99.1	96.9	2.31	105	98.5	6.09	70 - 130	70 - 130
t-Butyl alcohol (TBA)	ND	0.25	82.2	84.7	2.95	89.9	90	0.0873	70 - 130	70 - 130
1,2-Dibromoethane (EDB)	ND	0.050	93.3	90.3	3.24	97.5	91.2	6.73	70 - 130	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	0.050	113	109	3.16	117	110	6.36	70 - 130	70 - 130
Diisopropyl ether (DIPE)	ND	0.050	120	116	2.95	122	118	3.07	70 - 130	70 - 130
Ethanol	ND	2.5	106	109	2.05	111	111	0	70 - 130	70 - 130
Ethyl tert-butyl ether (ETBE)	ND	0.050	106	103	2.82	112	105	5.88	70 - 130	70 - 130
Methanol	ND	12.5	92.1	105	12.8	103	93.8	9.02	70 - 130	70 - 130
Methyl-t-butyl ether (MTBE)	ND	0.050	104	101	2.75	112	102	8.66	70 - 130	70 - 130
%SS1:	101	0.050	98	95	3.24	100	94	6.39	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 22913 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0607531-003A	7/27/06	7/28/06	7/29/06 6:22 PM	0607531-004A	7/27/06	7/28/06	7/29/06 7:06 PM
0607531-005A	7/27/06	7/28/06	7/29/06 7:50 PM	0607531-006A	7/27/06	7/28/06	7/29/06 8:35 PM
0607531-007A	7/27/06	7/28/06	7/29/06 9:19 PM	0607531-008A	7/27/06	7/28/06	7/29/06 10:04 PM
0607531-009A	7/27/06	7/28/06	7/29/06 10:48 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification N° 1644

QA/QC Officer

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0607531 **ClientID: CESW** **EDF: YES**

Report to:
Tim Cook
Cook Environmental Services, Inc.
271 Las Juntas Way
Walnut Creek, CA 94596

Email: cookenvironmental@att.net
TEL: 925-937-1759 FAX: 925-937-1759
ProjectNo: #1004; High Street
PO:

Bill to:
Tim Cook
Cook Environmental Services, Inc.
271 Las Juntas Way
Walnut Creek, CA 94596

Requested TAT: 5 days

Date Received: 07/28/2006
Date Printed: 07/31/2006

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0607531-001	B-1@10'	Soil	7/27/06	☐	A	A	A									
0607531-002	B-2@10'	Soil	7/27/06	☐	A	A										
0607531-003	B-3@10'	Soil	7/27/06	☐	A	A										
0607531-004	B-1@14'	Soil	7/27/06	☐	A	A										
0607531-005	B-2@14'	Soil	7/27/06	☐	A	A										
0607531-006	B-3@14'	Soil	7/27/06	☐	A	A										
0607531-007	B-1@18'	Soil	7/27/06	☐	A	A										
0607531-008	B-2@18'	Soil	7/27/06	☐	A	A										
0607531-009	B-3@18'	Soil	7/27/06	☐	A	A										

Test Legend:

1	9-OXYS_S	2	G-MBTEX_S	3	PREDF REPORT	4		5	
6		7		8		9		10	
11		12							

Prepared by: Maria Venegas

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

McCAMPBELL ANALYTICAL, INC.
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Telephone: (925) 798-1620 Fax: (925) 798-1622

060753 1

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

EDF Required? Coelt (Normal) Yes / Write On (DW) No

Report To: Tim Cook Bill To:

Company: Cook Environmental Services, Inc.
271 Las Juntas Way
Walnut Creek, CA 9457 E-Mail: cookenvironmental@att.net

Tele: (925) 937-1759 Fax: (925) 937-1759

Project #:1004 Project Name: High Street

Project Location: Oakland

Sampler Signature:

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX: Water	Soil	Air	Sludge	Other	METHOD PRESERVED: ICE	HCL	HNO_3	Other
B-1		7/27/06		3	VOA	X					X	X		
B-2		7/27/06		3	VOA	X					X	X		
B-3		7/27/06		3	VOA	X					X	X		
B-1@ 10'		7/27/06			tube		X				X			
B-2@ 10'		7/27/06			tube		X				X			
B-3@ 10'		7/27/06			tube		X				X			
B-1@ 14'		7/27					X				X			
B-2@ 14'							X				X			
B-3@ 14'							X				X			
B-1@ 18'							X				X			
B-2@ 18'							X				X			
B-3@ 18'							X				X			

Analysis Request

BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010 / 8021	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8081	EPA 608 / 8082 PCB's ONLY	EPA 8140 / 8141	EPA 8150 / 8151	EPA 8260 All 9 oxys only	EPA 525 / 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals (6010 / 6020)	LUFT 5 Metals (6010 / 6020)	Lead (200.8 / 200.9 / 6010)	Other	Comments
X										X							Filter Samples for Metals analysis: Yes / No
X										X							
X										X							
X										X							
X										X							
X										X							
X										X							
X										X							
X										X							
X										X							
X										X							

Relinquished By:	Date:	Time:	Received By:
[illegible]	7/29	11:30A	Enviro Tech - TC
Enviro Tech	[illegible]	1550	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

ICE/t° ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB

COMMENTS:

PRESERVATION	VOAS	O&G	METALS pH<2	OTHER

McCampbell Analytical, Inc.
"When Quality Counts"

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Telephone: 877-252-9262 Fax: 925-252-9269

Cook Environmental Services, Inc	Client Project ID: #1004; High Street	Date Sampled: 08/01/06
271 Las Juntas Way		Date Received: 08/01/06
Walnut Creek, CA 94596	Client Contact: Tim Cook	Date Reported: 08/09/06
	Client P.O.:	Date Completed: 08/09/06

WorkOrder: 0608027

August 09, 2006

Dear Tim:

Enclosed are:

1). the results of **3** analyzed samples from your **#1004; High Street project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

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Telephone: 877-252-9262 Fax: 925-252-9269

Cook Environmental Services, Inc.	Client Project ID: #1004; High Street	Date Sampled: 08/01/06
271 Las Juntas Way		Date Received: 08/01/06
Walnut Creek, CA 94596	Client Contact: Tim Cook	Date Extracted 08/05/06-08/08/06
	Client P.O.:	Date Analyzed: 08/05/06-08/08/06

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0608027

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	B-1	W	ND,i	580	ND	ND	ND	ND	1	99
002A	B-2	W	59,m,i	570	ND	ND	ND	ND	1	99
003A	B-3	W	51,m	490	ND	ND	ND	ND	1	103
Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	1	µg/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

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Telephone: 877-252-9262 Fax: 925-252-9269

Cook Environmental Services, Inc. 271 Las Juntas Way Walnut Creek, CA 94596	Client Project ID: #1004; High Street Client Contact: Tim Cook Client P.O.:	Date Sampled: 08/01/06 Date Received: 08/01/06 Date Extracted 08/04/06-08/08/06 Date Analyzed: 08/04/06-08/08/06

Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0608027

Lab ID	0608027-001B	0608027-002B	0608027-003B		Reporting Limit for DF =1	
Client ID	B-1	B-2	B-3			
Matrix	W	W	W			
DF	20	20	25		S	W
Compound	**Concentration**				ug/kg	µg/L
tert-Amyl methyl ether (TAME)	ND<17	ND<17	18		NA	0.5
t-Butyl alcohol (TBA)	ND<170	ND<170	ND<120		NA	5.0
1,2-Dibromoethane (EDB)	ND<17	ND<17	ND<12		NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND<17	ND<17	ND<12		NA	0.5
Diisopropyl ether (DIPE)	ND<17	ND<17	ND<12		NA	0.5
Ethanol	ND<1700	ND<1700	ND<1200		NA	50
Ethyl tert-butyl ether (ETBE)	ND<17	ND<17	ND<12		NA	0.5
Methanol	ND<17,000	ND<17,000	ND<12,000		NA	500
Methyl-t-butyl ether (MTBE)	590	570	700		NA	0.5
Surrogate Recoveries (%)						
%SS1:	107	106	113			
Comments	i	i				

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.

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Angela Rydelius, Lab Manager

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QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0608027

EPA Method: SW8021B/8015Cm **Extraction: SW5030B** **BatchID: 22960** **Spiked Sample ID: 0608018-005F**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(btex)£	ND	60	108	102	5.29	107	104	3.28	70 - 130	70 - 130
MTBE	ND	10	92.1	95.8	3.95	89.5	89	0.554	70 - 130	70 - 130
Benzene	ND	10	90.1	80.6	11.2	88.4	84.1	4.90	70 - 130	70 - 130
Toluene	ND	10	85	81.7	3.98	89.5	87	2.79	70 - 130	70 - 130
Ethylbenzene	ND	10	93.2	92.6	0.546	99.7	97.9	1.84	70 - 130	70 - 130
Xylenes	ND	30	90	90.3	0.370	100	95.3	4.78	70 - 130	70 - 130
%SS:	99	10	94	93	0.609	97	95	2.79	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 22960 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0608027-001A	8/01/06	8/05/06	8/05/06 4:12 PM	0608027-001A	8/01/06	8/08/06	8/08/06 1:41 PM
0608027-002A	8/01/06	8/05/06	8/05/06 4:42 PM	0608027-002A	8/01/06	8/07/06	8/07/06 6:11 PM
0608027-003A	8/01/06	8/05/06	8/05/06 2:46 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not applicable or not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification N° 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0608027

EPA Method: SW8260B **Extraction: SW5030B** **BatchID: 22961** **Spiked Sample ID: 0608018-005a**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
tert-Amyl methyl ether (TAME)	ND	10	107	105	1.50	115	115	0	70 - 130	70 - 130
t-Butyl alcohol (TBA)	ND	50	111	98.3	12.5	93.6	92.3	1.39	70 - 130	70 - 130
1,2-Dibromoethane (EDB)	ND	10	90.4	90.2	0.178	103	104	1.10	70 - 130	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	10	123	117	4.97	118	114	3.63	70 - 130	70 - 130
Diisopropyl ether (DIPE)	ND	10	121	120	0.747	127	128	0.251	70 - 130	70 - 130
Ethanol	ND	500	107	114	6.38	91.9	103	11.6	70 - 130	70 - 130
Ethyl tert-butyl ether (ETBE)	ND	10	108	108	0	119	121	2.22	70 - 130	70 - 130
Methanol	ND	2500	107	101	6.15	98.8	93.6	5.34	70 - 130	70 - 130
Methyl-t-butyl ether (MTBE)	ND	10	108	106	1.78	120	116	3.12	70 - 130	70 - 130
%SS1:	97	10	100	97	2.59	96	98	1.59	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 22961 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0608027-001B	8/01/06	8/04/06	8/04/06 12:50 AM	0608027-001B	8/01/06	8/08/06	8/08/06 9:54 PM
0608027-002B	8/01/06	8/04/06	8/04/06 1:40 AM	0608027-002B	8/01/06	8/08/06	8/08/06 10:40 PM
0608027-003B	8/01/06	8/04/06	8/04/06 12:03 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification N° 1644

QA/QC Officer

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0608027 **ClientID: CESW** **EDF: NO**

Report to:
Tim Cook
Cook Environmental Services, Inc.
271 Las Juntas Way
Walnut Creek, CA 94596

Email: cookenvironmental@att.net
TEL: 925-937-1759 FAX: 925-937-1759
ProjectNo: #1004; High Street
PO:

Bill to:
Tim Cook
Cook Environmental Services, Inc.
271 Las Juntas Way
Walnut Creek, CA 94596

Requested TAT: 5 days

Date Received: 08/01/2006
Date Printed: 08/02/2006

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12
0608027-001	B-1	Water	08/01/2006	☐	B	A										
0608027-002	B-2	Water	08/01/2006	☐	B	A										
0608027-003	B-3	Water	08/01/2006	☐	B	A										

Test Legend:

1	9-OXYS_W	2	G-MBTEX_W	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Rosa Venegas

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

McCAMPBELL ANALYTICAL, INC.
110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☑ 5 DAY

EDF Required? Coelt (Normal) Yes Write On (DW) No

Report To: Tim Cook	Bill To:
Company: Cook Environmental Services, Inc.	
271 Las Juntas Way	
Walnut Creek, CA 9457	E-Mail: cookenvironmental@att.net
Tele: (925) 937-1759	Fax: (925) 937-1759
Project #:1004	Project Name: High Street
Project Location: Oakland	
Sampler Signature:	

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED ICE	METHOD PRESERVED HCL	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010 / 8021	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8081	EPA 608 / 8082 PCB's ONLY	EPA 8140 / 8141	EPA 8150 / 8151	EPA 8260 All 9 oxys only	EPA 525 / 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals (6010 / 6020)	LUFT 5 Metals (6010 / 6020)	Lead (200.8 / 200.9 / 6010)	Other			Comments
B-1		8/1/06		3	VOA	X					X	X			X										X									
B-2		8/1/06		3	VOA	X					X	X			X										X									
B-3		8/1/06		3	VOA	X					X	X			X										X									

	Date:	Time:	Received By:
Relinquished By:	8/1/06	4:03	ENVIROTECH AA 16:03
Relinquished By:	8/1/06	5:40	
Relinquished By:	8/1/06	6:55	

ICE/t° ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS
PRESERVED IN LAB

COMMENTS:

PRESERVATION	VOAS	O&G	METALS	OTHER
			pH<2	

APPENDIX C

Results of February 2001 Soil Sampling

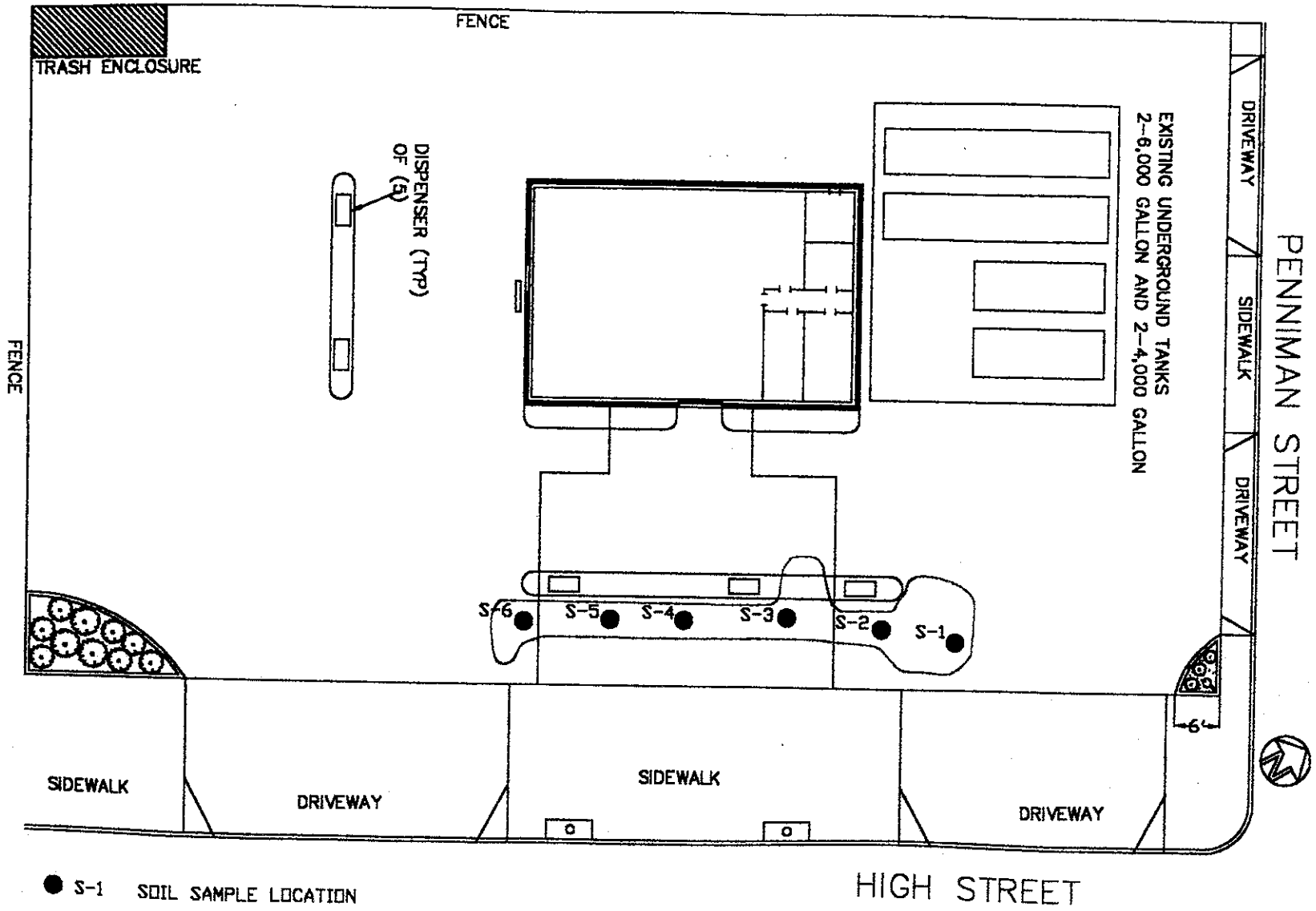
Table 1. Soil Sample Results from Pipe Trench Investigation

Sample ID	TPH-g	MtBE	TAME	benzene	toluene	ethylbenzene	xylenes
S-1	180	4	0.17	0.14	5.8	3.2	22
S-2	71	6.8	0.19	0.20	2.8	1.7	6.2
S-3	370	2.9	0.13	0.26	2.1	2.5	15
S-4	180	0.3	<0.01	0.12	0.95	1.3	16
S-5	3,600	2.3	<1	2.6	15	49	340
S-6	730	85	4.7	4.0	49	8.6	62

Table 2. Site Specific Threshold Levels

	SSTLs	
Constituent	Groundwater (ug/l)	Subsurface Soil (mg/kg)
benzene	200	2.6
ethylbenzene	180	1.9
toluene	270	1.6
total xylenes	470	2.8
MtBE	8,400	9.7

Note: SSTLs were established in *Addendum to Risk Assessment for Zima Center Corporation, 2951 High Street, Oakland, CA,*, Christopher M. Palmer Consulting Hydrogeologist, August 22, 1997.



W.A. Craig, Inc.
6940 Tremont Road LIC# 455752
Dixon, California 95620-9603
PH# (707) 693-2929

SOIL SAMPLE LOCATIONS

2951 High Street
Oakland California

Project: 3936	Figure: 3
Date: 3/27/01	
Scale: 1" = 20'	