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PERJURY STATEMENT

Name of Document or Report: Additional Subsurface Investigation Report

Site Address: 1685 24th Street, Oakland, CA

RO#: 2568

Date of Report: April 27, 2007

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

alfAlt
Company Officer or Legal Representative
Manager
Title
Capitell Store Group LLC Company
1/17/08
Date / /

CC: ACC Environmental Consultants, Inc.



April 27, 2007

Mr. Jabari Herbert Capital Stone Group LLC 1485 8th Street Oakland, CA 94607

RE: Additional Subsurface Investigation Report 1685 24th Street, Oakland, California *ACC Project Number:* 6871-001.00

Dear Mr. Herbert:

Please find the enclosed two copies of the Subsurface Investigation Report for 1685 24th Street, Oakland, California (Site). This additional subsurface characterization work was conducted to: 1) further characterize suspect petroleum hydrocarbon impacts in soil and groundwater in the vicinity of seven former underground storage tanks (USTs) identified at the Site; and 2) obtain additional data to confirm the preliminary Conceptual Site Model (CSM). Groundwater was encountered at 10 feet below ground surface (bgs) during this investigation.

If you have any questions regarding the report, please contact me at (510) 638-8400, ext. 109 or email me at <u>ddement@accenv.com</u>.

Sincerely,

David R. DeMent, PG, REA II Environmental Division Manager

/krb:drd

Enclosures





SUBSURFACE INVESTIGATION REPORT

1685 24th Street Oakland, California

ACC Project Number: 6892-001-01

Prepared for:

Mr. Jabari Herbert Capital Stone Group LLC 1485 8th Street Oakland, CA 94607

April 27, 2007

Prepared By:

Kenneth Blume Staff Geologist

Reviewed By:

David DeMent, PG, REA II Division Manager / Senior Geologist



TABLE OF CONTENTS

Page

1.0	INTRODUCTION	.1
2.0	BACKGROUND	.1
3.0	FIELD PROCEDURES	.4
4.0	FINDINGS	.5
	4.1 Subsurface Conditions	.5
	4.2 Analytical Results	.5
5.0	DISCUSSION	.8
6.0	CONCEPTUAL SITE MODEL	.10
	6.1 Potential Concerns	.10
	6.2 Site Conditions	.10
	6.3 Exposure Assumptions	.10
	6.4 TPH Impacts in Soil	.11
	6.5 TPH Impacts in Groundwater	.11
	6.6 TPH Impacts in Soil Gas	.11
7.0	CONCLUSIONS	.12
8.0	RECOMMENDATIONS	.12
9.0	LIMITATIONS	.13

TABLES

1 – 2004 TPHg/BTEX/MTBE Analytical Results	.2
2 – 2004 TEPH Analytical Results.	.3
3 – Soil Sample TPHg/BTEX/MTBE Analytical Results	.6
4 – Soil Sample TEPH Analytical Results	.7
5 – Groundwater Sample TPHg/BTEX/MTBE Analytical Results	.7
6 – Groundwater Sample TEPH Analytical Results	.8

FIGURES

1 – Location Ma	p
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- 2 Site Map
- 3 Geologic Cross Section

APPENDICES

- 1 Alameda County Public Works Soil Boring Permit
- 2 Lithologic Logs
- 3 Analytical Results and Chain of Custody Record
 4 Brunsing Associates Well Monitoring Data, 1734 24th Street

ADDITIONAL SUBSURFACE INVESTIGATION REPORT 1685 24th Street Oakland, California

1.0 INTRODUCTION

At the request of the Capital Stone Group LLC (Client), ACC Environmental Consultants Inc., (ACC), has prepared this Additional Subsurface Investigation Report summarizing additional subsurface investigation and soil characterization work performed at 1685 24th Street (Site) located in Oakland, California (Site). The primary goal of this investigation was to further characterize suspect petroleum hydrocarbon impacts in soil and groundwater in the vicinity of seven former underground storage tanks (USTs) identified at the Site and to obtain additional data to confirm the preliminary Site Conceptual Model (SCM).

2.0 BACKGROUND

The subject property is bound by 24th Street to the north, Willow Street to the west, and the Pacific Pipe Company (PPC) pipe storage yards to the east and south (Figure 1). Circa 1966 to 1990, the subject property was utilized as a taxicab maintenance facility. From 1990 to the present, automotive repair operations have been conducted at the site by Lee's Auto Shop. In April 1987, seven underground storage tanks (USTs) were reportedly removed from the Site. According to records obtained at the OFD Office of Emergency Services, three 1,000 gallon gasoline USTs, two 8,000-gallon USTs, and two 7,500-gallon USTs were permitted for the Site. UST removal records obtained during the Phase I Environmental Site Assessment indicate that two 7,500-gallon gasoline USTs, two 10,000-gallon gasoline USTs, and one 550-gallon waste oil tank were removed.

The site plan generated during UST removal was not scaled so exact former UST locations are unknown. Estimated former UST locations are illustrated on Figure 2. Specifically, the USTs illustrated at soil boring locations TB-4, SS-1, and TB-10 are known due to the observation of gasoline-discolored soil and obvious backfill materials as sand and pea gravel at these three locations. The four suspect USTs depicted in the vicinity of soil borings TB-6 through TB-9 are known with less confidence but are estimated based on the depicted locations on the unscaled site plan. Product dispenser locations are unknown but seven holes for seven vent lines are located in the southwest corner of the building.

ACC conducted an initial subsurface investigation at the Site in August 2002 for a prospective buyer. Subsurface soil and groundwater characterization was requested by the prospective buyer for due diligence purposes due to historical site use and documented USTs at the Site. In order to confirm suspect soil and groundwater impacts from the former USTs, ACC located and advanced seven exploratory soil borings to collect representative soil and grab groundwater samples. Soil boring TB-1 and TB-2 were advanced on August 2, 2002 and "step-out" soil borings B25 through B29 were advanced on August 12, 2002. The soil boring designations used reflect the fact that the soil borings advanced at the Site were part of a much larger comprehensive subsurface investigation at a number of properties. Field indications and sample analytical results indicated that gasoline and diesel fuel impact was evident in several soil and groundwater samples collected in these soil borings.

TPHg was reported in the grab groundwater sample from soil boring TB-1 at 5,000 micrograms per Liter (μ g/L) with relatively minor associated BTEX. TEPH was reported in sample TB-1-W at a concentration of 2,000 μ g/L. TPHg was reported in soil in soil borings B25, B28, and B29 at concentrations ranging from 36 to 190 milligrams per kilogram (mg/kg). Traces of emulsified free-phase floating product (free product) were observed on groundwater in soil boring B25, as evidenced by grab groundwater sample analytical results reported in grab groundwater sample B25-W. Some reported concentrations of TPHg and BTEX were significant but appeared localized. Groundwater was generally encountered at approximately 9 feet below ground surface (bgs) perched above a silty clay aquitard approximately 10 feet thick. Analytical results from the 2004 subsurface investigation are summarized in Table 1 and Table 2.

Sample ID	TPHg	Benzene	Toluene	Ethyl-	Total	MTBE			
				benzene	Xylene				
	SOIL								
TB3-7.5	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			
TB4-7.5	2.5	0.11	< 0.005	0.24	0.29	0.0072			
TB4-9.0	3.5	0.09	0.011	0.0074	0.037	< 0.005			
TB5-9.0	1,700	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50			
TB6-11.0	<1.0	< 0.005	< 0.005	< 0.005	0.0084	< 0.005			
TB8-8.0	14	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022			
TB9-8.0	470	< 0.50	< 0.50	< 0.50	< 0.50	0.54			
TB10-8.0	220	0.88	2.6	4.2	11	< 0.50			
TB10-12.0	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			
SS-1-2.0	4.3	0.01	< 0.005	0.017	0.013	< 0.005			
SS-1-7.5	120	< 0.50	< 0.50	0.99	< 0.50	< 0.50			
			WATER						
TB3-W	69	8.4	< 0.50	1.3	<1.0	4.2			
TB5-W	3,600	20	1.4	1.5	1.7	4.2			
TB6-W	1,300	19	2.4	13	8.9	0.57			
TB7-W	13,000	31	3.8	8.7	13	<2.5			
TB8-W	1,400	16	0.91	0.57	2.8	< 0.50			
TB9-W	3,200	<5.0	6.2	8.8	<10	<5.0			
TB10-W	20,000	8,800	310	760	530	<100			
SS-1-W	7,700	1,100	12	170	29	33			

TABLE 1 – 2004 TPHg/BTEX/MTBE ANALYTICAL RESULTS

< = analytical results under laboratory reporting limit

N/*A* = samples were not analyzed for this constituent

Sample ID	TEPH as Diesel	TEPH as Motor Oil	Lab Notes
	SOIL		
TB3-7.5	5.8	<50	ndp
TB4-9.0	140	600	ldr
TB5-9.0	140	82	edr
TB8-8.0	15	<50	edr
TB9-8.0	60	420	edr
SS-1-7.5	68	62	edr
	WATER		
TB6-W	680	<500	edr
TB7-W	1,900	<500	edr
TB10-W	7,700	7,600	edr
SS-1-W	2,700	4,600	edr

TABLE 2 – 2004 TEPH ANALYTICAL RESULTS

Notes:

Soil sample results are in milligrams per kilogram (mg/kg), approximately equal

to parts per million (ppm). Water sample results are in micrograms per Litter (µg/L), approximately equal to parts per billion (ppb).

< = analytical results under laboratory reporting limit

N/A = samples were not analyzed for this constituent

n/a = not applicable

ldr= Hydrocarbon reported is in the late Diesel range, and does not match our Diesel standard

edr= Hydrocarbon reported is in the early Diesel range, and does not match our Diesel standard

ndp= Hydrocarbon reported does not match the pattern of the laboratory Diesel standard

TPHg, BTEX, and TEPH as diesel were the primary constituents of concern identified in soil and groundwater. These constituents are likely the result of unauthorized releases from the former gasoline and diesel fuel USTs. Subsurface impacts were not entirely characterized but appear to be largely localized to the general vicinity of the former USTs and horizontal and vertical migration potential is estimated to be minimal due to the low permeability aquitard observed from approximately 9.5 to 20 feet bgs. TPHg and BTEX concentrations in select locations are above regulatory action levels and may represent an unacceptable human health risk and/or the necessity for land use restrictions and groundwater monitoring. In addition, halogenated volatile organic compounds (HVOCs) were reported in one groundwater sample.

3.0 FIELD PROCEDURES

In December 2006, ACC obtained a soil boring permit from the Alameda County Public Works Agency (ACPWA). A copy of the permit is included in Appendix 1. The location of the subsurface investigation was marked with white paint, and Underground Service Alert was notified 48 hours prior to commencing work.

ACC's Professional Geologist performed the soil borings and sampling, and the subsurface materials in the soil borings were identified, classified and logged. Soil borings were continuously cored using a combination truck-mounted hydraulic and pneumatic Geoprobe® sampling tool. ACC utilized a four-foot long, stainless steel Geoprobe® macro-core sampling tool equipped with 2-inch inside-diameter clear acetate liners. The sampling probe and rods were pre-cleaned prior to use and between sample drives by washing them with a trisodium phosphate and potable water solution and two potable water rinses. Upon removal from the sampler, each recovered soil core was visually inspected and screened with a ppbRAE® photo-ionization detector (PID). Subsurface materials in the soil borings were identified, classified and logged during drilling operations according to the Unified Soil Classification System (USCS). The sample intervals were primarily logged to determine relative permeability and evaluate mitigation potential at that soil boring location. The lithologic logs are included as Appendix 2.

Six exploratory soil borings were advanced on December 15, 2006 at select, representative locations at the Site. Approximate soil boring locations are illustrated on Figure 2. Each soil boring was continuously cored to facilitate logging and screening encountered soils and obtain soil sample intervals for potential laboratory analysis. Select soil sample intervals were cut from the acetate liners, capped, labeled, and stored in a pre-chilled, insulated container to be transported following chain of custody protocol to Curtis & Tompkins, Inc., a state-certified analytical laboratory. Discrete soil samples were analyzed for total extractable petroleum hydrocarbons (TEPH) by EPA Method 8015B, total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and total xylenes (BTEX), and methyl tertiary butyl ether (MTBE) by EPA Method 8260B, and total petroleum hydrocarbons as diesel (TPHd) by EPA Method 8015B.

Six grab groundwater samples were collected with the use of disposable poly-ethylene bailers and temporary 1-inch-diameter PVC casing installed into each respective open soil boring annulus. Upon collection, the groundwater was immediately transferred to laboratory-supplied 40 milliliter glass VOA vials without headspace and 1-liter amber bottles, and labeled. The grab groundwater samples were immediately placed in a pre-chilled, insulated container pending transport to the analytical laboratory. Samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and total xylenes (BTEX), and methyl tertiary butyl ether (MTBE) by EPA Method 8260B, total petroleum hydrocarbons as diesel (TPHd) by EPA Method 8015B, and halogenated volatile organic compounds (HVOCs) by EPA Method 8260B. Analytical results and chain of custody are included in Appendix 3.

Following drilling and sample collection, each soil boring location was abandoned with neat cement with the use of a tremie pipe to the surface and the site was later inspected by a representative of the Alameda County Public Works Agency.

4.0 FINDINGS

4.1 Subsurface Conditions

The surface of the Site in the area of the investigation is covered with three to four inches of concrete or asphalt pavement underlain by approximately three to six inches of baserock. Subsurface soil conditions vary somewhat across the Site. Soils consist of silty sand (SM) from the surface to approximately 6 to 10 feet bgs sand underlain by clay soils to a minimum of 20 feet bgs. The silty sands were medium to fine grained, moderately sorted, brown and olive brown, loose to medium dense, damp, and exhibited moderate estimated permeability. The deeper clays were dark olive gray, medium stiff, uniform, moderately to highly plastic and exhibited low estimated permeability. The first encountered saturated zone was generally observed at approximately eight to nine feet bgs and appeared to be water perched on the underlying clays. The clays were interpreted as "Bay Mud" and are shown on the geologic cross section, Figure 3.

ACC generally observed evidence of fill materials above the clays consisting of debris, ceramic fragments, slag, and decaying organic matter indicating the Site may have been a former "dump", or poor quality fill may have been placed below the sand materials during reclamation of the area.

All soil borings were continuously cored to better characterize soils present at the site. Some elevated PID readings, characteristic odors, or soil discoloration were noted during sampling activities. Additional details are included in the soil boring lithologic logs (Appendix 1).

4.2 Analytical Results

No detectable concentrations of TPHg, BTEX, or MTBE were reported in four of the six samples analyzed. Reported concentrations of TPHg, BTEX, or MTBE were above the laboratory detectable limit, but below the residential Environmental Screening Levels (ESLs) for these constituents. Analytical results for soil samples analyzed for TPHg, BTEX and MTBE are summarized in Table 3.

TEPH-diesel range petroleum hydrocarbons were reported at concentrations ranging from the laboratory non-detectable limit of 1.0 milligrams per kilogram (mg/kg) to 40 mg/kg in soil boring TB14-4.0. TEPH-motor oil range petroleum hydrocarbons were reported at concentrations ranging from the laboratory non-detectable limit of 5.0 mg/kg to 170 mg/kg in soil boring TB15-8.5. Reported concentrations of TEPH-ranged petroleum hydrocarbons were below the Residential ESLs. TEPH analytical results for soil samples are summarized in Table 4.

All six grab groundwater samples analyzed reported TPHg concentrations above acceptable groundwater ESLs, ranging from 640 micrograms per Liter (μ g/L) to 10,000 μ g/L. Benzene concentrations range from 0.55 μ g/L to 84 μ g/L. Concentrations of MTBE range from the laboratory non-detectable limit of 0.50 μ g/L to 35 μ g/L. Reported MTBE concentrations were below the Groundwater ESL of 1,800 μ g/L. TEPH-diesel range petroleum hydrocarbons reported concentrations ranging from 540 μ g/L to 9,500 μ g/L, and TEPH-motor oil petroleum hydrocarbons range from 300 μ g/L to 13,000 μ g/L. Analytical results for grab groundwater samples are summarized in Table 5 and Table 6.

No detectable HVOCs were reported in the three analyzed grab groundwater samples collected from soil borings TB-12, TB-13, and TB-16. A copy of the analytical results and chain of custody record is included as Appendix 1.

Sample ID	Sample Depth (ft) bgs	TPHg (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl- benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)
TB11-4.0	4.0	16 ¹	0.0085	< 0.0048	0.027	0.0044	< 0.0048
TB12-4.0	4.0	<1.0	< 0.0047	< 0.0047	< 0.0047	< 0.0047	< 0.0047
TB12-8.5	8.5	<1.0	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049
TB13-8.5	8.5	<1.0	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048
TB14-4.0	4.0	< 0.97	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046
TB15-8.5	8.5	< 0.95	< 0.0050	< 0.0050	0.46	0.030	< 0.0500
Residential ESL*		100	0.18	9.3	32.0	11.0	2.0
Commercial ESL*		400	0.38	9.3	32.0	11.0	5.6

TABLE 3 - SOIL SAMPLE TPHg/BTEX/MTBE ANALYTICAL RESULTS

Notes:

All soil results reported in micrograms per kilogram (mg/kg), bolded values exceed ESL

Sample result less than the laboratory minimum detection limit indicated
 ¹ Analytical result flagged by laboratory that heavier hydrocarbons contributed to the quantitation
 ² Analytical result flagged by laboratory that lighter hydrocarbons contributed to the quantitation

* SF Bay RWQCB, February 2005 ESLs are for Shallow Soils (Table B)

Sample ID	Sample Depth (ft) bgs	TEPH-diesel (mg/kg)	TEPH-Motor Oil (mg/kg)
TB11-4.0	4.0	28 ^{1,2,3}	$22^{1,2}$
TB12-4.0	4.0	9.5 ^{1,3}	79 ¹
TB12-8.5	8.5	7.9 ^{1,2,3}	29 ^{1,2}
TB13-2.0	2.0	2.5^{3}	<5.0
TB13-8.5	8.5	<1.0	<5.0
TB14-4.0	4.0	40 ^{1,3}	160 ¹
TB15-8.5	8.5	25 ^{1,2}	170 ^{1,2}
Residential ESL*		100	500
Com	mercial ESL*	500	1000

TABLE 4 –SOIL SAMPLE TEPH ANALYTICAL RESULTS

Notes: milligrams per kilogram (mg/kg) approximately equal to parts per million (ppm)

¹Analytical result flagged by laboratory that heavier hydrocarbons contributed to the

quantitation, and sample chromatographic pattern did not resemble the laboratory standard

²Analytical result flagged by laboratory that heavier hydrocarbons contributed to the

quantitation, and sample chromatographic pattern did not resemble the laboratory standard

³ Sample chromatographic pattern did not resemble the laboratory standard

* SF Bay RWCQB, February 2005 ESLs for groundwater (Table B), not to be used to assess health risk

TABLE 5 – GROUNDWATER TPHg/BTEX/MTBE SAMPLE ANALYTICAL RESULTS

Sample ID	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
TB11-W	9,400	84	15	27	37.5	29
TB12-W	1,600 ^Z	0.55	<0.50	<0.50	1.2	< 0.50
TB13-W	640 ^Z	0.85	<0.50	<0.50	0.55	< 0.50
TB14-W	9,400 ^Z	170	4.4	11	9.4	35
TB15-W	10,000 ^Z	22	3.9	310	18.3	<2.0
TB16-W	1,500 ^Y	1.8	<0.50	<0.50	<0.50	<0.50
Groundwater ESL*	500	46	130	290	100	1,800

Notes: All w

All water results reported in micrograms per Liter (μ g/L)

< Sample result less than the laboratory minimum detection limit indicated

Sample exhibits chromatographic pattern which does not resemble standard

^Z Sample exhibits unknown single peak or peaks

* SF Bay RWCQB, February 2005 ESLs for groundwater (Table B), not to be used to assess health risk

Sample ID	TEPH-diesel (µg/L)	TEPH-Motor Oil (µg/L)
TB11-W	8,100 ^{1,2,3}	13,000 ²
TB12-W	540 ^{1,2,3}	410^{2}
TB13-W	720 ^{1,2,3}	370^{2}
TB14-W	4,100 ^{1,2,3}	$2,900^{1,2}$
TB15-W	9,500 ^{1,2,3}	11,000 ²
TB16-W	$1,600^{1,2,3}$	300^{2}
Groundwater ESL*	640	640

TABLE 6 – GROUNDWATER SAMPLE TEPH ANALYTICAL RESULTS

Notes:

milligrams per kilogram (mg/kg) approximately equal to parts per million (ppm)

Analytical result flagged by laboratory that heavier hydrocarbons contributed to the

quantitation, and sample chromatographic pattern did not resemble the laboratory standard

²Analytical result flagged by laboratory that lighter hydrocarbons contributed to the

quantitation, and sample chromatographic pattern did not resemble the laboratory standard

³ Sample chromatographic pattern did not resemble the laboratory standard

* SF Bay RWCQB, February 2005 ESLs for groundwater (Table B), not to be used to assess health risk

5.0 **DISCUSSION**

For purposes of due diligence for a previous prospective buyer, ACC prepared a Phase I Environmental Site Assessment (ESA) for this property and identified the former USTs as the primary environmental concern. In order to confirm suspect soil and groundwater impacts from the former USTs, ACC located and advanced seven exploratory soil borings in August 2002 to collect representative soil and grab groundwater samples in proximity to the estimated location of the former USTs (Figure 2). Field indications of gasoline impact and elevated PID readings were evident in soil in soil borings TB-1 (B20) but were not noted in soil boring TB-2 (B21). TPHg was reported in the grab groundwater sample from soil boring TB-1 at 5,000 μ g/L. Groundwater was generally encountered at approximately 7.5 feet bgs. Soil and grab groundwater samples collected in the other soil borings were relatively minor and indicative of degraded residual petroleum hydrocarbons from releases from the former USTs. Traces of free product were identified in groundwater at soil boring location B25.

Due to the initial subsurface findings, ACC conducted additional subsurface investigation in June 2004. Unlike during the August 2002 investigation, much of the area of investigation was accessible at this time, primarily inside the Lee's Auto Yard extending from soil boring TB-3 to TB-10. Characteristic asphalt repairs indicative of a UST removal were observed at soil boring locations TB-4, SS-1, and TB-10. Originally, a former UST was suspected at soil boring TB-3 but direct observation and sample analytical results do not support this.

TPHg, BTEX, and TEPH as diesel were the primary constituents of concern identified in soil and groundwater. Subsurface impacts were not entirely characterized but appear to be localized to the general vicinity of each of the former USTs and horizontal and vertical migration potential is estimated

to be minimal. Field indications of impact and sample analytical results indicated that a release from the former USTs occurred. With the possible exception of grab groundwater sample TB10-W, sample analytical results and laboratory notes generally indicate the reported petroleum hydrocarbons were degraded and that significant natural attenuation likely occurred since April 1987.

In December 2006, ACC conducted additional subsurface characterization at the Site to further characterize suspect TPH impacts in soil and groundwater. Perched groundwater was encountered approximately 8.5 to 9 feet bgs in soil borings TB11 through TB15 and at approximately 5 feet bgs in soil boring TB16. Analytical results continue to indicate that TPH impacts appear to be primarily in groundwater. Petroleum hydrocarbons were reported in all six of the grab groundwater samples; however, BTEX concentrations are relatively low and reported TEPH concentrations are flagged as not resembling the laboratory standard. This type of laboratory flag typically indicates the hydrocarbons are weathered and being degraded by natural attenuation processes.

5.1 Informal Risk Evaluation

ACC compared the reported concentrations of TPHg, BTEX, and TEPH to their applicable ESLs as summarized in Table B, California Regional Water Quality Control Board, San Francisco Bay Region, *Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater*, Volume 1: Summary Tier 1 Lookup Tables, Interim Final – February 2005. This comparison constitutes a preliminary risk evaluation only.

None of the reported TPHg, BTEX, MTBE, or TEPH concentrations in soil exceeded their applicable residential ESL. Benzene exceeded its ESL of 46 μ g/L in grab groundwater samples collected in soil boring TB11 and TB14 and ethylbenzene exceeded its ESL of 290 μ g/L in the grab groundwater sample collected in soil boring TB15. Since most grab groundwater sample BTEX analytical results were significantly below their applicable ESLs, ACC evaluated benzene and ethylbenzene according to Table E-1a, Groundwater Screening Levels For Evaluation of Vapor Intrusion Concerns, California Regional Water Quality Control Board, San Francisco Bay Region, *Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater*, Volume 1: Summary Tier 1 Lookup Tables, Interim Final – February 2005. For a residential scenario with high permeability soil, the benzene concentration in groundwater that might represent an indoor inhalation hazard is 540 μ g/L, and similarly, 170,000 μ g/L for ethylbenzene. Diesel and motor oil concentrations in grab groundwater samples exceed their ESL but do not pose a significant risk in the CSM.

In summary, the informal risk evaluation using a simple comparison of applicable ESLs to reported TPH concentrations indicates no soil sample analytical results exceeded their ESLs and very few grab groundwater sample analytical results exceeded their ESLs. A formal risk assessment would most likely come to the conclusion that residual petroleum hydrocarbon concentrations in soil and groundwater do not represent an unacceptable human health risk for future residential site use.

6.0 CONCEPTUAL SITE MODEL

Based on the findings of completed soil and groundwater investigations, available groundwater monitoring results, acceptable informal risk assessment evaluations, the minimal possibility of downgradient wells, and relatively simple hydrogeological conditions at the Site, the conceptual site model is known with a high degree of confidence. There is one reasonable complete onsite exposure scenario and no known sensitive receptors in the downgradient direction. Concentrations of residual petroleum hydrocarbons have been identified in subsurface soil and groundwater and remedial soil excavation may be required to develop the property for residential use.

6.1 Potential Concerns

The primary environmental concern is residual petroleum hydrocarbon impacts in subsurface soil and groundwater from the former underground storage tanks. Sample analytical results indicate gasoline and diesel fuel was released from the former USTs and residual TPH is naturally attenuating.

6.2 Site Conditions

The subject property is approximately 42 feet above sea level and the surrounding area is relatively flat with a gentle slope towards the west. San Francisco Bay is approximately one mile northwest of the Site. The estimated groundwater gradient of 0.003 approximates the observed topographic gradient. Hills and areas of groundwater recharge exist to the east and southeast and regional groundwater movement and surface drainage trends to the west and northwest. Subsurface soil conditions vary somewhat across the Site. The area is reclaimed bay margin land with varying thicknesses of silty sand (SM) ranging from 5 to 10 feet overlying native Bay Mud clays to a minimum depth of 20 feet bgs. Just above the clays, ACC observed one to two feet of perched water in soils that exhibited evidence of fill, debris, and dumped waste materials. The depth to regional groundwater is unknown but greater than 20 feet bgs. Groundwater monitoring wells MW-4 and MW-6, installed in or adjacent to Willow Street as part of the UST investigation at Pacific Building Supply at 1735 24th Street, reported depths to groundwater ranging from 3.37 to 8.37 feet.

Generally, hydrogeological conditions are relatively simple: 1) moderately permeable silty sands are generally present to a depth of 10 feet and are then underlain by a minimum of 10 feet of highly plastic stiff "Bay Mud" clays; 2) varying amounts of perched water rest on the clay layer and the horizon represents a barrier to any additional vertical petroleum hydrocarbon migration; and 3) horizontal migration is primarily limited to this thin perched water zone at 10 feet bgs.

6.3 Exposure Assumptions

Exposure to or contact with residual petroleum hydrocarbon concentrations in soil is not considered a potential exposure pathway. Exposure to or ingestion of groundwater containing residual petroleum hydrocarbon concentrations is not considered a potential exposure pathway. Reported concentrations of petroleum hydrocarbons in soil and groundwater suggest that indoor inhalation of petroleum hydrocarbons is a potentially complete exposure pathway.

Worker exposure to petroleum hydrocarbon-impacted soil at the Site during construction is unlikely, and based on the relatively low concentrations of benzene and BTEX in soil; this temporary exposure would likely not represent an unacceptable human health risk. If remedial soil excavation is performed prior to Site development, potential exposures would be even less.

6.4 TPH Impacts in Soil

Petroleum hydrocarbon impacts in soil primarily exist at 8 to 10 feet bgs, below tank bottom and above perched water observed at 9.5 feet bgs. Soil samples collected adjacent to the former USTs indicate the residual petroleum hydrocarbons are degraded and contain relatively low concentrations of BTEX and numerous soil samples did not report any detectable TPHg or BTEX. TPHg and benzene are not present at any significant concentrations in soil above approximately 8 feet bgs.

Soils at the Site to a depth of approximately 9 feet bgs appear to be primarily silty sands with low to moderate permeability. Based on estimated tank bottom depths of 6 to 8 feet bgs, any releases from the tanks would have likely impacted soil immediately beneath the tanks until water was encountered at 9.5 to 10 feet bgs. Currently, the degree and extent of petroleum hydrocarbon impact in soil is estimated to be minimal and confined between 6 to 9.5 feet bgs at each former UST location.

6.5 TPH Impacts in Groundwater

Petroleum hydrocarbon impacts in groundwater primarily exist at 9 to 10 feet bgs in plumes that surround the former USTs. A relatively thin perched water zone was observed on the Bay Mud clays at approximately 10 feet bgs and the thickness of this zone likely fluctuates during the calendar year due to precipitation rates. Grab groundwater samples collected adjacent to the former USTs generally indicate the residual dissolved petroleum hydrocarbons are degraded and contain relatively low concentrations of BTEX. Sample TB14-W, collected to further evaluate the elevated benzene reported in sample TB10-W in 2004, reported only 170 μ g/L. Generally, reported BTEX in grab groundwater samples were relatively low and indicate that preferential attenuation has occurred.

Groundwater monitoring well MW-6, installed in Willow Street as part of the UST investigation at Pacific Building Supply at 1735 24th Street, reported TPHg concentrations ranging from 1.0 to 2.3 μ g/L during periodic groundwater monitoring conducted between December 1989 and December 1995. This monitoring well was located approximately 15 feet from the gate leading into the Site and directly downgradient of the majority of the USTs formerly located at the Site. A copy of Brunsing Associates Site Map, Figure 2, and groundwater monitoring results from monitoring wells MW-4 and MW-6 is included in Appendix 4.

6.6 TPH Impact in Soil Gas

Potential TPH impacts in soil gas are unknown. Due to relatively low BTEX concentrations reported in soil and groundwater, and relatively small volumes of TPH-impacted soil at each UST location, the cumulative TPH impacts in soil gas should be minimal and readily disseminated in surface soils.

7.0 CONCLUSIONS

Based on previous investigation findings, additional sample analytical results, PID readings, and field observations, ACC concludes:

- □ Groundwater in the vicinity of the former USTs has been impacted by petroleum hydrocarbons related to a suspect release(s) from the former USTs prior to their removal in 1987;
- □ Grab groundwater analytical results reported elevated concentrations of gasoline and diesel fuel constituents and relatively low concentrations of BTEX constituents;
- □ Soil sample analytical results reported relatively minor concentrations of TPHg, BTEX, MTBE, and TEPH and further demonstrate TPH impacts in soil are relatively small;
- □ Soils at the Site are primarily fine-grained silts and clays with low to moderate estimated permeability which limit or prevent the vertical migration of dissolved-phase petroleum hydrocarbons;
- □ Encountered groundwater consisted of approximately 1 foot of perched water at the silty sand/clay interface and was observed in soils containing fill materials, decaying organic matter, and debris;
- □ HVOCs were not reported in groundwater in the three grab groundwater samples analyzed and further demonstrate that HVOCs are not constituents of concern at the Site;
- □ With minor exceptions, apparent human health risk from residual TPH in the subsurface is acceptable in a residential scenario.

8.0 RECOMMENDATIONS

Based on conclusions of this investigation and our understanding of enforced UST regulations in the City of Oakland and Alameda County, ACC recommends:

- Immediately pursuing regulatory review by the San Francisco Bay Regional Water Quality Control Board as the lead regulatory agency and determine the potential need to remediate petroleum hydrocarbon-impacted soil and groundwater during future Site development;
- Evaluate the need to perform remedial soil excavation in the vicinity of soil borings TB-5, SS-1, and TB-10 and pit dewatering for purposes of source removal to further decrease potential human health risk associated with residual petroleum hydrocarbons in subsurface soil and groundwater;
- □ Having a Contingency Plan in place during Site development to properly remove and handle petroleum hydrocarbon-impacted soil in a timely and cost effective manner; and
- □ Installing a vapor barrier under the building foundations during construction.

9.0 LIMITATIONS

The service performed by ACC has been conducted in a manner consistent with the levels of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the area. No other warranty, expressed or implied, is made.

The conclusions presented in this report are professional opinions based on the indicated data described in this report and applicable regulations and guidelines currently in place. They are intended only for the purpose, site, and project indicated. Opinions and recommendations presented herein apply to site conditions existing at the time of our study.

ACC has included analytical results from a state-certified laboratory, which performs analyses according to procedures suggested by the U.S. Environmental Protection Agency and the State of California. ACC is not responsible for laboratory errors in procedure or result reporting.

FIGURES







APPENDICES

APPENDIX 1

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 Approve	ed on: 12/01/2006 By jamesy	Permit Numbers: W2006-10 Permits Valid from 12/07/2006 to 12/15/20		
Application Id:	1164928142690 1685 24th St. Ockland, CA 94607	City of Project Site:Oakland		
Project Start Date:	12/07/2006	Completion Date: 12/15/2006		
Applicant:	ACC Environmental Consultants - Kenneth	Phone: 510-638-840	0	
Property Owner: Client:	Blume 7977 Capwell Dr #100, Oakland, CA 94621 Capital Stone Group LLC 1485 8th St., Oakland, CA 94607 ** same as Property Owner **	Phone: 510-663-036	3	
	Receipt Number: WR2006-0532	Total Due: Total Amount Paid:	\$200.00 \$200.00	

	Total Due:	\$∠00.00
Receipt Number: WR2006-0532	Total Amount Paid:	\$200.00
Payer Name : AA Environmental	Paid By: CHECK	PAID IN FULL
-	-	

Works Requesting Permits:

Borehole(s) for Investigation-Geotechnical Study/CPT's - 10 Boreholes Driller: Environmental Control Associates - Lic #: 695970 - Method: other

Work Total: \$200.00

Specifications

Permit	Issued Dt	Expire Dt	#	Hole Diam	Max Depth
Number			Boreholes		
W2006-	12/01/2006	03/07/2007	10	2.00 in.	35.00 ft
1011					

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.

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. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

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

Alameda County Public Works Agency - Water Resources Well Permit

6. 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.

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.

APPENDIX 2

	MAJOR DIV		TYPICAL NAMES		
	GRAVELS	CLEAN GRAVELS	GW		well graded gravels, gravel-sand mixtures
လ	more than half	WITH LITTLE OR NO FINES	GP		poorly graded gravels, gravel-sand mixtures
coarse fraction i	coarse fraction is larger than	GRAVELS WITH			silty gravels, poorly graded gravel-sand silt mixtures
NED	O Number 4 sieve OVER	OVER 12% FINES	GC		clayey gravels, poorly graded gravel-sand clay mixtures
GRA	SANDS	CLEAN SANDS WITH	SW		well graded sands, gravelly sands
SE	more than half coarse	LITTLE OR NO FINES	SP		poorly graded sands, gravelly sands
fraction is smaller O than Number 4 siev	fraction is smaller than Number 4 sieve	SANDS WITH OVER	SM		silty sands, poorly graded sand-silt mixtures
		12% FINES	SC		clayey sands, poorly graded sand-clay mixtures
R			ML		inorg. silts and very fine sands, rock flour silty or clayey sands, or clayey silts w/ sl. plasticity
SOI	liquid limit less that	an 50	CL		inorg. clays of low-med plasticity, gravelly clays, sandy clays, silty clays, lean clays
VED	·		OL		organic clays and organic silty clays of low plasticity
RAIN			ΜН		inorganic silty, micaceous or diatomacious fine sandy or silty soils, elastic silts
Э Ш	liquid limit greater	than 50	СН		inorganic clays of high plasticity, fat clays
FIN	inquia intri groator		OH		organic clays of medium to high plasticity organic silts
	HIGHLY ORGAN	NIC SOILS	РТ	×	peat and other highly organic soils









Soil Color Color Code (Munsell Soil Color Chart)	PID (ppm)	SAMPLE ID	SAMPLE INTERVAL	depth below ground surface (ft)	EQUIPMENT: Geoprobe Hydraulic Sampling Device OPERATED BY: Environmental Control Associates LOGGED BY: Dave DeMent, Ken Blume LOCATION: 1685 24th Street, Oakland, CA WORK DATE: 12/15/06 BORING: TB-14
10YR-5/4		TB14-4.0		— 2 — — 4 —	Asphalt pavement Gravel baserock Silty sand (SM), yellow brown, poorly graded, loose, 10% fines, uniform, damp, olive green at 3.5 feet (possible soil discoloration), brick noted, no petroleum hydrocarbon, interpreted as FILL
2.5Y-4/4	 			- 6 - - 8 -	Silty sand (SM), olive green, predominantly fine to medium grain sand, 5-20% disseminated fines, moist, slight petroleum hydrocarbon odor
5Y-3/2	 	 			Clay (CL), dark olive gray, medium stiff, uniform, moderately to highly plastic, damp
	 			— 12 —	TOTAL DEPTH OF BORING: 11.0 feet bgs (water estimated at 8.5' bgs)
	 			- 14 -	
	 			— 16 –	
	 			- 18 -	
	 	 		- 20 -	
	 	 		- 22 -	
	 			- 24 -	
	 			- 26 -	
	 	 		- 28 -	
ACC Environmental Cons	sulta	ants, Inc	Pro	oject Nun	mber Title: LOG OF BORING TB-14
Oakland, California (510)638-8400 FAX: (510	946 963	21 8-8404	Da	ate: 12/1	1685 24th Street 5/06 Oakland, California



Soil Color Color Code (Munsell Soil Color Chart)	PID (ppm)	SAMPLE ID	SAMPLE INTERVAL	depth below ground surface (ft)	EQUI OPEF LOGO LOCA WOR BORI	PMENT: Geoprobe Hydraulic Sampling Device RATED BY: Environmental Control Associates GED BY: Dave DeMent, Ken Blume ATION: 1685 24th Street, Oakland, CA K DATE: 12/15/06 NG: TB-16
10YR-5/4				— 2 — — 4 —		Silt (ML), brown to dark brown, medium stiff, uniform, moderately plastic, damp Silty sand (SM), yellow brown, poorly graded, medium to fine grain, loose-medium dense, 5-15% fines, uniform, damp
5Y-3/2		 		— 6 — — 8 —		Clay (CL), dark olive gray, medium stiff to soft, uniform, moderately to highly plastic, damp
		 		— 10 -		TOTAL DEPTH OF BORING: 9.0 feet bgs (water estimated at 5.25' bgs)
	 	 		— 12 —		
				- 14 -		
		 		—16 -		
	 	 		- 18 -		
		 		- 20 -		
		 		-22 -		
				- 24 -		
		 		- 26 -		
	 	 		- 28 -		
ACC Environmental Cons 7977 Capwell Drive, S	sulta Suite	ants, Inc. 100	Pro 6	oject Nur 871-001.	nber 00	Title: LOG OF BORING TB-16
Oakland, California 94621 (510)638-8400 FAX: (510)638-8404		Da	ate: 12/1	5/06	1685 24th Street Oakland, California	

APPENDIX 3

		Total V	olatil	e Hydrocar	bons	
Lab #: Client: Project#:	191564 ACC Environmental Co STANDARD	onsultants		Location: Prep: Analysis:		1685 24th Street EPA 5030B EPA 8015B
Matrix: Units: Basis: Diln Fac:	Soil mg/Kg as received 1.000			Batch#: Sampled: Received:		120492 12/15/06 12/18/06
Field ID:	TB11-4.0			Lab ID:		191564-001
туре.	SAMPLE			Analyzed.		12/19/06
Gasoline	Analyte C7-C12	Re	sult 16 H		<u>RL</u> 1.0	
	Surrogate	%REC I	imits			
Trifluoro	toluene (FID) robenzene (FID)	114 6 105 6	2-137 0-148			
Dromorrao		100 0	0 110			
Field ID: Type:	TB12-4.0 SAMPLE			Lab ID: Analyzed:		191564-002 12/19/06
Gagoline	Analyte	Re	sult		RL	
Gaborine		ND			 .c	
Trifluoro	toluene (FID)	<u>%REC L</u>	1mits 2-137			
Bromolluo		101 0	0 1 4 0			
	robenzene (FID)	99 6	0-148			
Field ID: Type:	robenzene (FID) TB12-8.5 SAMPLE	99 6	0-148	Lab ID: Analyzed:		191564-003 12/20/06
Field ID: Type:	robenzene (FID) TB12-8.5 SAMPLE Analyte	101 6 99 6	0-148 sult	Lab ID: Analyzed:	RL 1 (191564-003 12/20/06
Field ID: Type: Gasoline	robenzene (FID) TB12-8.5 SAMPLE Analyte C7-C12	Re	0-148	Lab ID: Analyzed:	RL 1.0	191564-003 12/20/06
Field ID: Type: Gasoline Trifluoro Bromofluo:	robenzene (FID) TB12-8.5 SAMPLE Analyte C7-C12 Surrogate toluene (FID) robenzene (FID)	101 6 99 6 ND Rec 100 6 97 6	0-148 sult <u>imits</u> 2-137 0-148	Lab ID: Analyzed:	RL 1.0	191564-003 12/20/06
Field ID: Type: Gasoline Trifluoro Bromofluo Field ID: Type:	TB12-8.5 SAMPLE Analyte C7-C12 Surrogate toluene (FID) robenzene (FID) TB13-8.5 SAMPLE	101 6 99 6 ND <u>%REC 1</u> 100 6 97 6	0-148 sult imits 2-137 0-148	Lab ID: Analyzed: Lab ID: Analyzed:	RL	191564-003 12/20/06 191564-005 12/20/06
Field ID: Type: Gasoline Trifluoro Bromofluo: Field ID: Type: Gasoline	robenzene (FID) TB12-8.5 SAMPLE Analyte C7-C12 Surrogate toluene (FID) robenzene (FID) TB13-8.5 SAMPLE Analyte C7-C12	101 0 99 6 ND %REC 1 100 6 97 6 97 6	0-148 sult <u>imits</u> 2-137 0-148 sult	Lab ID: Analyzed: Lab ID: Analyzed:	RL 1.0 RL	191564-003 12/20/06 191564-005 12/20/06
Field ID: Type: Gasoline Trifluoro Bromofluo Field ID: Type: Gasoline	TB12-8.5 SAMPLE Analyte C7-C12 Surrogate toluene (FID) robenzene (FID) TB13-8.5 SAMPLE Analyte C7-C12	101 6 99 6 ND %REC 1 100 6 97 6 97 6 ND 8 Ree ND	0-148 sult imits 2-137 0-148 sult	Lab ID: Analyzed: Lab ID: Analyzed:	RL 1.0 RL 0.9	191564-003 12/20/06 191564-005 12/20/06

H= Heavier hydrocarbons contributed to the quantitation ND= Not Detected RL= Reporting Limit $_{\mbox{Page 1 of 2}}$

		Total	Volatil	le Hydrocar	bons	
Lab #: Client: Project#:	191564 ACC Environmental (STANDARD	Consultan	ts	Location: Prep: Analysis:	16 EP EP	85 24th Street A 5030B A 8015B
Matrix: Units: Basis: Diln Fac:	Soil mg/Kg as received 1.000			Batch#: Sampled: Received:	12 12 12	0492 /15/06 /18/06
Field ID: Type:	TB14-4.0 SAMPLE			Lab ID: Analyzed:	19 12	1564-006 /20/06
- 1 -	Analyte		Result		RL	
Gasoline	C7-C12	ND)		0.97	
Trifluoro Bromofluo:	Surrogate toluene (FID) robenzene (FID)	%REC 105 98	Limits 62-137 60-148			
Field ID: Type:	TB15-8.5 SAMPLE			Lab ID: Analyzed:	19 12	1564-007 /20/06
Gagalina	Analyte	ND	Result		RL	
Gasoline		NL			0.95	
Trifluoro Bromofluo:	Surrogate toluene (FID) robenzene (FID)	%REC 101 99	Limits 62-137 60-148			
Type: Lab ID:	BLANK QC368815			Analyzed:	12	/19/06
	Analyte		Result		RL	
Gasoline	C7-C12	ND)		0.20	
	Surrogate	%REC	Limits			
Trifluoro Bromofluo:	toluene (FID) robenzene (FID)	97 99	62-137 60-148			
Total Volatile Hydrocarbons						
-----------------------------	-------------------------------	-----------	------------------	--	--	--
Lab #:	191564	Location:	1685 24th Street			
Client:	ACC Environmental Consultants	Prep:	EPA 5030B			
Project#:	STANDARD	Analysis:	EPA 8015B			
Type:	LCS	Basis:	as received			
Lab ID:	QC368816	Diln Fac:	1.000			
Matrix:	Soil	Batch#:	120492			
Units:	mg/Kg	Analyzed:	12/19/06			

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	10.00	9.864	99	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	115	62-137
Bromofluorobenzene (FID)	103	60-148

Total Volatile Hydrocarbons							
Lab #:	191564	Location:	1685 24th Street				
Client:	ACC Environmental Consultants	Prep:	EPA 5030B				
Project#:	STANDARD	Analysis:	EPA 8015B				
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000				
MSS Lab II	D: 191578-001	Batch#:	120492				
Matrix:	Miscell.	Sampled:	12/18/06				
Units:	mg/Kg	Received:	12/18/06				
Basis:	as received	Analyzed:	12/19/06				

Type:	MS			Lab ID:	QC	368817			
	Analyte	MSS Re	sult	Spike	d	Result	%REC	Limi	its
Gasoline	e C7-C12		0.1061	9.	901	9.281	93	38-1	120
	Surrogate	%REC	Limits						
Trifluon	rotoluene (FID)	110	62-137						
Bromoflu	lorobenzene (FID)	106	60-148						
Туре:	MSD			Lab ID:	QC	368818			
	Analyte		Spiked		Result	%REC	Limits	RPD I	Lim
Gasoline	e C7-C12		9.70	9	8.452	86	38-120	7 2	26

Surrogate	%REC	Limits		
Trifluorotoluene (FID)	103	62-137		
Bromofluorobenzene (FID)	99	60-148		



		Total E	Extracta	ble Hydrocarbo	ns
Lab #: 19 Client: AC Project#: SI	91564 CC Environmental FANDARD	Consultan	lts	Location: Prep: Analysis:	1685 24th Street EPA 3520C EPA 8015B
Matrix: Units: Diln Fac:	Water ug/L 1.000			Sampled: Received:	12/15/06 12/18/06
Field ID: Type: Lab ID: Batch#:	TB11-W SAMPLE 191564-008 120518			Prepared: Analyzed: Cleanup Method:	12/19/06 12/21/06 EPA 3630C
Diesel C10-C	Analyte 224		<u>Result</u> 8,100 H L	<u>RL</u> Y 50	
Motor Oil C2	24-C36	1	3,000 L	300	
Su Hexacosane	ırrogate	% REC 9.2	Limits 65-130		
Field ID: Type: Lab ID: Batch#:	TB12-W SAMPLE 191564-009 120518		Denvelt	Prepared: Analyzed: Cleanup Method:	12/19/06 12/21/06 EPA 3630C
Diesel C10-C	224 224 24-C36		540 H L	Y 50	
Motor orr cz Su Hexacosane	irrogate	% REC 110	Limits 65-130	500	
Field ID: Type: Lab ID: Batch#:	TB13-W SAMPLE 191564-010 120518			Prepared: Analyzed: Cleanup Method:	12/19/06 12/21/06 EPA 3630C
Diesel C10-C	Analyte		Result 720 H T	RL Y 50	
Motor Oil C2	24-C36		370 L	300	
Su Hexacosane	ırrogate	% REC 90	Limits 65-130		

 $\mbox{H=}$ Heavier hydrocarbons contributed to the quantitation L= Lighter hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard ND= Not Detected RL= Reporting Limit

Page 1 of 3



		Total Extra	actable Hydroca	arbons	
Lab #: Client: Project#:	191564 ACC Environmental STANDARD	Consultants	Location: Prep: Analysis:	1685 24th EPA 3520C EPA 8015B	Street
Matrix: Units: Diln Fac:	Water ug/L 1.000		Sampled: Received:	12/15/06 12/18/06	
Field TD:	TB14-W		Prenared:	12/22/06	
Type: Lab ID: Batch#:	SAMPLE 191564-011 120670		Analyzed: Cleanup Meth	12/27/06 hod: EPA 3630C	
	Analyte	Resu	1+	RI.	
Diesel Cl(Motor Oil	C24 C24-C36	4,10	С Н L Y О Н L	50 300	
	Surrogate	% REC Lim	ita		
Hexacosane		69 65-1	130		
Field ID: Type: Lab ID: Batch#:	TB15-W SAMPLE 191564-012 120518		Prepared: Analyzed: Cleanup Meth	12/19/06 12/21/06 hod: EPA 3630C	
	Analyte	Resu		RL	
Motor Oil	C^{24}	9,500	ЈНЦҮ От.	50 300	
MOCOL OIL	021 030	11,000		500	
	Surrogate	%REC Lim	its		
Hexacosane	9	90 65-1	130		
Field ID: Type: Lab ID: Batch#:	TB16-W SAMPLE 191564-013 120518		Prepared: Analyzed: Cleanup Meth	12/19/06 12/21/06 hod: EPA 3630C	
	Analyte	Resu	lt	RL	
Motor Oil	C24-C36	1,601 301	лыт ОГ	300	
10001 011	021 000	500	• -		
	Surrogate	%REC Lim	its		
Hexacosane	2	97 65	130		
Type: Lab ID: Batch#:	BLANK QC368938 120518		Prepared: Analyzed: Cleanup Metl	12/19/06 12/21/06 hod: EPA 3630C	
	Analyte	Resu	lt	RL	
Diesel Cl(Motor Oil	D-C24 C24-C36	ND ND		50 300	
	Surrogate	%REC Lim	its		
Hexacosane	9	108 65-3	130		
H= Heavier	r hydrocarbons cont	ributed to the	e quantitation		

L= Lighter hydrocarbons contributed to the quantitation Y= Sample exhibits chromatographic pattern which does not resemble standard ND= Not Detected

RL= Reporting Limit

Page 2 of 3



Total Extractable Hydrocarbons							
Lab #: Client: Project#:	191564 ACC Environmental STANDARD	Consultants	Location: Prep: Analysis:	1685 24th Street EPA 3520C EPA 8015B			
Matrix: Units: Diln Fac:	Water ug/L 1.000		Sampled: Received:	12/15/06 12/18/06			
Type: Lab ID: Batch#:	BLANK QC369528 120670		Prepared: Analyzed: Cleanup Method:	12/22/06 12/27/06 EPA 3630C			
	Analyte	Result	RL				
Motor Oil	C24-C36	ND ND	300				
Hexacosan	Surrogate	%REC Limits 98 65-130					

H= Heavier hydrocarbons contributed to the quantitation L= Lighter hydrocarbons contributed to the quantitation Y= Sample exhibits chromatographic pattern which does not resemble standard ND= Not Detected RL= Reporting Limit Page 3 of 3

		Total 1	Extracta	ble Hydrocarbo	ns			
Lab #:	191564			Location:	1685 24th Str	reet		
Client:	ACC Environmental C	onsultar	nts	Prep:	EPA 3520C			
Project#:	STANDARD			Analysis:	EPA 8015B			
Matrix:	Water			Batch#:	120518			
Units:	ug/L			Prepared:	12/19/06			
Diln Fac:	1.000			Analyzed:	12/22/06			
Type: Lab ID:	BS QC368939			Cleanup Method:	EPA 3630C			
	Analyte		Spiked	Result	%REC	Limits		
Diesel Cl	0-C24		2,500	2,657	106	61-133		
	Surrogate	%REC	Limits					
Hexacosan	e	93	65-130					
Type: Lab ID:	BSD QC368940			Cleanup Method:	EPA 3630C			
	Analyte		Spiked	Result	%REC	Limits	RPD	Lim
Diesel Cl	0-C24		2,500	2,716	109	61-133	2	31
	Surrogate	%REC	Limits					
Hexacosan	e	105	65-130					

Total Extractable Hydrocarbons							
Lab #:	191564	Location:	1685 24th Street				
Client:	ACC Environmental Consultants	Prep:	EPA 3520C				
Project#:	STANDARD	Analysis:	EPA 8015B				
Type:	LCS	Diln Fac:	1.000				
Lab ID:	QC369529	Batch#:	120670				
Matrix:	Water	Prepared:	12/22/06				
Units:	ug/L	Analyzed:	12/27/06				

Cleanup Method: EPA 3630C

Analyte		Spiked	Result	%REC	Limits
Diesel C10-C24		2,500	2,303	92	61-133
Surrogate	%REC	Limits			
Hexacosane	83	65-130			



	Total Extractable Hydrocarbons					
Lab #: 1 Client: A Project#: S	91564 CC Environmental Co TANDARD	nsultan	ts	Location: Prep: Analysis:	1685 24th Street SHAKER TABLE EPA 8015B	
Matrix: Units: Basis: Batch#:	Soil mg/Kg as received 120496			Sampled: Received: Prepared: Analyzed:	12/15/06 12/18/06 12/19/06 12/20/06	
Field ID:	TB12-8.5			Diln Fac:	1.000	
Type: Lab ID:	SAMPLE 191564-003			Cleanup Method:	EPA 3630C	
Diesel C10- Motor Oil C	Analyte C24 24-C36		Result 7.9 H 29 H L	<u>RL</u> LY 1. 5.	0 0	
S Hexacosane	urrogate	%REC 87	Limits 48-130			
Field ID: Type: Lab ID:	TB13-8.5 SAMPLE 191564-005			Diln Fac: Cleanup Method:	1.000 EPA 3630C	
Diesel C10-	Analyte C24	ND	Result	RL 1.	0	
Motor Oil C	24-C36	ND		5.	0	
Hexacosane	urrogate	%REC 81	48-130			
Field ID: Type: Lab ID:	TB15-8.5 SAMPLE 191564-007			Diln Fac: Cleanup Method:	5.000 EPA 3630C	
Diesel C10-	Analyte C24		Result 25 H Y	RL 5.	0	
Motor Oil C	24-C36		170 H L	25		
Hexacosane	urrogate	8 REC 69	Limits 48-130			
Type: Lab ID:	BLANK QC368841			Diln Fac: Cleanup Method:	1.000 EPA 3630C	
Diesel C10-	Analyte C24	ND	Result		0	
Motor Oil C	24-C36	ND		5.	0	
Hexacosane	urrogate	89	48-130			

H= Heavier hydrocarbons contributed to the quantitation L= Lighter hydrocarbons contributed to the quantitation Y= Sample exhibits chromatographic pattern which does not resemble standard ND= Not Detected RL= Reporting Limit

Page 1 of 1

Total Extractable Hydrocarbons					
Lab #:	191564	Location:	1685 24th Street		
Client:	ACC Environmental Consultants	Prep:	SHAKER TABLE		
Project#:	STANDARD	Analysis:	EPA 8015B		
Type:	LCS	Diln Fac:	1.000		
Lab ID:	QC368842	Batch#:	120496		
Matrix:	Soil	Prepared:	12/19/06		
Units:	mg/Kg	Analyzed:	12/20/06		
Basis:	as received				

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.92	44.91	90	59-133

Surrogate	%REC	Limits
Hexacosane	94	48-130



Total Extractable Hydrocarbons					
Lab #:	191564	Location:	1685 24th Street		
Client:	ACC Environmental Consultants	Prep:	SHAKER TABLE		
Project#:	STANDARD	Analysis:	EPA 8015B		
Field ID:	ZZZZZZZZZZ	Batch#:	120496		
MSS Lab II	D: 191543-001	Sampled:	12/15/06		
Matrix:	Soil	Received:	12/15/06		
Units:	mg/Kg	Prepared:	12/19/06		
Basis:	as received	Analyzed:	12/22/06		
Diln Fac:	5.000				

Type:	MS			Lab ID:	QC368	8843			
	Analyte	MSS Res	ult	Spiked	Re	esult	%REC	Lin	nits
Diesel (C10-C24	49	.89	49.90)	105.4	111	37-	153
	Surrogate	%REC	Limits						
Hexacosa	ane	94	48-130						
Type:	MSD			Lah ID:	0036	8844			
TYPC.	MOD				QCSU	5011			
	Analyte		Spiked		Result	%REC	Limits	RPD	Lim
Diesel (C10-C24		49.86		97.15	95	37-153	8	43
	Surrogate	%REC	Limits						
Hexacosa	ane	89	48-130						



		Total E	xtracta	ble Hydroc	arbons	
Lab #: 1 Client: A Project#: S	91564 CC Environmental Co TANDARD	onsultan	ts	Location: Prep: Analysis:	168 SHAI EPA	5 24th Street KER TABLE 8015B
Matrix: Units: Basis: Batch#:	Soil mg/Kg as received 120496			Sampled: Received: Prepared:	12/ 12/ 12/	15/06 18/06 19/06
Field ID: Type: Lab ID:	TB11-4.0 SAMPLE 191564-001			Diln Fac: Analyzed:	1.0	00 21/06
	Analvte		Result		RL	
Diesel C10-0 Motor Oil C	C24 24-C36		28 H I 22 H I	- Y	1.0 5.0	
S	urrogate	%REC	Limits			
Hexacosane		101	48-130			
Field ID: Type: Lab ID:	TB12-4.0 SAMPLE 191564-002			Diln Fac: Analyzed:	5.0 12/	00 20/06
	Analyte		Result	T 37	RL	
Motor Oil C	24-C36		9.5 f 79 H	i I	25	
		0 - 4				
Hevacosane	urrogate	76	<u>L1M1ts</u>			
Field ID: Type: Lab ID:	TB13-2.0 SAMPLE 191564-004		10 100	Diln Fac: Analyzed:	1.0 12/	00 21/06
	Analyte		Result	_	RL	
Diesel Clu-(C24 24-C36		2.5	Ĺ	1.0	
MOCOL OIL C.	21 030	ND			5.0	
S1	urrogate	%REC	Limits			
Field ID: Type: Lab ID:	TB14-4.0 SAMPLE 191564-006		40-130	Diln Fac: Analyzed:	5.0 12/	00 20/06
	Analyte		Result	7	RL	
Diesel Cl0-0 Motor Oil C	UZ4 24-C36		40 H Y 160 H	Ĺ	5.0 25	
MOCOL OIL C.	21.030		T 00 11		4.5	
S Hexacosane	urrogate	%REC 91	Limits 48-130			

H= Heavier hydrocarbons contributed to the quantitation L= Lighter hydrocarbons contributed to the quantitation Y= Sample exhibits chromatographic pattern which does not resemble standard ND= Not Detected RL= Reporting Limit

Page 1 of 2

	·	Total Extracta	able Hydroca	arbons
Lab #:	191564	_	Location:	1685 24th Street
Client: Project#:	ACC Environmental Co STANDARD	onsultants	Prep: Analysis:	SHAKER TABLE EPA 8015B
Matrix:	Soil		Sampled:	12/15/06
Units:	mg/Kg		Received:	12/18/06
Basis:	as received		Prepared:	12/19/06
Batch#:	120496		-	
Type: Lab ID:	BLANK QC368841		Diln Fac: Analyzed:	1.000 12/20/06
D 1 01	Analyte	Result		RL
Diesel Cl Motor Oil	0-C24 C24-C36	ND ND		1.0 5.0
	Surrogate	%REC Limits		
Hexacosan	e	104 48-130		

H= Heavier hydrocarbons contributed to the quantitation L= Lighter hydrocarbons contributed to the quantitation Y= Sample exhibits chromatographic pattern which does not resemble standard ND= Not Detected RL= Reporting Limit Page 2 of 2

Total Extractable Hydrocarbons					
Lab #:	191564	Location:	1685 24th Street		
Client:	ACC Environmental Consultants	Prep:	SHAKER TABLE		
Project#:	STANDARD	Analysis:	EPA 8015B		
Type:	LCS	Diln Fac:	1.000		
Lab ID:	QC368842	Batch#:	120496		
Matrix:	Soil	Prepared:	12/19/06		
Units:	mg/Kg	Analyzed:	12/20/06		
Basis:	as received				

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.92	44.91	90	59-133

Surrogate	%REC	Limits
Hexacosane	94	48-130



Total Extractable Hydrocarbons					
Lab #:	191564	Location:	1685 24th Street		
Client:	ACC Environmental Consultants	Prep:	SHAKER TABLE		
Project#:	STANDARD	Analysis:	EPA 8015B		
Field ID:	ZZZZZZZZZZ	Batch#:	120496		
MSS Lab II	D: 191543-001	Sampled:	12/15/06		
Matrix:	Soil	Received:	12/15/06		
Units:	mg/Kg	Prepared:	12/19/06		
Basis:	as received	Analyzed:	12/22/06		
Diln Fac:	5.000				

Type:	MS			Lab ID:	QC368	8843			
	Analyte	MSS Res	ult	Spiked	Re	esult	%REC	Lin	nits
Diesel (C10-C24	49	.89	49.90)	105.4	111	37-	153
	Surrogate	%REC	Limits						
Hexacosa	ane	94	48-130						
Type:	MSD			Lah ID:	0036	8844			
TYPC:	MOD				QCSU	5011			
	Analyte		Spiked		Result	%REC	Limits	RPD	Lim
Diesel (C10-C24		49.86		97.15	95	37-153	8	43
	Surrogate	%REC	Limits						
Hexacosa	ane	89	48-130						

Purgeable Halocarbons by GC/MS Lab #: 191564 Location: 1685 24th Street Client: ACC Environmental Consultants Prep: EPA 5030B Project#: STANDARD EPA 8260B Analysis: TB12-W Field ID: Batch#: 120691 Lab ID: 191564-009 Sampled: 12/15/06 Matrix: Received: Water 12/18/06 Units: ug/L Analyzed: 12/27/06 Diln Fac: 1.000

Analyte	Result	RL	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Freon 113	ND	0.5	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	20	
trans-1,2-Dichloroethene	ND	0.5	
1,1-Dichloroethane	ND	0.5	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	1.0	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
cis-1,3-Dichloropropene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Bromoform	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	108	80-130
Toluene-d8	102	80-120
Bromofluorobenzene	105	80-122

Purgeable Halocarbons by GC/MS Lab #: 191564 Location: 1685 24th Street Client: ACC Environmental Consultants Prep: EPA 5030B Project#: STANDARD EPA 8260B Analysis: TB13-W Field ID: Batch#: 120691 Lab ID: 191564-010 Sampled: 12/15/06 Matrix: Received: Water 12/18/06 Units: Analyzed: 12/27/06 ug/L Diln Fac: 1.000

Analyte	Result	RL	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Freon 113	ND	0.5	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	20	
trans-1,2-Dichloroethene	ND	0.5	
1,1-Dichloroethane	ND	0.5	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	1.0	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
cis-1,3-Dichloropropene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Bromoform	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	99	80-130
Toluene-d8	98	80-120
Bromofluorobenzene	106	80-122

Purgeable Halocarbons by GC/MS						
Lab #:	191564		Location:	1685 24th Street		
Client:	ACC Environmental	Consultants	Prep:	EPA 5030B		
Project#:	STANDARD		Analysis:	EPA 8260B		
Field ID:	TB16-W		Batch#:	120691		
Lab ID:	191564-013		Sampled:	12/15/06		
Matrix:	Water		Received:	12/18/06		
Units:	ug/L		Analyzed:	12/27/06		
Diln Fac:	1.000					

Analyte	Result	RL	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Freon 113	ND	0.5	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	20	
trans-1,2-Dichloroethene	ND	0.5	
1,1-Dichloroethane	ND	0.5	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	1.0	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
cis-1,3-Dichloropropene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Bromoform	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	96	80-130
Toluene-d8	98	80-120
Bromofluorobenzene	101	80-122

Trichloroethene

Chlorobenzene

Purgeable Halocarbons by GC/MS							
Lab #:	191564	Location:	1685 24th Street				
Client:	ACC Environmental Consultants	Prep:	EPA 5030B				
Project#:	STANDARD	Analysis:	EPA 8260B				
Matrix:	Water	Batch#:	120691				
Units:	ug/L	Analyzed:	12/27/06				
Diln Fac:	1.000						

Type:	BS			Lab ID:	QC369	9604			
	Analyte		Spiked		Result	%REC	Limits		
1,1-Dich	loroethene		25.00		22.40	90	77-128		
Trichlor	oethene		25.00		22.52	90	80-120		
Chlorobe	nzene		25.00		24.80	99	80-120		
	Surrogate	%REC	Limits						
1,2-Dich	loroethane-d4	98	80-130						
Toluene-	d8	97	80-120						
Bromoflu	orobenzene	101	80-122						
Type:	BSD			Lab ID:	QC369	9605			
	Analyte		Spiked		Result	%REC	Limits	RPD	Lim
1.1-Dich	loroethene		25.00		25.63	103	77-128	13	2.0

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	95	80-130
Toluene-d8	98	80-120
Bromofluorobenzene	100	80-122

24.20

25.61

97

102

80-120 7

3

80-120

20

20

25.00

25.00

Purgeable Halocarbons by GC/MS						
Lab #:	191564		Location:	1685 24th Street		
Client:	ACC Environmental Co	onsultants	Prep:	EPA 5030B		
Project#:	STANDARD		Analysis:	EPA 8260B		
Type:	BLANK		Diln Fac:	1.000		
Lab ID:	QC369606		Batch#:	120691		
Matrix:	Water		Analyzed:	12/27/06		
Units:	ug/L					

Analyte	Result	RL	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Freon 113	ND	0.5	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	20	
trans-1,2-Dichloroethene	ND	0.5	
1,1-Dichloroethane	ND	0.5	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	1.0	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
cis-1,3-Dichloropropene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Bromoform	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	104	80-130
Toluene-d8	100	80-120
Bromofluorobenzene	106	80-122

ND= Not Detected RL= Reporting Limit Page 1 of 1

Gasoline by GC/MS					
Lab #:	191564	Location:	1685_24th Street		
Client:	ACC Environmental Consultants	Prep:	EPA 5030B		
Project#:	STANDARD	Analysis:	EPA 8260B		
Matrix:	Water	Sampled:	12/15/06		
Units:	ug/L	Received:	12/18/06		

Field ID:	TB11-W	Diln Fac:	4.000
Type:	SAMPLE	Analyzed:	12/23/06
Lab ID:	191564-008		

Analyte	Result	RL	Batch#	
Gasoline C7-C12	9,400	200	120679	
MTBE	29	2.0	120680	
Benzene	84	2.0	120680	
Toluene	15	2.0	120680	
Ethylbenzene	27	2.0	120680	
m.p-Xvlenes	31	$\frac{1}{2}$, 0	120680	
o-Xvlene	6.5	$\frac{1}{2}$, 0	120680	

Surrogate	%REC	Limits	Batch#
Dibromofluoromethane	103	80-120	120680
1,2-Dichloroethane-d4	103	80-130	120680
Toluene-d8	102	80-120	120680
Bromofluorobenzene	99	80-122	120680

Field ID: Type:	TB12-W SAMPLE	1	Lab ID: 1915 Diln Fac: 1.00	64-009 0	
A	Analyte	Result	RL	Batch# Analyzed	
Gasoline C7-	-C12	1,600 Z	50	120679 12/23/06	
MTBE		ND	0.50	120691 12/27/06	
Benzene		0.55	0.50	120691 12/27/06	
Toluene		ND	0.50	120691 12/27/06	
Ethylbenzene	2	ND	0.50	120691 12/27/06	
m,p-Xylenes		1.2	0.50	120691 12/27/06	
o-Xylene		ND	0.50	120691 12/27/06	
Su	irrogate	%REC Limits Ba	atch# Analyzed		

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	108	80-120	120691	12/27/06
1,2-Dichloroethane-d4	108	80-130	120691	12/27/06
Toluene-d8	102	80-120	120691	12/27/06
Bromofluorobenzene	105	80-122	120691	12/27/06

Y= Sample exhibits chromatographic pattern which does not resemble standard Z= Sample exhibits unknown single peak or peaks NA= Not Analyzed ND= Not Detected RL= Reporting Limit Page 1 of 5

Lab #:191564Location:1685 24th StreetClient:ACC Environmental ConsultantsPrep:EPA 5030BProject#:STANDARDAnalysis:EPA 8260B		Gasoline	by GC/MS	
Client:ACC Environmental ConsultantsPrep:EPA 5030BProject#:STANDARDAnalysis:EPA 8260B	Lab #:	191564	Location:	1685 24th Street
Project#: STANDARD Analysis: EPA 8260B	Client:	ACC Environmental Consultants	Prep:	EPA 5030B
	Project#:	STANDARD	Analysis:	EPA 8260B
Matrix: Water Sampled: 12/15/06	Matrix:	Water	Sampled:	12/15/06
Units: ug/L Received: 12/18/06	Units:	ug/L	Received:	12/18/06

Field ID: Type:	TB13-W SAMPLE		Lab ID: Diln Fac:	191564-010 1.000	
A	nalyte	Result	RL	Bato	ch# Analyzed
Gasoline C7-	C12	640 Z	50) 1206	579 12/23/06
MTBE		ND	C	.50 1206	591 12/27/06
Benzene		0.8	5 0	.50 1206	591 12/27/06
Toluene		ND	C	.50 1206	591 12/27/06
Ethylbenzene		ND	C	.50 1206	591 12/27/06
m,p-Xylenes		0.5	5 0	.50 1206	591 12/27/06
o-Xylene		ND	C	1206	591 12/27/06

Surrogate	%REC	Limits	atch# Analyzed	s Batch# Analyzed	
Dibromofluoromethane	100	80-120	20691 12/27/06) 120691 12/27/06	
1,2-Dichloroethane-d4	99	80-130	20691 12/27/06) 120691 12/27/06	
Toluene-d8	98	80-120	20691 12/27/06) 120691 12/27/06	
Bromofluorobenzene	106	80-122	20691 12/27/06	2 120691 12/27/06	

Field ID:	TB14-W	Diln Fac:	3.333	
Type:	SAMPLE	Analyzed:	12/23/06	
Lab ID:	191564-011			

Analyte	Result	RL	Batch#	
Gasoline C7-C12	9,400 Z	170	120679	
MTBE	35	1.7	120680	
Benzene	170	1.7	120680	
Toluene	4.4	1.7	120680	
Ethylbenzene	11	1.7	120680	
m,p-Xylenes	5.1	1.7	120680	
o-Xylene	4.3	1.7	120680	

Surrogate	%REC	Limits	Batch#
Dibromofluoromethane	102	80-120	120680
1,2-Dichloroethane-d4	100	80-130	120680
Toluene-d8	100	80-120	120680
Bromofluorobenzene	98	80-122	120680

Y= Sample exhibits chromatographic pattern which does not resemble standard Z= Sample exhibits unknown single peak or peaks NA= Not Analyzed ND= Not Detected RL= Reporting Limit Page 2 of 5

	Gasolin	e by GC/MS	
Lab #:	191564	Location:	1685 24th Street
Client:	ACC Environmental Consultants	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	12/15/06
Units:	ug/L	Received:	12/18/06

Field ID: Type:	TB15-W SAMPLE		Lab ID:	191564-012	
Ana	lyte	Result	RL	Diln Fac	Batch# Analyzed
Gasoline C7-C	212	10,000 Z	130	2.500	120679 12/23/06
MTBE		ND	2.0	4.000	120691 12/27/06
Benzene		22	2.0	4.000	120691 12/27/06
Toluene		3.9	2.0	4.000	120691 12/27/06
Ethylbenzene		310	2.0	4.000	120691 12/27/06
m,p-Xylenes		14	2.0	4.000	120691 12/27/06
o-Xylene		4.3	2.0	4.000	120691 12/27/06
Sur	rogate	%REC Limits	Diln Fac Batch#	Analyzed	

Surrogate	%REC	Limits	Diln Fac	Batch# Analyzed
Dibromofluoromethane	105	80-120	4.000	120691 12/27/06
1,2-Dichloroethane-d4	109	80-130	4.000	120691 12/27/06
Toluene-d8	100	80-120	4.000	120691 12/27/06
Bromofluorobenzene	106	80-122	4.000	120691 12/27/06

Field ID: Type:	TB16-W SAMPLE			Lab II Diln I	D: Fac:	1915 1.00	64-013 0		
Ana	alyte]	Result		RL		Batch#	Analyzed	
Gasoline C7-C1	12		1,500 Y		50		120679	12/23/06	
MTBE		ND			0	.50	120691	12/27/06	
Benzene			1.8		0	.50	120691	12/27/06	
Toluene		ND			0	.50	120691	12/27/06	
Ethylbenzene		ND			0	.50	120691	12/27/06	
m,p-Xylenes		ND			0	.50	120691	12/27/06	
o-Xylene		ND			0	.50	120691	12/27/06	
		-							
Suri	rogate	%REC	Limits	Batch#	Analyzed				
Dibromofluoron	nethane	95	80-120	120691	12/27/06				
1,2-Dichloroet	chane-d4	96	80-130	120691	12/27/06				
Toluene-d8		98	80-120	120691	12/27/06				
Bromofluorober	nzene	101	80-122	120691	12/27/06				

Y= Sample exhibits chromatographic pattern which does not resemble standard Z= Sample exhibits unknown single peak or peaks NA= Not Analyzed ND= Not Detected RL= Reporting Limit Page 3 of 5

		(Gasoline	by GC/MS		
Lab #: 1 Client: A Project#: S	91564 CC Environmental TANDARD	Consultar	its	Location: Prep: Analysis:		1685 24th Street EPA 5030B EPA 8260B
Matrix: Units:	Water ug/L			Sampled: Received:		12/15/06 12/18/06
Type: Lab ID: Diln Fac:	BLANK QC369562 1.000			Batch#: Analyzed:		120679 12/23/06
	Analyte		Result		RL	
Gasoline C7 MTBE	-C12	NI NA)		50	
Benzene Toluene		NA NA				
Ethylbenzen	e	NA				
m,p-Xylenes		NA NA				
0 Xyrene						
S	urrogate	%REC	Limits			
1.2-Dichlor	romethane-d4	116 94	80-120 80-130			
Toluene-d8		112	80-120			
Bromofluoro	benzene	96	80-122			
	DIANK			Pot ab# ·		120690
Type: Lab ID:	BLANK OC369565			Batch#: Analyzed:		120680 12/23/06
Type: Lab ID: Diln Fac:	BLANK QC369565 1.000			Batch#: Analyzed:		120680 12/23/06
Type: Lab ID: Diln Fac:	BLANK QC369565 1.000 Analyte		Result	Batch#: Analyzed:	RL	120680 12/23/06
Type: Lab ID: Diln Fac: Gasoline C7	BLANK QC369565 1.000 Analyte -C12	NA	Result	Batch#: Analyzed:	RL	120680 12/23/06
Type: Lab ID: Diln Fac: Gasoline C7 MTBE	BLANK QC369565 1.000 Analyte -C12	NA NI	Result	Batch#: Analyzed:	RL	120680 12/23/06
Type: Lab ID: Diln Fac: Gasoline C7 MTBE Benzene Toluene	BLANK QC369565 1.000 Analyte -C12	NA NI NI NI	Result	Batch#: Analyzed:	RL 0.1 0.1	120680 12/23/06 50 50
Type: Lab ID: Diln Fac: Gasoline C7 MTBE Benzene Toluene Ethylbenzen	BLANK QC369565 1.000 Analyte -C12	NA NI NI NI NI	Result	Batch#: Analyzed:	RL 0.1 0.1 0.1	120680 12/23/06
Type: Lab ID: Diln Fac: Gasoline C7 MTBE Benzene Toluene Ethylbenzen m.p-Xylenes	BLANK QC369565 1.000 Analyte -C12	NA NI NI NI NI	Result	Batch#: Analyzed:	RL 0.1 0.1 0.1 0.1	120680 12/23/06
Type: Lab ID: Diln Fac: Gasoline C7 MTBE Benzene Toluene Ethylbenzen m,p-Xylenes o-Xylene	BLANK QC369565 1.000 Analyte -C12	NA NI NI NI NI NI	Result	Batch#: Analyzed:	RL 0.1 0.1 0.2 0.2	120680 12/23/06
Type: Lab ID: Diln Fac: Gasoline C7 MTBE Benzene Toluene Ethylbenzen m,p-Xylenes o-Xylene	BLANK QC369565 1.000 Analyte -C12 e ue	NA NI NI NI NI NI NI NI	Result	Batch#: Analyzed:	RL 0.9 0.9 0.9 0.9	120680 12/23/06
Type: Lab ID: Diln Fac: Gasoline C7 MTBE Benzene Toluene Ethylbenzen m,p-Xylenes o-Xylene Dibromofluo 1.2-Dichlor	BLANK OC369565 1.000 Analyte -C12 e ue te te te te te te te te te te te te te	NA NI NI NI NI NI NI NI NI NI 103 102	Result	Batch#: Analyzed:	RL 0.9 0.9 0.9 0.9	120680 12/23/06
Type: Lab ID: Diln Fac: Gasoline C7 MTBE Benzene Toluene Ethylbenzen m,p-Xylenes o-Xylene Dibromofluo 1,2-Dichlor Toluene-d8	BLANK QC369565 1.000 Analyte -C12 e ue urrogate romethane oethane-d4	NA NI NI NI NI NI NI NI NI NI NI NI NI NI	Result	Batch#: Analyzed:	RL 0.9 0.9 0.9 0.9	120680 12/23/06

Y= Sample exhibits chromatographic pattern which does not resemble standard Z= Sample exhibits unknown single peak or peaks NA= Not Analyzed ND= Not Detected RL= Reporting Limit Page 4 of 5

	Gasoline	by GC/MS	
Lab #:	191564	Location:	1685 24th Street
Client:	ACC Environmental Consultants	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	12/15/06
Units:	ug/L	Received:	12/18/06

Type: Lab ID: Diln Fac:	BLANK QC369606 1.000		Batch#: Analyzed:	120691 12/27/06	
A	Analyte	Result		RL	
Gasoline C7-	-C12	NA			
MTBE		ND		0.50	
Benzene		ND		0.50	
Toluene		ND		0.50	
Ethylbenzene	2	ND		0.50	
m,p-Xylenes		ND		0.50	
o-Xylene		ND		0.50	
Su	irrogate	%REC Limits			
Dibromofluor	romethane	104 80-120			
1,2-Dichloro	oethane-d4	104 80-130			
Toluene-d8		100 80-120			
Bromofluorob	oenzene	106 80-122			

Y= Sample exhibits chromatographic pattern which does not resemble standard Z= Sample exhibits unknown single peak or peaks NA= Not Analyzed ND= Not Detected RL= Reporting Limit Page 5 of 5

	Gasoli	ne by GC/MS	
Lab #:	191564	Location:	1685 24th Street
Client:	ACC Environmental Consultants	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	120679
Units:	ug/L	Analyzed:	12/23/06
Diln Fac:	1.000		

Type:

BS

Lab ID:

QC369563

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,174	109	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	113	80-120
1,2-Dichloroethane-d4	97	80-130
Toluene-d8	113	80-120
Bromofluorobenzene	94	80-122

Туре:	BSD			Lab ID:	Ç	<u>)</u> C369564			
	Analyte		Spiked		Result	%REC	Limits	RPD	Lim
Gasoline (C7-C12		2,000		2,121	106	70-130	2	20
	Surrogate	%REC	Limits						
Dibromofl	uoromethane	113	80-120						
1,2-Dichl	oroethane-d4	92	80-130						
Toluene-d	.8	111	80-120						
Bromofluo	robenzene	95	80-122						

	Gasoline	e by GC/MS	
Lab #:	191564	Location:	1685 24th Street
Client:	ACC Environmental Consultants	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	120680
Units:	ug/L	Analyzed:	12/23/06
Diln Fac:	1.000		

Type:

BS

Lab ID:

QC369566

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	23.42	94	72-120
Benzene	25.00	25.52	102	80-120
Toluene	25.00	25.89	104	80-120
Ethylbenzene	25.00	27.36	109	80-120
m,p-Xylenes	50.00	55.47	111	80-121
o-Xylene	25.00	26.37	105	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-120
1,2-Dichloroethane-d4	101	80-130
Toluene-d8	100	80-120
Bromofluorobenzene	100	80-122

Type: BSD	Lab ID:	QC36	9567			
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	24.47	98	72-120	4	20
Benzene	25.00	26.16	105	80-120	2	20
Toluene	25.00	26.64	107	80-120	3	20
Ethylbenzene	25.00	27.66	111	80-120	1	20
m,p-Xylenes	50.00	56.36	113	80-121	2	20
o-Xylene	25.00	26.60	106	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-120
1,2-Dichloroethane-d4	101	80-130
Toluene-d8	101	80-120
Bromofluorobenzene	101	80-122

	Gasoline	e by GC/MS	
Lab #:	191564	Location:	1685 24th Street
Client:	ACC Environmental Consultants	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	120691
Units:	ug/L	Analyzed:	12/27/06
Diln Fac:	1.000		

Type:

BS

QC369604

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	22.05	88	72-120
Benzene	25.00	22.78	91	80-120
Toluene	25.00	24.67	99	80-120
Ethylbenzene	25.00	26.90	108	80-120
m,p-Xylenes	50.00	55.93	112	80-121
o-Xylene	25.00	29.10	116	80-120

Lab ID:

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-120
1,2-Dichloroethane-d4	98	80-130
Toluene-d8	97	80-120
Bromofluorobenzene	101	80-122

Type: BSD	Lab ID:	QC36	9605			
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	23.07	92	72-120	4	20
Benzene	25.00	23.51	94	80-120	3	20
Toluene	25.00	26.00	104	80-120	5	20
Ethylbenzene	25.00	28.10	112	80-120	4	20
m,p-Xylenes	50.00	60.24	120	80-121	7	20
o-Xylene	25.00	28.88	116	80-120	1	20
Gummogata	Spec timita					

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-120
1,2-Dichloroethane-d4	95	80-130
Toluene-d8	98	80-120
Bromofluorobenzene	100	80-122

Purgeable Aromatics by GC/MS					
Lab #:	191564	Location:	1685 24th Street		
Client:	ACC Environmental Consultants	Prep:	EPA 5030B		
Project#:	STANDARD	Analysis:	EPA 8260B		
Field ID:	TB11-4.0	Diln Fac:	0.9615		
Lab ID:	191564-001	Batch#:	120738		
Matrix:	Soil	Sampled:	12/15/06		
Units:	ug/Kg	Received:	12/18/06		
Basis:	as received	Analyzed:	12/27/06		

Analyte	Result	RL	
MTBE	ND	4.8	
Benzene	8.5	4.8	
Toluene	ND	4.8	
Chlorobenzene	ND	4.8	
Ethylbenzene	27	4.8	
m,p-Xylenes	44	4.8	
o-Xylene	ND	4.8	
1,3-Dichlorobenzene	ND	4.8	
1,4-Dichlorobenzene	ND	4.8	
1,2-Dichlorobenzene	ND	4.8	

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	99	76-130
Toluene-d8	102	80-120
Bromofluorobenzene	99	80-126

Purgeable Aromatics by GC/MS				
Lab #:	191564	Location:	1685 24th Street	
Client:	ACC Environmental Consultants	Prep:	EPA 5030B	
Project#:	STANDARD	Analysis:	EPA 8260B	
Field ID:	TB12-4.0	Diln Fac:	0.9434	
Lab ID:	191564-002	Batch#:	120483	
Matrix:	Soil	Sampled:	12/15/06	
Units:	ug/Kg	Received:	12/18/06	
Basis:	as received	Analyzed:	12/19/06	

Analyte	Result	RL	
MTBE	ND	4.7	
Benzene	ND	4.7	
Toluene	ND	4.7	
Chlorobenzene	ND	4.7	
Ethylbenzene	ND	4.7	
m,p-Xylenes	ND	4.7	
o-Xylene	ND	4.7	
1,3-Dichlorobenzene	ND	4.7	
1,4-Dichlorobenzene	ND	4.7	
1,2-Dichlorobenzene	ND	4.7	

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	104	76-130
Toluene-d8	96	80-120
Bromofluorobenzene	110	80-126

Purgeable Aromatics by GC/MS				
Lab #:	191564	Location:	1685 24th Street	
Client:	ACC Environmental Consultants	Prep:	EPA 5030B	
Project#:	STANDARD	Analysis:	EPA 8260B	
Field ID:	TB12-8.5	Diln Fac:	0.9804	
Lab ID:	191564-003	Batch#:	120530	
Matrix:	Soil	Sampled:	12/15/06	
Units:	ug/Kg	Received:	12/18/06	
Basis:	as received	Analyzed:	12/20/06	

Analyte	Result	RL	
MTBE	ND	4.9	
Benzene	ND	4.9	
Toluene	ND	4.9	
Chlorobenzene	ND	4.9	
Ethylbenzene	ND	4.9	
m,p-Xylenes	ND	4.9	
o-Xylene	ND	4.9	
1,3-Dichlorobenzene	ND	4.9	
1,4-Dichlorobenzene	ND	4.9	
1,2-Dichlorobenzene	ND	4.9	

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	101	76-130
Toluene-d8	94	80-120
Bromofluorobenzene	122	80-126

Purgeable Aromatics by GC/MS				
Lab #:	191564	Location:	1685 24th Street	
Client:	ACC Environmental Consultants	Prep:	EPA 5030B	
Project#:	STANDARD	Analysis:	EPA 8260B	
Field ID:	TB13-8.5	Diln Fac:	0.9615	
Lab ID:	191564-005	Batch#:	120483	
Matrix:	Soil	Sampled:	12/15/06	
Units:	ug/Kg	Received:	12/18/06	
Basis:	as received	Analyzed:	12/19/06	

Analyte	Result	RL	
MTBE	ND	4.8	
Benzene	ND	4.8	
Toluene	ND	4.8	
Chlorobenzene	ND	4.8	
Ethylbenzene	ND	4.8	
m,p-Xylenes	ND	4.8	
o-Xylene	ND	4.8	
1,3-Dichlorobenzene	ND	4.8	
1,4-Dichlorobenzene	ND	4.8	
1,2-Dichlorobenzene	ND	4.8	

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	101	76-130
Toluene-d8	99	80-120
Bromofluorobenzene	102	80-126

Purgeable Aromatics by GC/MS				
Lab #:	191564	Location:	1685 24th Street	
Client:	ACC Environmental Consultants	Prep:	EPA 5030B	
Project#:	STANDARD	Analysis:	EPA 8260B	
Field ID:	TB14-4.0	Diln Fac:	0.9259	
Lab ID:	191564-006	Batch#:	120483	
Matrix:	Soil	Sampled:	12/15/06	
Units:	ug/Kg	Received:	12/18/06	
Basis:	as received	Analyzed:	12/19/06	

Analyte	Result	RL	
MTBE	ND	4.6	
Benzene	ND	4.6	
Toluene	ND	4.6	
Chlorobenzene	ND	4.6	
Ethylbenzene	ND	4.6	
m,p-Xylenes	ND	4.6	
o-Xylene	ND	4.6	
1,3-Dichlorobenzene	ND	4.6	
1,4-Dichlorobenzene	ND	4.6	
1,2-Dichlorobenzene	ND	4.6	

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	104	76-130
Toluene-d8	100	80-120
Bromofluorobenzene	103	80-126

Purgeable Aromatics by GC/MS

Lab #:	191564	Location:	1685 24th Street
Client:	ACC Environmental Consultants	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	TB15-8.5	Basis:	as received
Lab ID:	191564-007	Sampled:	12/15/06
Matrix:	Soil	Received:	12/18/06
Units:	ug/Kg		

Analyte	Result	RL	Diln Fac	Batch# Analyzed
MTBE	ND	25	5.000	120483 12/19/06
Benzene	ND	25	5.000	120483 12/19/06
Toluene	ND	25	5.000	120483 12/19/06
Chlorobenzene	ND	25	5.000	120483 12/19/06
Ethylbenzene	460	250	50.00	120530 12/20/06
m,p-Xylenes	30	25	5.000	120483 12/19/06
o-Xylene	ND	25	5.000	120483 12/19/06
1,3-Dichlorobenzene	ND	25	5.000	120483 12/19/06
1,4-Dichlorobenzene	ND	25	5.000	120483 12/19/06
1,2-Dichlorobenzene	ND	25	5.000	120483 12/19/06

Surrogate	%REC	Limits	Diln Fac	Batch# Analyzed
1,2-Dichloroethane-d4	124	76-130	5.000	120483 12/19/06
Toluene-d8	95	80-120	5.000	120483 12/19/06
Bromofluorobenzene	118	80-126	5.000	120483 12/19/06
Trifluorotoluene (MeOH)	90	53-133	50.00	120530 12/20/06

Purgeable Aromatics by GC/MS				
Lab #:	191564	Location:	1685 24th Street	
Client:	ACC Environmental Consultants	Prep:	EPA 5030B	
Project#:	STANDARD	Analysis:	EPA 8260B	
Type:	LCS	Basis:	as received	
Lab ID:	QC368786	Diln Fac:	1.000	
Matrix:	Soil	Batch#:	120483	
Units:	ug/Kg	Analyzed:	12/19/06	

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	21.70	87	69-120
Benzene	25.00	25.08	100	80-120
Toluene	25.00	25.68	103	80-120
Chlorobenzene	25.00	26.97	108	80-120
Ethylbenzene	25.00	27.24	109	80-120
m,p-Xylenes	50.00	53.22	106	80-120
o-Xylene	25.00	25.85	103	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	119	76-130
Toluene-d8	102	80-120
Bromofluorobenzene	102	80-126

Purgeable Aromatics by GC/MS				
Lab #:	191564	Location:	1685 24th Street	
Client:	ACC Environmental Consultants	Prep:	EPA 5030B	
Project#:	STANDARD	Analysis:	EPA 8260B	
Type:	BLANK	Basis:	as received	
Lab ID:	QC368787	Diln Fac:	1.000	
Matrix:	Soil	Batch#:	120483	
Units:	ug/Kg	Analyzed:	12/19/06	

Analyte	Result	RL	
MTBE	ND	5.0	
Benzene	ND	5.0	
Toluene	ND	5.0	
Chlorobenzene	ND	5.0	
Ethylbenzene	ND	5.0	
m,p-Xylenes	ND	5.0	
o-Xylene	ND	5.0	
1,3-Dichlorobenzene	ND	5.0	
1,4-Dichlorobenzene	ND	5.0	
1,2-Dichlorobenzene	ND	5.0	

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	120	76-130
Toluene-d8	98	80-120
Bromofluorobenzene	103	80-126

Purgeable Aromatics by GC/MS				
Lab #:	191564	Location:	1685 24th Street	
Client:	ACC Environmental Consultants	Prep:	EPA 5030B	
Project#:	STANDARD	Analysis:	EPA 8260B	
Field ID:	TB13-8.5	Diln Fac:	0.9615	
MSS Lab II): 191564-005	Batch#:	120483	
Matrix:	Soil	Sampled:	12/15/06	
Units:	ug/Kg	Received:	12/18/06	
Basis:	as received	Analyzed:	12/19/06	

Type:

MS

Lab ID:

QC368890

Analyte	MSS Result	Spiked	Result	%REC	Limits
MTBE	<0.1843	48.08	42.30	88	56-120
Benzene	<0.1325	48.08	42.08	88	67-120
Toluene	<0.5313	48.08	43.02	89	62-120
Chlorobenzene	<0.4972	48.08	41.49	86	59-120
Ethylbenzene	<0.5605	48.08	44.50	93	60-120
m,p-Xylenes	<1.257	96.15	85.28	89	58-120
o-Xylene	<0.4957	48.08	43.56	91	58-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	92	76-130
Toluene-d8	99	80-120
Bromofluorobenzene	100	80-126

Type:

MSD

Lab ID:

QC368891

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	48.08	38.97	81	56-120	8	23
Benzene	48.08	37.91	79	67-120	10	20
Toluene	48.08	38.82	81	62-120	10	20
Chlorobenzene	48.08	36.37	76	59-120	13	21
Ethylbenzene	48.08	39.06	81	60-120	13	21
m,p-Xylenes	96.15	74.98	78	58-120	13	22
o-Xylene	48.08	38.34	80	58-120	13	22

Surrogate	%REC	Limits				
1,2-Dichloroethane-d4	93	76-130				
Toluene-d8	101	80-120				
Bromofluorobenzene	103	80-126				
Purgeable Aromatics by GC/MS						
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Lab #:	191564	Location:	1685 24th Street			
Client:	ACC Environmental Consultants	Prep:	EPA 5030B			
Project#:	STANDARD	Analysis:	EPA 8260B			
Type:	LCS	Basis:	as received			
Lab ID:	QC368985	Diln Fac:	1.000			
Matrix:	Soil	Batch#:	120530			
Units:	ug/Kg	Analyzed:	12/20/06			

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	22.34	89	69-120
Benzene	25.00	23.98	96	80-120
Toluene	25.00	23.92	96	80-120
Chlorobenzene	25.00	24.78	99	80-120
Ethylbenzene	25.00	25.77	103	80-120
m,p-Xylenes	50.00	50.04	100	80-120
o-Xylene	25.00	25.39	102	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	99	76-130
Toluene-d8	99	80-120
Bromofluorobenzene	102	80-126

Purgeable Aromatics by GC/MS						
Lab #:	191564	Location:	1685 24th Street			
Client:	ACC Environmental Consultants	Prep:	EPA 5030B			
Project#:	STANDARD	Analysis:	EPA 8260B			
Type:	BLANK	Basis:	as received			
Lab ID:	QC368986	Diln Fac:	1.000			
Matrix:	Soil	Batch#:	120530			
Units:	ug/Kg	Analyzed:	12/20/06			

Analyte	Result	RL	
MTBE	ND	5.0	
Benzene	ND	5.0	
Toluene	ND	5.0	
Chlorobenzene	ND	5.0	
Ethylbenzene	ND	5.0	
m,p-Xylenes	ND	5.0	
o-Xylene	ND	5.0	
1,3-Dichlorobenzene	ND	5.0	
1,4-Dichlorobenzene	ND	5.0	
1,2-Dichlorobenzene	ND	5.0	

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	99	76-130
Toluene-d8	96	80-120
Bromofluorobenzene	99	80-126

Purgeable Aromatics by GC/MS							
Lab #:	191564	Location:	1685 24th Street				
Client:	ACC Environmental Consultants	Prep:	EPA 5030B				
Project#:	STANDARD	Analysis:	EPA 8260B				
Field ID:	ZZZZZZZZZ	Diln Fac:	0.9434				
MSS Lab II	191549-004	Batch#:	120530				
Matrix:	Miscell.	Sampled:	12/15/06				
Units:	ug/Kg	Received:	12/15/06				
Basis:	as received	Analyzed:	12/20/06				

Type:

MS

Lab ID: QC369101

Analyte	MSS Result	Spiked	Result	%REC	Limits
MTBE	<0.1808	47.17	36.83	78	56-120
Benzene	0.5121	47.17	34.79	73	67-120
Toluene	2.372	47.17	34.61	68	62-120
Chlorobenzene	<0.4878	47.17	30.57	65	59-120
Ethylbenzene	6.211	47.17	37.72	67	60-120
m,p-Xylenes	19.79	94.34	81.03	65	58-120
o-Xylene	13.55	47.17	45.11	67	58-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	76-130
Toluene-d8	98	80-120
Bromofluorobenzene	107	80-126

Type:

MSD

Lab ID:

QC369102

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	47.17	35.67	76	56-120	3	23
Benzene	47.17	34.92	73	67-120	0	20
Toluene	47.17	34.85	69	62-120	1	20
Chlorobenzene	47.17	30.36	64	59-120	1	21
Ethylbenzene	47.17	37.07	65	60-120	2	21
m,p-Xylenes	94.34	78.59	62	58-120	3	22
o-Xylene	47.17	43.99	65	58-120	2	22

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	99	76-130
Toluene-d8	98	80-120
Bromofluorobenzene	106	80-126

Purgeable Aromatics by GC/MS						
Lab #:	191564	Location:	1685 24th Street			
Client:	ACC Environmental Consultants	Prep:	EPA 5030B			
Project#:	STANDARD	Analysis:	EPA 8260B			
Type:	BLANK	Basis:	as received			
Lab ID:	QC369788	Diln Fac:	1.000			
Matrix:	Soil	Batch#:	120738			
Units:	ug/Kg	Analyzed:	12/27/06			

Analyte	Result	RL	
MTBE	ND	5.0	
Benzene	ND	5.0	
Toluene	ND	5.0	
Chlorobenzene	ND	5.0	
Ethylbenzene	ND	5.0	
m,p-Xylenes	ND	5.0	
o-Xylene	ND	5.0	
1,3-Dichlorobenzene	ND	5.0	
1,4-Dichlorobenzene	ND	5.0	
1,2-Dichlorobenzene	ND	5.0	

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	76-130
Toluene-d8	100	80-120
Bromofluorobenzene	103	80-126

	Purgeable Aromatics by GC/MS												
Lab #:	191564	Location:	1685 24th Street										
Client:	ACC Environmental Consultants	Prep:	EPA 5030B										
Project#:	STANDARD	Analysis:	EPA 8260B										
Type:	LCS	Basis:	as received										
Lab ID:	QC369789	Diln Fac:	1.000										
Matrix:	Soil	Batch#:	120738										
Units:	ug/Kg	Analyzed:	12/27/06										

Analyte	Spiked	Result	%REC	Limits
MTBE	50.00	54.18	108	69-120
Benzene	50.00	47.09	94	80-120
Toluene	50.00	49.13	98	80-120
Chlorobenzene	50.00	47.02	94	80-120
Ethylbenzene	50.00	49.76	100	80-120
m,p-Xylenes	100.0	99.83	100	80-120
o-Xylene	50.00	48.60	97	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	103	76-130
Toluene-d8	101	80-120
Bromofluorobenzene	99	80-126

Purgeable Aromatics by GC/MS											
Lab #:	191564	Location:	1685 24th Street								
Client:	ACC Environmental Consultants	Prep:	EPA 5030B								
Project#:	STANDARD	Analysis:	EPA 8260B								
Field ID:	ZZZZZZZZZZ	Diln Fac:	0.8772								
MSS Lab II): 191645-001	Batch#:	120738								
Matrix:	Soil	Sampled:	12/20/06								
Units:	ug/Kg	Received:	12/20/06								
Basis:	as received	Analyzed:	12/28/06								

Type:

MS

Lab ID: QC369790

Analyte	MSS Result	Spiked	Result	%REC	Limits
MTBE	<0.1039	43.86	40.20	92	56-120
Benzene	<0.1723	43.86	34.96	80	67-120
Toluene	<0.2258	43.86	35.42	81	62-120
Chlorobenzene	<0.3205	43.86	32.02	73	59-120
Ethylbenzene	<0.3186	43.86	33.72	77	60-120
m,p-Xylenes	<0.5238	87.72	66.05	75	58-120
o-Xylene	<0.1561	43.86	32.86	75	58-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	106	76-130
Toluene-d8	103	80-120
Bromofluorobenzene	99	80-126

Type:

MSD

Lab ID: QC369791

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	43.86	39.53	90	56-120	2	23
Benzene	43.86	36.45	83	67-120	4	20
Toluene	43.86	37.38	85	62-120	5	20
Chlorobenzene	43.86	33.88	77	59-120	6	21
Ethylbenzene	43.86	35.70	81	60-120	б	21
m,p-Xylenes	87.72	70.50	80	58-120	7	22
o-Xylene	43.86	34.98	80	58-120	б	22

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	105	76-130
Toluene-d8	103	80-120
Bromofluorobenzene	98	80-126

CHAIN OF CUSTODY

Page 1 of 1

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Project	Number: 6871-001.00		Report To: ddement@accenv.com										60B		elC		oil								
Project	Name: 1685 24th Street		Comp	an	y:/	AC	C Environmei	ntal	Co	ทรเ	ultar	nts, Ind	/ 82		g		oto		List)						
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Lab No.	Sample Identity	Sampling Time	g Date e	Soil	Water	vvasie	# of Containers	HCL	H₂SO₄	HNO3	ICE		TPHg, B1		TPHd by		TEPH as		HVOCs 8						
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12-	TB12-4.0		9:40	X			1				X		X				x								1
-3	TB12-8.5	11	9:40	X			1				X		X		X										
-4	TB13-2.0	17	10:10	X			1				X						x]
-5	TB13-8.5	"	10:15	X			1				X		X		X										
-6	TB14-4.0	"	11:10	X			1				X		x				x								
-7	TB15-8.5	"	11:40	x	_		1				x		x		x										
-4	TB11-W		9:25		x		4	X			X		x		x										
-9	TB12-W	11	10:30		x		6	x			X		x		x				x						
<10	TB13-W	10:5	0		×		4	X			X		X		x				x		\square				
- 11	TB14-W	11:4	0		x		4	X			X		X		x										
14	TB15-W	12:0	0		×		4	X	<u> </u>		X		×		×		_		\square	_	$ \rightarrow $	\perp			
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APPENDIX 4



Well	Depth to Groundwater	Depth to Groundwater	Groundwater Elevation	TPH as gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	Lead	MTBE
Name	Date	(feet)	(feet, MSL)	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)
MW-6	12/29/1989	5.02	1.11	1.1	5.4	4.5	ND	ND	ND (1)	-
MW-6	3/9/1993	5.10	1.03	2.3	2.3	2.8	ND	3.1	ND (1)	-
MW-6	7/21/1993	5.23	0.90	.90 0.59 ND		7.6	ND	ND	ND(1)	-
MW-6	11/4/1993	5.25	0.88	1.5	1.5 ND 1.2		ND	0.7	ND(1)	
MW-6	2/1/1994	5.05	1.08	1.9	2.5	3.9	1.6	1.1	ND(1)	—
MW-6	6/2/1994	4.49	1.64	1.3	ND	1	ND	ND	ND(1)	-
MW-6	9/1/1994	4.53	1.60	2.2	ND	1.7	ND	ND	ND(1)	_
MW-6	12/13/1994	4.27	1.86	0.66 (3)	ND	ND	ND	ND	—	-
MW-6	3/8/1995	3.37	2.76	1.0 (3)	ND	ND	ND	ND	1	-
MW-6	6/9/1995	4.40	1.73	1.5	ND	3.3	ND	ND	_	-
MW-6	9/21/1995	4.69	1.44	0.28	ND	ND	ND	ND	-	-
MW-6	12/18/1995	4.42	1.71	_		-	_	-	-	

TABLE 1. SUMMARY OF GROUNDWATER ANALYTICAL DATA FOR MONITORING WELLS Pacific Supply Company, 1735 24th Street, Oakland, California



	Depth to	Depth to	Groundwater	TPH as	Banzene	Toluene	Ethylbenzene	Xvienes	Lead	MTBE
well	Groundwater	Groundwater	Elevation	Easonne	реплене	Tolacie	Lingitothic			
Name	Date	(feet)	(feet, MSL)	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)
MW-4	10/14/1988	8.33	0.74	4.6	1.2	ND		2.2		
MW-4	12/29/1989	8.08	0.99	0.5	0.7	ND	ND	ND	ND (1)	
MW-4	5/28/1992	8.19	0.88	0.27	8,8	1	ND	3.2	0.030 (2)	
MW-4	9/3/1992	8.37	0.70	0.20	4.5	4.4	ND	1.9	0.022 (2)	
MW-4	11/24/1992	8.28	0.79	0.14	3.2	3.2	ND	1.0	0.005 (2)	
MW-4	3/9/1993	7.98	1.09	0.47	10	ND	ND	2.5	ND (1)	-
MW-4	7/21/1993	8.17	0.90	0.28	4.4	5.9	ND	ND	ND(1)	-
MW-4	11/4/1993	8.14	0.93	0.08	1.3	1.6	ND	ND	. ND(1)	
MW-4	2/1/1994	7.79	1.28	0.08	ND	ND	ND	ND	ND(1)	-
MW-4	6/2/1994	7.53	1.54	0.30	3.1	2.9	ND	0.8	ND(1)	
MW-4	9/1/1994	7.69	1.38	0.12	1.6	ND	ND	ND	ND(1)	
MW-4	12/13/1994	6.70	2.37	ND	ND	ND	ND	ND	_	
MW-4	3/8/1995	6.83	2.24	0.09	ND	ND	ND	ND		
MW-4	6/9/1995	7.66	1.41	0.19	ND	ND	ND	ND_		
MW-4	9/21/1995	7.93	1.14	0.09	ND	ND	ND	ND		
MW-4	12/18/1995	6.98	2.09	-	-		-			
MW-4	2/29/1996	6.54	2.53	0.14	1.6	1.0	ND	0.6		
MW-4	7/15/1996	7.74	1.33		-	_	-		_	
MW-4	1/7/1997	6.46	2.61	0.09	1.0	0.5	<0.5	<0.5	-	
MW-4	7/12/1997	7.82	1.25		-	-	-	-		
MW-4	1/26/1998	6.67	2.40	0.09	1.1	0.8	<0.5	<0.5		
MW-4	7/3/1998	7.45	1.62	-	_	-				
MW-4	1/13/1999	7.51	1.56	0.12	1.1	0.62	<0.5	0.57	-	
MW-4	9/27/1999	7.88	1.19	-	-	-	-	_		
MW-4	1/28/2000	6.73	2.34	0.072	<0.5	<0.5	<0.5	<0.5		<5.0

TABLE 1. SUMMARY OF GROUNDWATER ANALYTICAL DATA FOR MONITORING WELLS Pacific Supply Company, 1735 24th Street, Oakland, California

