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Alameda County  
Environmental Health

**ED HEMMAT**  
**3840 SAN PABLO AVENUE**  
**EMERYVILLE, CA 94608**

September 18, 2009

**Ms. Barbara Jakub**  
ACHCSA  
1131 Harbor Parkway, Suite 250  
Oakland, California 94502-6577

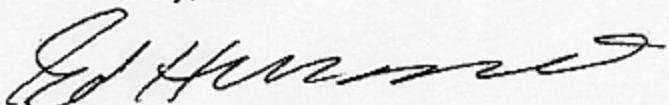
**SUBJECT: 2<sup>ND</sup> SEMI-ANNUAL OF 2009 GROUNDWATER  
MONITORING & SAMPLING**  
5630 San Pablo Avenue, Oakland, CA

Dear Ms. Jakub:

Enclosed, please find a copy of the September 14, 2009 subject Second Semi-Annual of 2009 Groundwater Monitoring & Sampling report prepared by my consultant, Enviro Soil Tech Consultants.

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

Sincerely,

  
ED HEMMAT

**SECOND SEMI-ANNUAL OF 2009  
GROUNDWATER MONITORING & SAMPLING  
FOR THE PROPERTY  
LOCATED AT 5630 SAN PABLO AVENUE  
OAKLAND, CALIFORNIA  
SEPTEMBER 14, 2009**

**PREPARED FOR:  
MR. ED HEMMAT  
3840 SAN PABLO AVENUE  
EMERYVILLE, CALIFORNIA 94608**

**BY:  
ENVIRO SOIL TECH CONSULTATNS  
131 TULLY ROAD  
SAN JOSE, CALIFORNIA 95111**

**ENVIRO SOIL TECH CONSULTANTS**

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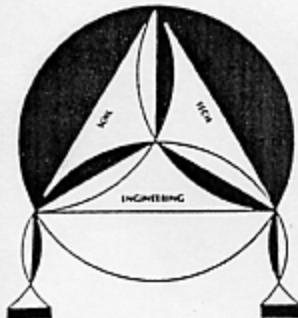
Groundwater Sampling      SOP1

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Accutest Laboratories Report and Chain-of-Custody



# ENVIRO SOIL TECH CONSULTANTS

Environmental & Geotechnical Consultants

131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111

Tel: (408) 297-1500

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September 14, 2009

File No. 12-04-770-GI

**Mr. Ed Hemmat**  
3840 San Pablo Avenue  
Emeryville, California 94608

**SUBJECT: SECOND SEMI-ANNUAL OF 2009 GROUNDWATER MONITORING & SAMPLING FOR THE PROPERTY**  
Located at 5630 San Pablo Avenue, in  
Oakland, California

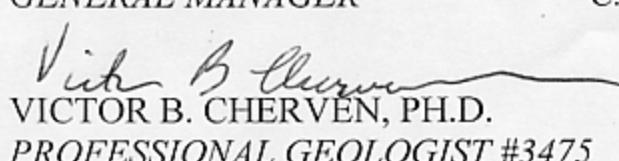
Dear Mr. Hemmat:

This report presents results from the second semi-annual of 2009 groundwater monitoring and sampling event conducted by Enviro Soil Tech Consultants (ESTC) at the subject site (Figure 1). The depth to groundwater was measured in the five monitoring wells and water samples were collected for laboratory analysis on August 20, 2009.

If you have any questions or require additional information, please feel free to contact our office at (408) 297-1500 or via email at [info@envirosoiltech.com](mailto:info@envirosoiltech.com).

Sincerely,

  
**FRANK HAMEDI-FARD**  
**GENERAL MANAGER**

  
**VICTOR B. CHERVEN, PH.D.**  
**PROFESSIONAL GEOLOGIST #3475**

**ENVIRO SOIL TECH CONSULTANTS**

  
**LAWRENCE KOO, P.E.**  
**C. E. #34928**



## SITE DESCRIPTION

The site is located on the southeast corner of San Pablo Avenue and Aileen Street in Oakland, California (Figure 1), and is currently being used as a storage site. The site contains one single story building. Underground gasoline storage tanks have not been removed from the site, and are located beneath the sidewalk along San Pablo Avenue. The subject property is located in an area of commercial development.

## SCOPE OF PRESENT WORK

The scope of work included in the groundwater monitoring program includes:

- Measure water depths in wells STMW-1 to STMW-5 and note whether petroleum sheen and/or odor are present.
- Purge the monitoring wells of standing water.
- Collect water samples from each well.
- Submit samples to a state-certified laboratory for chemical analyses of Total Petroleum Hydrocarbons as gasoline and diesel (TPHg and TPHd); Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX); Methyl Tertiary Butyl Ether (MTBE) and other fuel oxygenates.
- Review results and prepare a report of the investigation.

## FIELD ACTIVITIES

ESTC's staff monitored the five monitoring wells and collected water samples on August 20. Depth measurements and other observations were recorded on the field monitoring sheet. After the depth to groundwater was measured, approximately four to

five well volumes of water were bailed from each well in order to purge standing water from the casing and assure that water samples would be representative of surrounding groundwater. The purged water was stored on site in a plastic storage tank. The monitoring data are shown in Tables 1 and 2.

Water samples were collected after purging. A stainless steel bailer was used for sample collection. Water sampling equipment was decontaminated before and after each well was sampled using Tri-sodium Phosphate (TSP) and water wash, followed by double rinsing. The samples were preserved in 40-milliliter glass vials sealed with Teflon-lined screw caps, labeled and placed in a cold ice chest and then transported to Accutest of Northern California, a state-certified laboratory for analysis, with proper chain-of-custody. The sampling was conducted in accordance with ESTC's Standard Operation Procedures (Appendix "D") and ACHCSA-EHS guidelines.

## **DEPTH TO GROUNDWATER AND FLOW DIRECTION**

The depth to groundwater is now about 9 feet below surface grade. The last time the site was monitored (July 2008), the water table was about 6 inches higher, except in STMW-4. The depth in that well was nearly 2 feet shallower at that time.

In previous correspondence (September 2008), Alameda County Environmental Health Services indicated that the south or southeast groundwater flow direction that we had interpreted in prior monitoring reports is not in accord with the regional groundwater flow pattern. We have considered this in light of the depth measurements that we made in August, and Figure 2 shows our interpretation of the recent flow direction. Note that the elevation of the static water level is lowest in well STMW-3 (31.95 feet). In all other wells, the elevation is above 32 feet, which implies that the flow direction is likely to be

toward STMW-3 from the northeast (STMW-1 and STMW-2), northwest (STMW-5), and west (STMW-4). Convergence of flow from these three directions takes place slightly west of STMW-3, and from there groundwater is channeled to the southeast along the axis of a trough in the water table. It would not be possible to contour the data in a markedly different direction. Hence, it appears that the local flow direction is indeed different from the regional flow direction.

## **ANALYTICAL RESULTS**

The laboratory results are summarized in Table 2 (Appendix "A"), and the laboratory report is contained in Appendix "F". Data for all previous monitoring events are shown in Table 1.

Concentrations are essentially unchanged since July 2008. Benzene, Ethylbenzene, and MTBE were reported just above the detection limit in STMW-4, but the concentrations are so low as to be within the range of laboratory or sampling error. The samples from the other four wells were statistically indistinguishable from the July 2008 concentrations. The concentrations are contoured in Figures 3 through 5. The shape and location of the contaminant plume is essentially the same as in the previous few quarters.

## **RECOMMENDATIONS**

ACHCSA-EHS requested a work plan for additional investigation in September 2008, and ESTC submitted the requested plan in April. As of this date, we have not received approval from the regulatory agency and have not performed the work. Until further notice is received, we recommend continuing the monitoring program on a semi-annual basis.

A copy of this report should be forwarded to ACHCSA-EHS and the Regional Water Quality Control Board for their review and comments.

## LIMITATIONS

This report and the associated work have been provided in accordance with the general principles and practices currently employed in the environmental consulting profession. The contents of this report reflect the conditions of the site at this particular time. The findings of this report are based on:

- 1) The observations of field personnel.
- 2) The results of laboratory analyses performed by a state-certified laboratory.

It is possible that variations in the soil and groundwater could exist beyond the points explored in this investigation. Also, changes in groundwater conditions of a property can occur with the passage of time due to variations in rainfall, temperature, regional water usage and other natural processes or the works of man on this property or adjacent property.

The services that ESTC provided have been in accordance with generally accepted environmental professional practices for the nature and conditions of work completed in the same or similar localities at the time the work was performed. The contents of this report reflect the conditions of the subject site at this particular time. No other warranties, expressed or implied as to the professional advice provided are made.

File No. 12-04-770-GI  
September 14, 2009

## **A P P E N D I X "A"**

### **TABLES**

**ENVIRO SOIL TECH CONSULTANTS**

**TABLE 1**  
**GROUNDWATER MONITORING DATA (feet)**  
**AND ANALYTICAL RESULTS ( $\mu\text{g/L}$ )**

Date	Well No./Elevation	Depth of Well	Depth to Perf.	Depth to Water	GW Elev.	Well Observation	TPHg	TPHd	B	T	E	X	MTBE	PCE	TBA	TCE	Other VOCs By 82060B
5/19/05a	STMW-1 (41.92)*	20	5-20	6.68★	35.24	No sheen or odor	220	ND <50b	11	18	3.1	20	ND <1	NA	NA	NA	Not Analyzed
4/06/06				4.16★	37.76	No sheen or odor	ND <50	ND <50	ND <0.5	ND <0.5	ND <0.5	ND <0.5	1.7	ND <0.5	ND <10	ND <0.5	None Detected<0.5
2/05/07				8.38★	33.54	No sheen or odor	ND <50	ND <50	ND <0.5	ND <0.5	ND <0.5	ND <0.5	5.4	ND <0.5	ND <10	ND <0.5	None Detected<0.5
10/15/07				6.44★	35.48	No sheen or odor	ND <50	ND <52	ND <0.5	ND <0.5	ND <0.5	ND <0.5	4.1	ND <0.5	ND <10	ND <0.5	None Detected<0.5
1/18/08				5.50★	34.42	No sheen or odor	ND <50	ND <50	ND <0.5	0.64	ND <0.5	ND <0.5	2.7	ND <0.5	ND <10	ND <0.5	None Detected<0.5
4/11/08				6.90★	35.02	No sheen or odor	ND <50	ND <52	ND <0.5	ND <0.5	ND <0.5	ND <1	ND <1	ND <0.5	ND <10	ND <0.5	None Detected<0.5
7/14/08				8.46★	33.46	No sheen or odor	ND <50	ND <50	ND <0.5	ND <0.5	ND <0.5	ND <1	1.3	ND <0.5	ND <10	ND <0.5	None Detected<0.5
8/20/09				9.00★	32.92	No sheen or odor	ND <50	ND <94	ND <1	ND <1	ND <1	ND <2	1.8	ND <1	ND <10	ND <1	None Detected<1
5/19/05a	STMW-2 (41.74)*	20	5.20	7.32★	34.42	No sheen or odor	170	ND <50b	11	18	3.5	21	ND <1	NA	NA	NA	Not Analyzed
4/06/06				4.36★	37.38	Rainbow sheen No odor	ND <50	ND <50	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <1	ND <0.5	ND <10	ND <0.5	None Detected<0.5
2/05/07				8.06★	33.68	No sheen or odor	ND <50	ND <50	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <1	ND <0.5	ND <10	ND <0.5	None Detected<0.5
10/15/07				7.23★	34.51	No sheen or odor	ND <50	ND <58	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <1	ND <0.5	ND <10	ND <0.5	None Detected<0.5
1/18/08				6.32★	35.42	No sheen or odor	ND <50	ND <50	ND <0.5	1	ND <0.5	ND <0.5	<1	ND <0.5	ND <10	ND <0.5	None Detected<0.5
4/11/08				7.82★	33.92	Rainbow sheen No odor	ND <50	ND <50j	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <1	ND <0.5	ND <10	ND <0.5	None Detected<0.5
7/14/08				8.84★	32.90	No sheen or odor	ND <50	ND <51	ND <0.5	ND <0.5	ND <0.5	ND <1	ND <1	ND <0.5	ND <10	ND <0.5	None Detected<0.5
8/20/09				9.46★	32.28	No sheen or odor	ND <50	ND <94	ND <1	ND <1	ND <1	ND <2	ND <1	ND <1	ND <10	ND <1	None Detected<1

**TABLE 1 CONT'D**  
**GROUNDWATER MONITORING DATA (feet)**  
**AND ANALYTICAL RESULTS ( $\mu\text{g/L}$ )**

Date	Well No./Elevation	Depth of Well	Depth to Perf.	Depth to Water	GW Elev.	Well Observation	TPHg	TPHd	B	T	E	X	MTBE	PCE	TBA	TCE	Other VOCs By 8206B	
5/19/05a	STMW-3 (42.01)*	20	5-20	8.26★	33.75	No sheen or odor	470	ND <50b	13	18	4.9	22	ND <1	NA	NA	NA	Not Analyzed	
4/06/06				6.02★	35.99	Rainbow sheen No odor	2200	ND <50c	ND <0.5	ND <0.5	ND <0.5	ND <0.5	1	ND <0.5	ND <10	ND <0.5	None Detected<0.5	
2/05/07				9.32★	32.69	No sheen or odor	ND <50	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <1	ND <0.5	ND <10	ND <0.5	None Detected<0.5	
10/15/07				8.20★	33.81	No sheen or odor	ND <50	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <1	ND <0.5	ND <10	ND <0.5	None Detected<0.5	
1/18/08h				7.70★	34.31	Rainbow sheen No odor	820f	390g	ND <2.5	ND <2.5	ND <2.5	ND <2.5	<5	ND <2.5	ND <50	ND <2.5	Isopropylbenzene 8.6	
4/11/08				8.74★	33.27	Rainbow sheen No odor	ND <50	ND <48	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <1	ND <0.5	ND <10	ND <0.5	None Detected<0.5	
7/14/08				9.36★	32.65	Rainbow sheen No odor	ND <50	ND <50	ND <0.5	ND <0.5	ND <0.5	ND <0.5	<1	1.4	ND <0.5	ND <10	ND <0.5	None Detected<0.5
8/20/09				10.06★	31.95	No sheen or odor	50.8	ND <91	ND <1	ND <1	ND <1	ND <2	2.3	ND <1	ND <10	ND <1	Di-Isopropyl Ether .095m	
5/19/05a	STMW-4 (42.48)*	20	5-20	8.10★	34.38	Rainbow sheen Light petroleum odor	2700	ND <500b	3.2	ND <1	1.6	5	ND <2	ND <1	ND <20	ND <1	Isopropylbenzene 36 n-Propylbenzene 30	
4/06/06				6.32★	36.16	Rainbow sheen Petroleum odor	1800	ND <50c	1.5	1.4	1.1	3.5	ND <2	ND <1	ND <20	ND <1	Isopropylbenzene 41 n-Propylbenzene 23	
2/05/07				9.24★	33.24	Rainbow sheen Petroleum odor	2500	ND <50d	5	ND <1	1.5	3.5	ND <2	ND <1	ND <20	ND <1	Isopropylbenzene 45 n-Propylbenzene 28	
10/15/07				8.06★	34.42	No sheen or odor	510	ND <50e	1.5	0.53	0.54	1.3	ND <1	ND <0.5	ND <10	ND <0.5	Isopropylbenzene 19 n-Propylbenzene 9.5	
1/18/08				7.64★	34.84	No sheen or odor	150f	57i	1.3	0.56	ND <0.5	0.58	ND <1	ND <0.5	ND <10	ND <0.5	Isopropylbenzene 2.6	
4/11/08				8.78★	33.70	Rainbow sheen No odor	1200f	650k	ND <0.5	ND <0.5	ND <0.5	1.3	ND <1	ND <0.5	ND <10	ND <0.5	Isopropylbenzene 22 n-Propylbenzene 8.4	
7/14/08				7.90★	34.58	Rainbow sheen No odor	1000f	490l	ND <0.5	ND <0.5	ND <0.5	ND <1	ND <1	ND <0.5	ND <10	ND <0.5	Isopropylbenzene 32 n-Propylbenzene 12 sec-Butylbenzene 6.9	

**TABLE 1 CONT'D**  
**GROUNDWATER MONITORING DATA (feet)**  
**AND ANALYTICAL RESULTS ( $\mu\text{g/L}$ )**

Date	Well No./Elevation	Depth of Well	Depth to Perf.	Depth to Water	GW Elev.	Well Observation	TPHg	TPHd	B	T	E	X	MTBE	PCE	TBA	TCE	Other VOCs By 8206B
8/20/09	STMW-4 (42.48)*	20	5-20	9.70★	32.78	Rainbow sheen Sewerage odor	355	105n	0.65m	ND <1	0.4m	ND <2	1.2	ND <1	ND <10	ND <1	n-Butylbenzene 2m sec-Butylbenzene 5.5 tert-Butylbenzene 0.76m Di-Isopropyl Ether 2.4m Isopropylbenzene 21.2 p-Isopropylbenzene 0.92m n-Propylbenzene 8.1
5/19/05a	STMW-5 (40.84)*	20	5-20	6.58★	34.26	Light rainbow sheen No odor	1500	ND <50b	16	ND <0.5	0.52	ND <0.5	ND <1	ND <0.5	ND <10	ND <0.5	Isopropylbenzene 13
4/06/06				4.74★	36.10	Rainbow sheen No odor	640	ND <50c	15	ND <0.5	0.91	ND <0.5	ND <1	ND <0.5	ND <10	ND <0.5	Isopropylbenzene 7.1
2/05/07				7.96★	32.88	No sheen or odor	600	ND <50d	4.5	ND <0.5	ND <0.5	ND <1	ND <0.5	ND <10	ND <0.5	Isopropylbenzene 8.4	
10/15/07				6.72★	34.12	No sheen or odor	270	ND <50e	0.83	ND <0.5	ND <0.5	ND <1	ND <0.5	ND <10	ND <0.5	None Detected<0.5	
1/18/08h				5.52★	35.32	Rainbow sheen Petroleum odor	1400f	3300g	2.8	3.2	ND <2.5	4	ND <5	ND <2.5	ND <50	ND <2.5	Isopropylbenzene 44 n-Propylbenzene 27
4/11/08				7.06★	33.78	No sheen or odor	140f	ND <50	ND <0.5	ND <0.5	ND <1	ND <1	ND <0.5	ND <10	ND <0.5	None Detected<0.5	
7/29/08				8.29★	32.55	No sheen or odor	140	ND <48	ND <0.5	ND <0.5	ND <1	ND <1	ND <0.5	ND <10	ND <0.5	None Detected<0.5	
8/10/09				8.72★	32.12	No sheen or odor	251	ND <94	0.6m	ND <1	ND <2	ND <1	ND <1	ND <10	ND <1	sec-Butylbenzene 1.1m Di-Isopropyl Ether 3.5m Isopropylbenzene 2.1 n-Propylbenzene 0.58m	

**TPHg** - Total Petroleum Hydrocarbons as gasoline

**BTEX** - Benzene, Toluene, Ethylbenzene, Total Xylenes

**PCE** - Tetrachloroethene

**TCE** - Trichloroethene

**GW Elev.** - Groundwater Elevation

**NA** - Not Analyzed

**TPHd** - Total Petroleum Hydrocarbons as diesel

**MTBE** - Methyl Tertiary Butyl Ether

**TBA** - tert-Butanol

**VOCs** - Volatile Organic Compounds

**Perf.** - Perforation

**ND** - Not Detected (Below Laboratory Reporting Limit)

**TABLE 1 CONT'D**  
**GROUNDWATER MONITORING DATA (feet)**  
**AND ANALYTICAL RESULTS ( $\mu\text{g/L}$ )**

\* Groundwater was surveyed based on California Coordinate System 1983, Zone 3. The benchmarks are NGVD 1929 Datum

★ Well screens are submerged

☆ Well screens are not submerged

a Water samples for TPHg, BTEX and MTBE analyses were collected on May 23, 2005

b Higher boiling gasoline compounds in the diesel range

c Hydrocarbon (C8-C36) (C8-C18). No diesel pattern present

d Hydrocarbon (C9-C16). No diesel pattern present

e Higher boiling gasoline compounds (C9-C16). No diesel pattern

f A typical pattern

g Not a typical pattern (C9-C16)

h Sample was diluted due to high concentration of non-target compounds

i Not a typical pattern. Higher boiling gasoline compounds in the diesel range (C9-C16)

j Reporting limits raised due to insufficient sample volume (high level of sediment)

k Not a typical pattern. Pattern resembles Mineral Spirits (C10-C16)

l Not a typical pattern. Higher boiling gasoline compounds in the diesel range (C10-C16)

m Indicates an estimated value

n Higher boiling gasoline compounds in the diesel range (C10-C16)

**TABLE 2**  
**RECENT GROUNDWATER MONITORING DATA (feet)**  
**AND ANALYTICAL RESULTS ( $\mu\text{g/L}$ )**

Date	Well No./Elevation	Depth of Well	Depth to Perf.	Depth to Water	GW Elev.	Well Observation	TPHg	TPHd	B	T	E	X	MTBE	PCE	TBA	TCE	Other VOCs By 8206B
8/20/09	STMW-1 (41.92)*	20	5-20	9.00★	32.92	No sheen or odor	ND <50	ND <94	ND <1	ND <1	ND <1	ND <2	1.8	ND <1	ND <10	ND <1	None Detected<1
8/20/09	STMW-2 (41.74)*	20	5.20	9.46★	32.28	No sheen or odor	ND <50	ND <94	ND <1	ND <1	ND <1	ND <2	ND <1	ND <1	ND <10	ND <1	None Detected<1
8/20/09	STMW-3 (42.01)*	20	5-20	10.06★	31.95	Rainbow sheen No odor	50.8	ND <94	ND <1	ND <1	ND <1	ND <2	2.3	ND <1	ND <10	ND <1	Di-Isopropyl Ether 0.95m
8/20/09	STMW-4 (42.48)*	20	5-20	9.70★	32.78	Rainbow sheen Sewerage odor	355	105n	0.65m	ND <1	0.4m	ND <2	1.2	ND <1	ND <10	ND <1	n-Butylbenzene 2m sec-Butylbenzene 5.5 tert-Butylbenzene 0.76m Di-Isopropyl Ether 2.4m Isopropylbenzene 21.2 p-Isopropylbenzene 0.92m n-propylbenzene 8.1
8/20/09	STMW-5 (40.84)*	20	5-20	8.72★	32.12	No sheen or odor	251	ND <94	0.6m	ND <1	ND <1	ND <2	ND <1	ND <1	ND <10	ND <1	sec-Butylbenzene 1.1m Di-Isopropyl Ether 3.5m Isopropylbenzene 2.1 n-Propylbenzene 0.58m

**TPHg** - Total Petroleum Hydrocarbons as gasoline

**BTEX** - Benzene, Toluene, Ethylbenzene, Total Xylenes

**PCE** - Tetrachloroethene

**TCE** - Trichloroethene

**GW Elev.** - Groundwater Elevation

**ND** - Not Detected (Below Laboratory Reporting Limit)

\* Groundwater was surveyed based on California Coordinate System 1983, Zone 3. The benchmarks are NGVD 1929 Datum

★ Well screens are submerged

m Indicates an estimated value

n Higher boiling gasoline compounds in the diesel range (C10-C16)

**TPHd** - Total Petroleum Hydrocarbons as diesel

**MTBE** - Methyl Tertiary Butyl Ether

**TBA** - tert-Butanol

**VOCs** - Volatile Organic Compounds

**Perf.** - Perforation

★ Well screens are not submerged

**TABLE 3**  
**SUMMARY OF MONITORING WELLS DATA**  
**IN FEET**

Well No.	Well Diameter (inch)	Depth of Well	Depth of Perforation	Depth of Blank	Depth of Cement	Depth of Bentonite	Depth of Sand
STMW-1	2	20	5-20	0-5	0-3½	3½-4	4-20
STMW-2	2	20	5-20	0-5	0-3½	3½-4	4-20
STMW-3	2	20	5-20	0-5	0-3½	3½-4	4-20
STMW-4	2	20	5-20	0-5	0-3½	3½-4	4-20
STMW-5	2	20	5-20	0-5	0-3½	3½-4	4-20

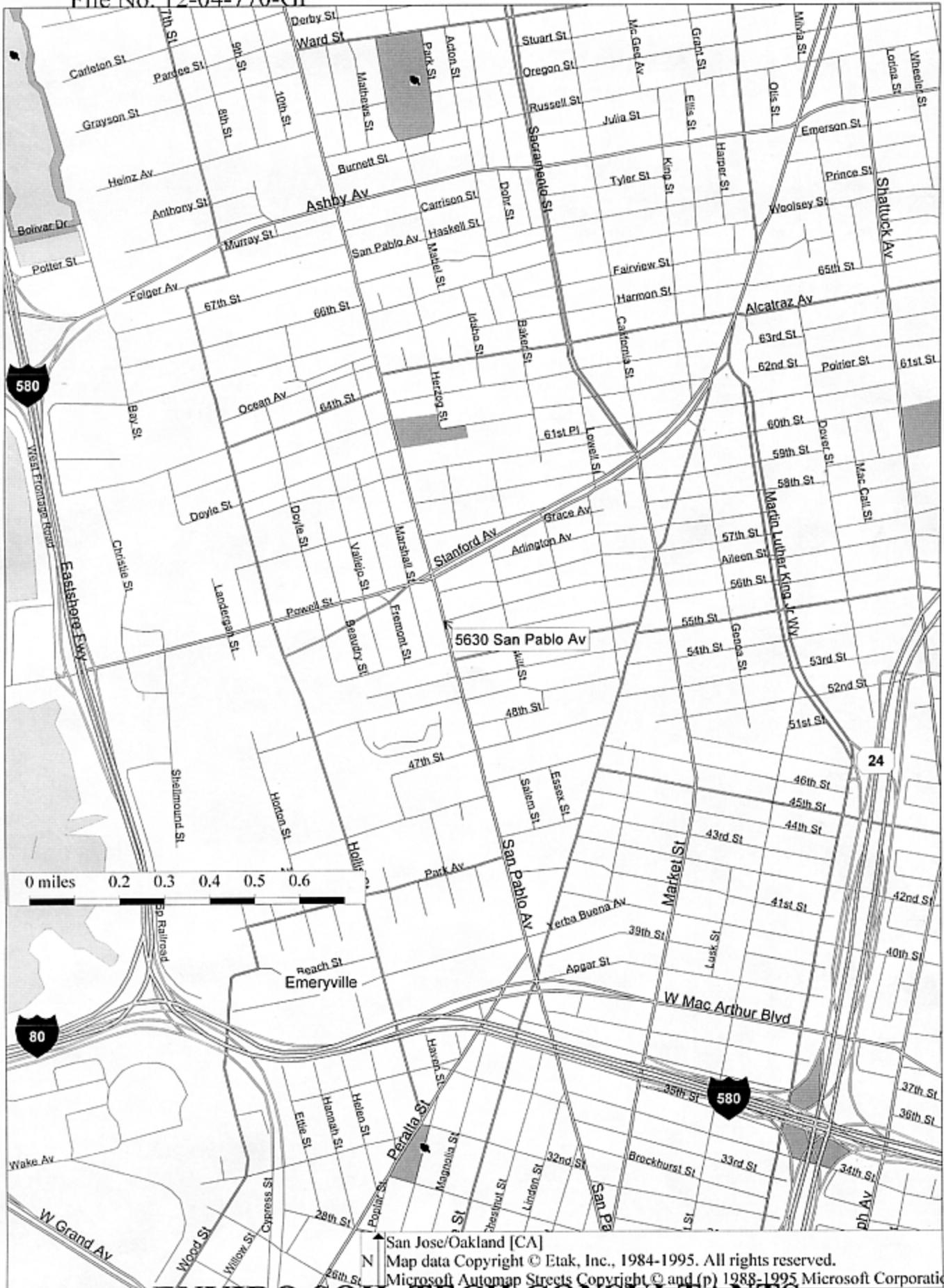
File No. 12-04-770-GI  
September 14, 2009

## **A P P E N D I X "B"**

### **FIGURES**

**ENVIRO SOIL TECH CONSULTANTS**

File No. 12-04-770-GI



San Jose/Oakland [CA]

Map data Copyright © Etak, Inc., 1984-1995. All rights reserved.

Microsoft Automap Streets Copyright © and (p) 1988-1995 Microsoft Corporation

**ENVIRO SOIL TECH CONSULTANTS**

Figure 1

F1

Enviro Soil Tech  
Consultants  
131 Tully Road  
San Jose, CA 95112

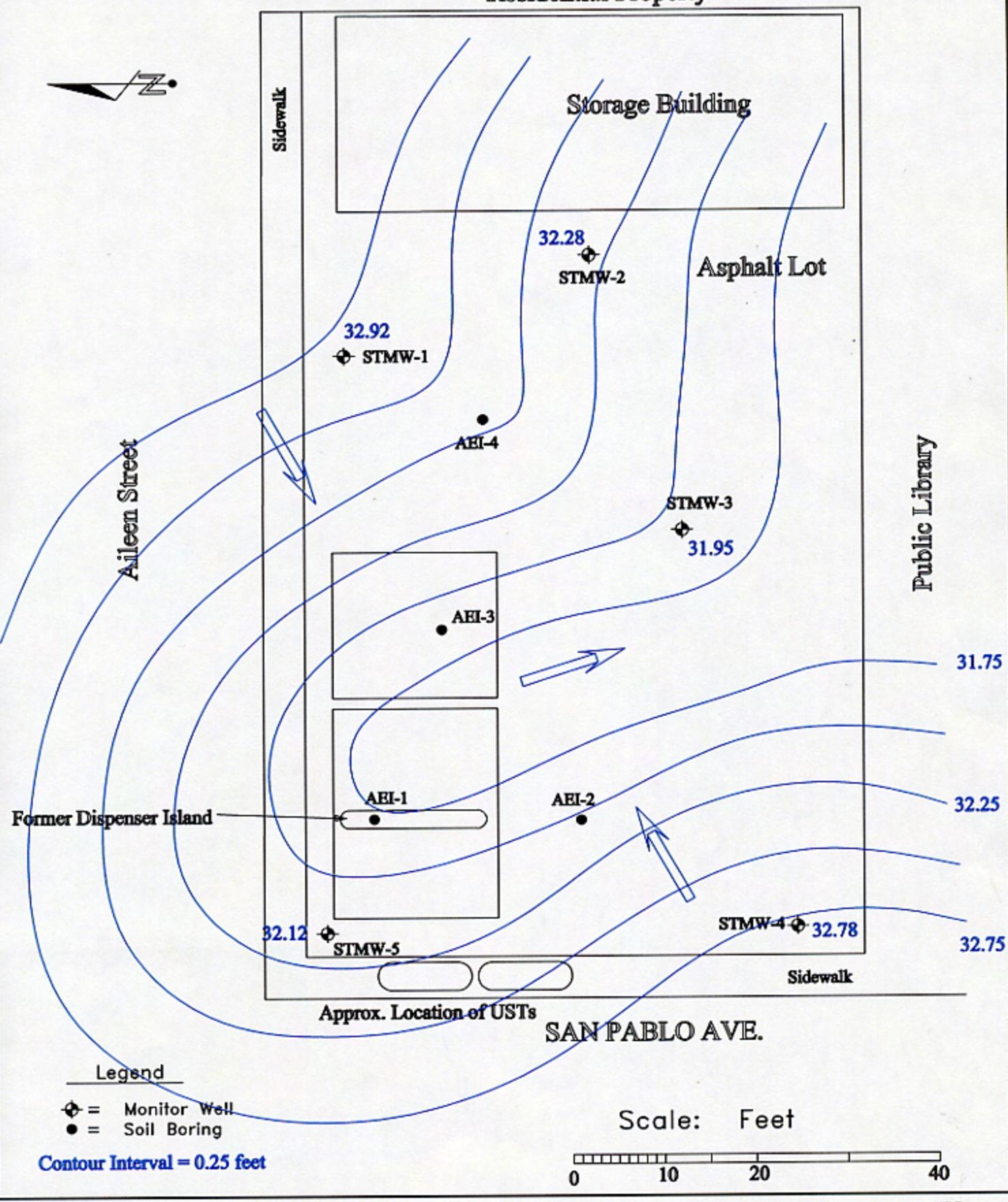
PROJECT  
5630 San Pablo Avenue  
Oakland, California  
PROJECT # 12-04-770-GI  
DATE: 9/10/2009

Figure

2

Groundwater Elevation  
August 20, 2009

Residential Property



Contour Interval = 0.25 feet

0 10 20 30 40

F2

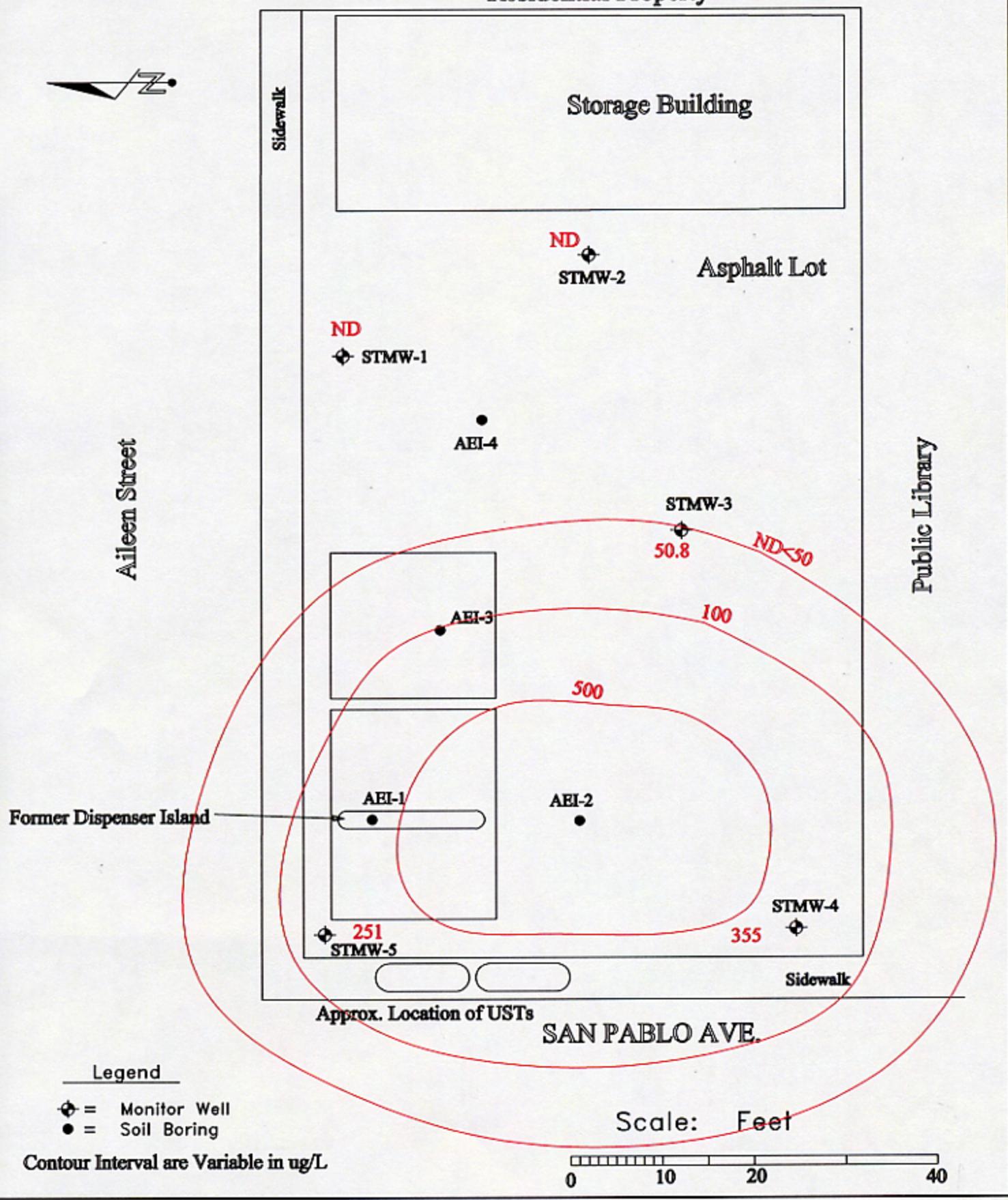
**Enviro Soil Tech  
Consultants**  
131 Tully Road  
San Jose, CA 95112

**PROJECT**  
5630 San Pablo Avenue  
Oakland, California  
**PROJECT #** 12-04-770-GI  
**DATE:** 9/10/2009

**Figure** 3

Isocontours of TPH-g in  
Groundwater, 8/20/2009

Residential Property



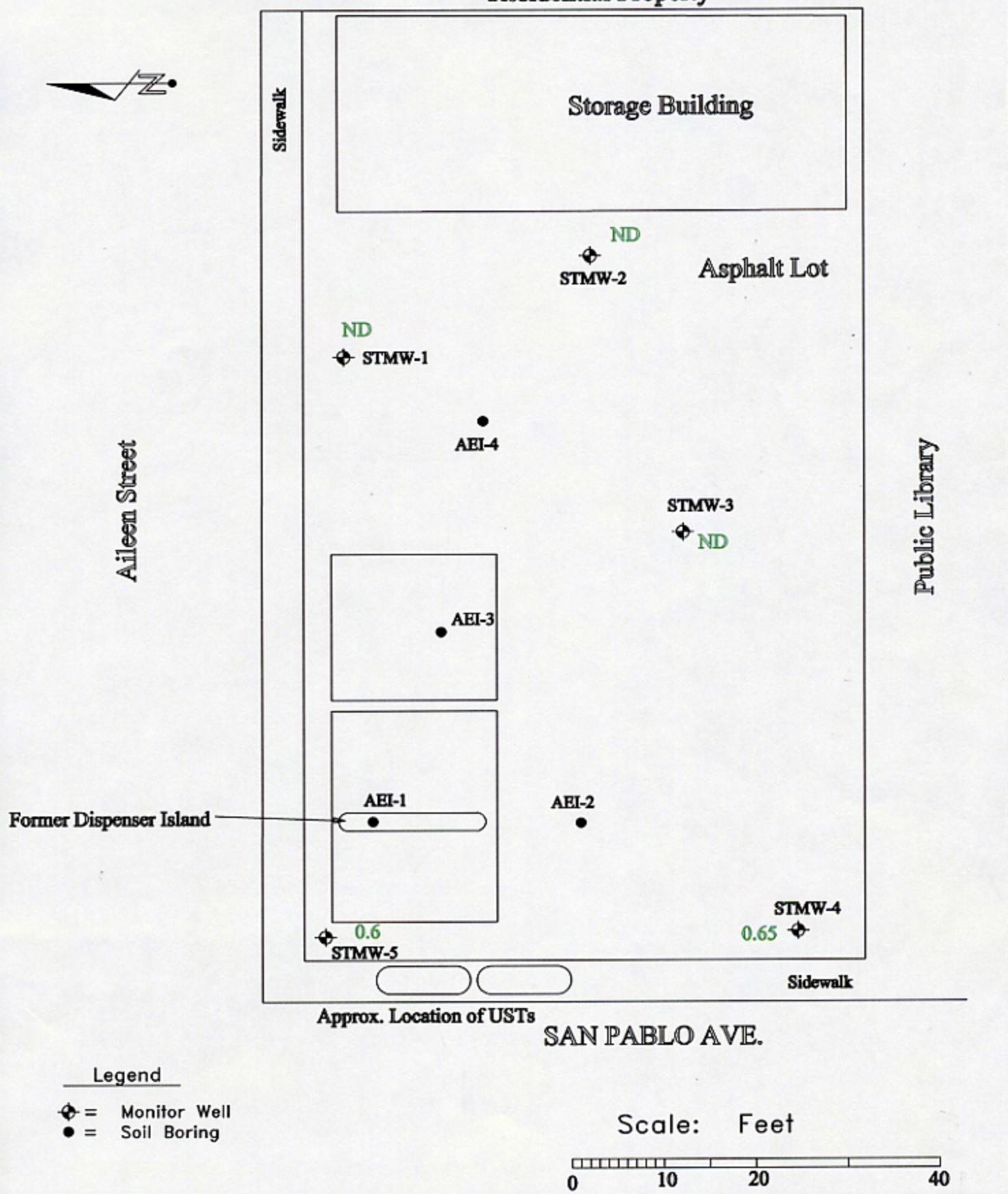
Enviro Soil Tech  
Consultants  
131 Tully Road  
San Jose, CA 95112

PROJECT  
5630 San Pablo Avenue  
Oakland, California  
PROJECT # 12-04-770-GI  
DATE: 9/10/2009

Figure 4

Isocontours of Benzene in  
Groundwater, 8/20/2009

Residential Property



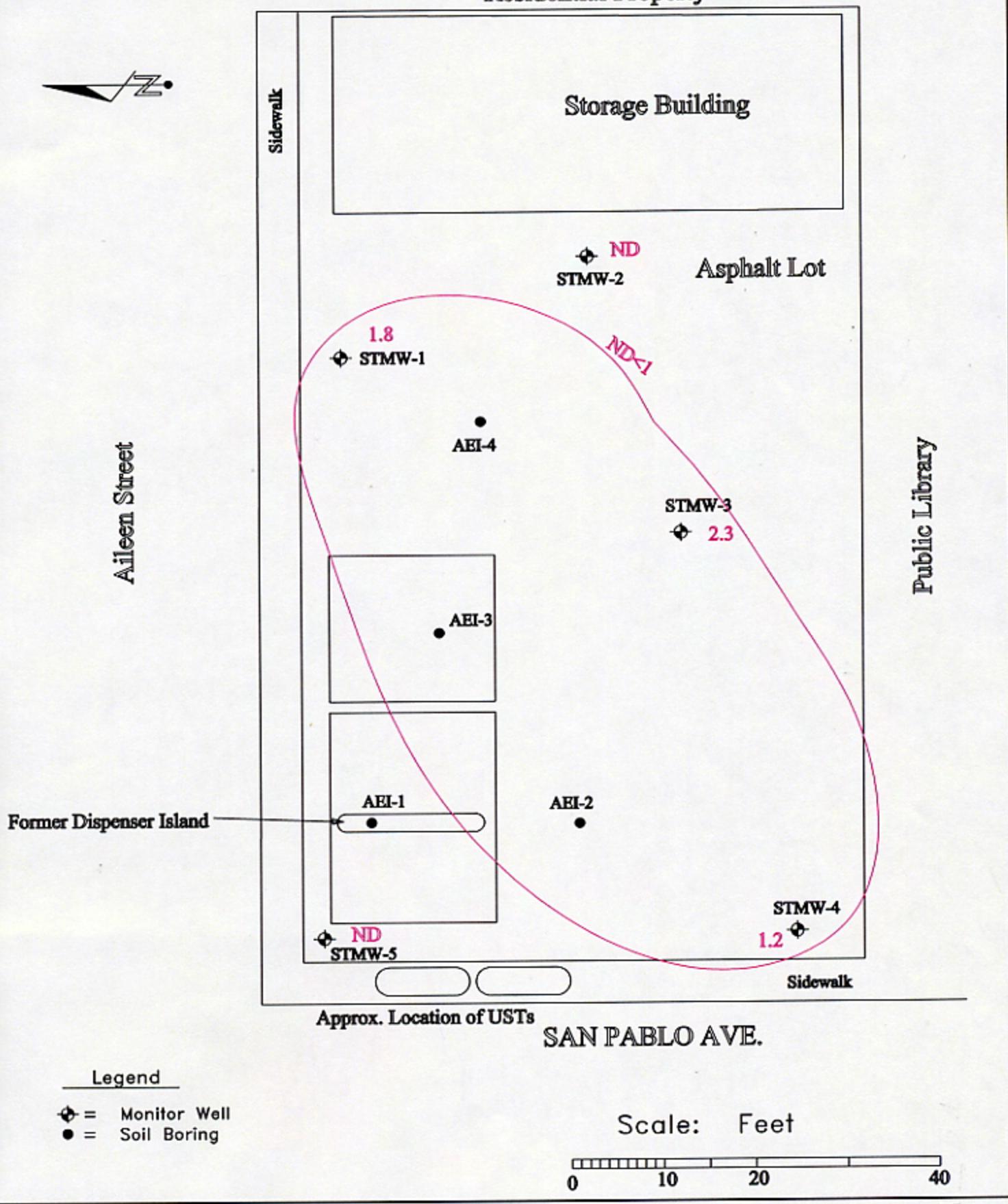
**Enviro Soil Tech  
Consultants**  
131 Tully Road  
San Jose, CA 95112

**PROJECT**  
5630 San Pablo Avenue  
Oakland, California  
**PROJECT #** 12-04-770-GI  
**DATE:** 9/10/2009

**Figure** 5

Isocontours of MTBE in  
Groundwater, 8/20/2009

**Residential Property**



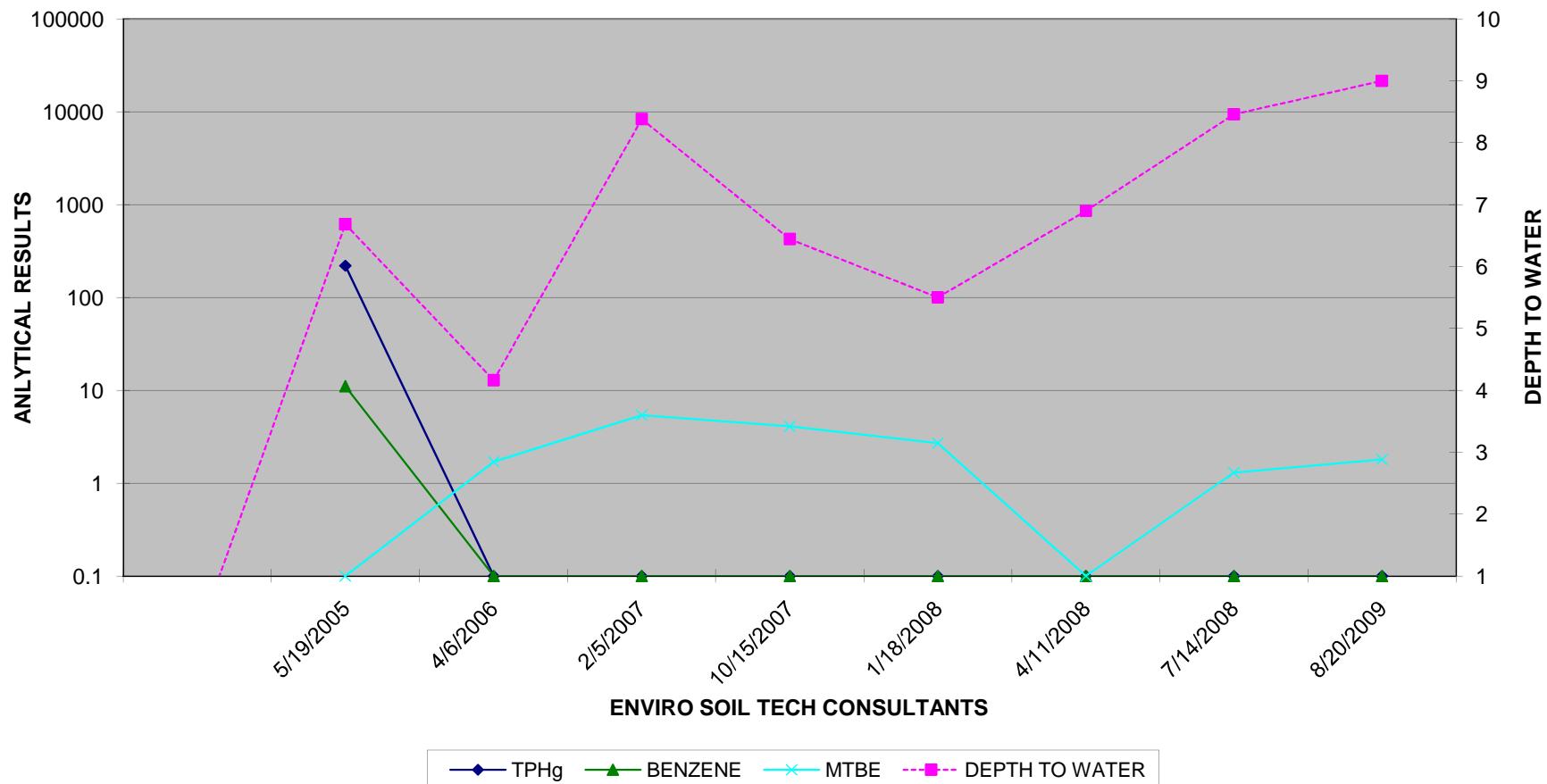
File No. 12-04-770-GI  
September 14, 2009

## **A P P E N D I X "C"**

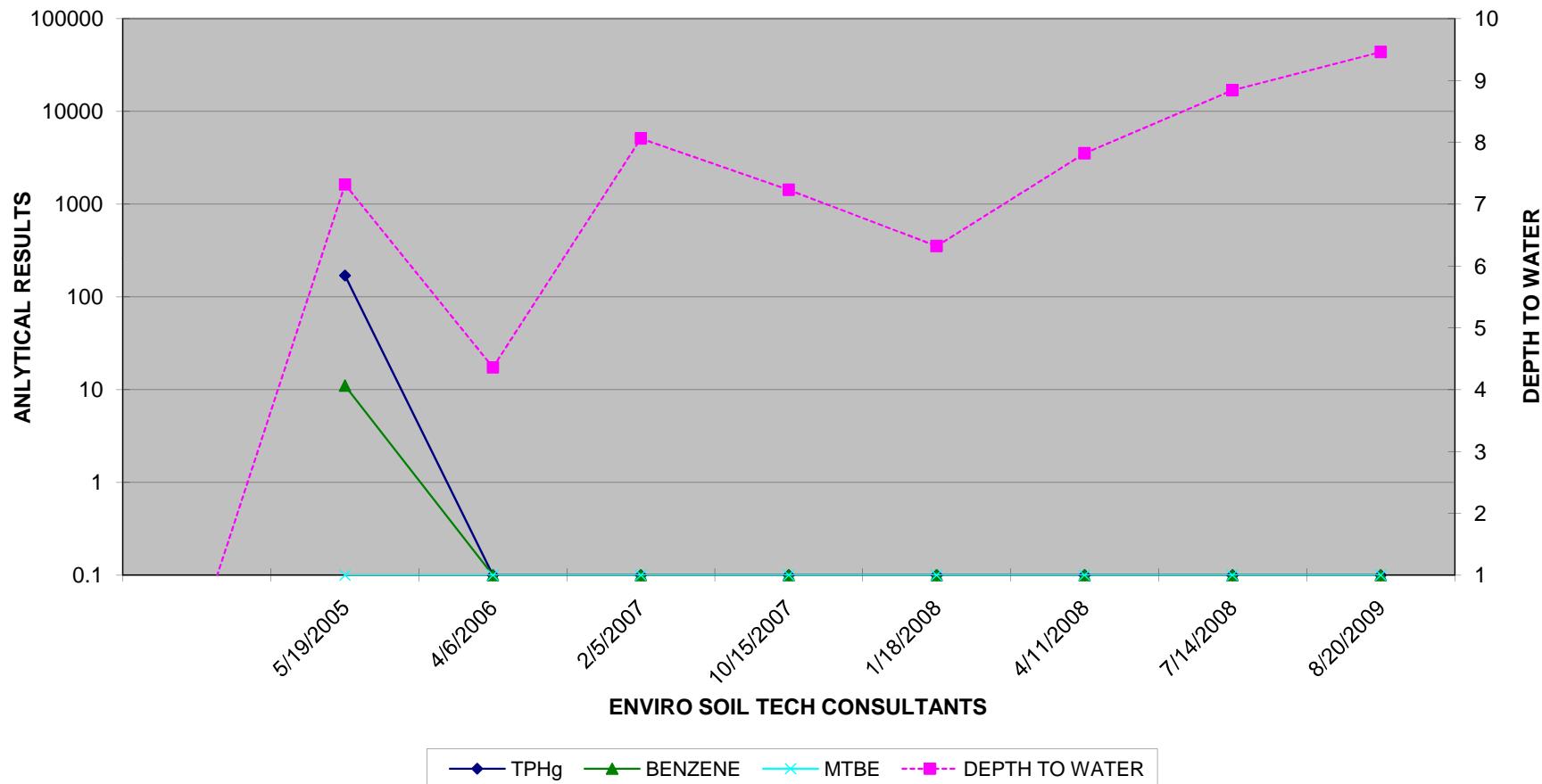
### **HYDROGRAPHS**

**ENVIRO SOIL TECH CONSULTANTS**

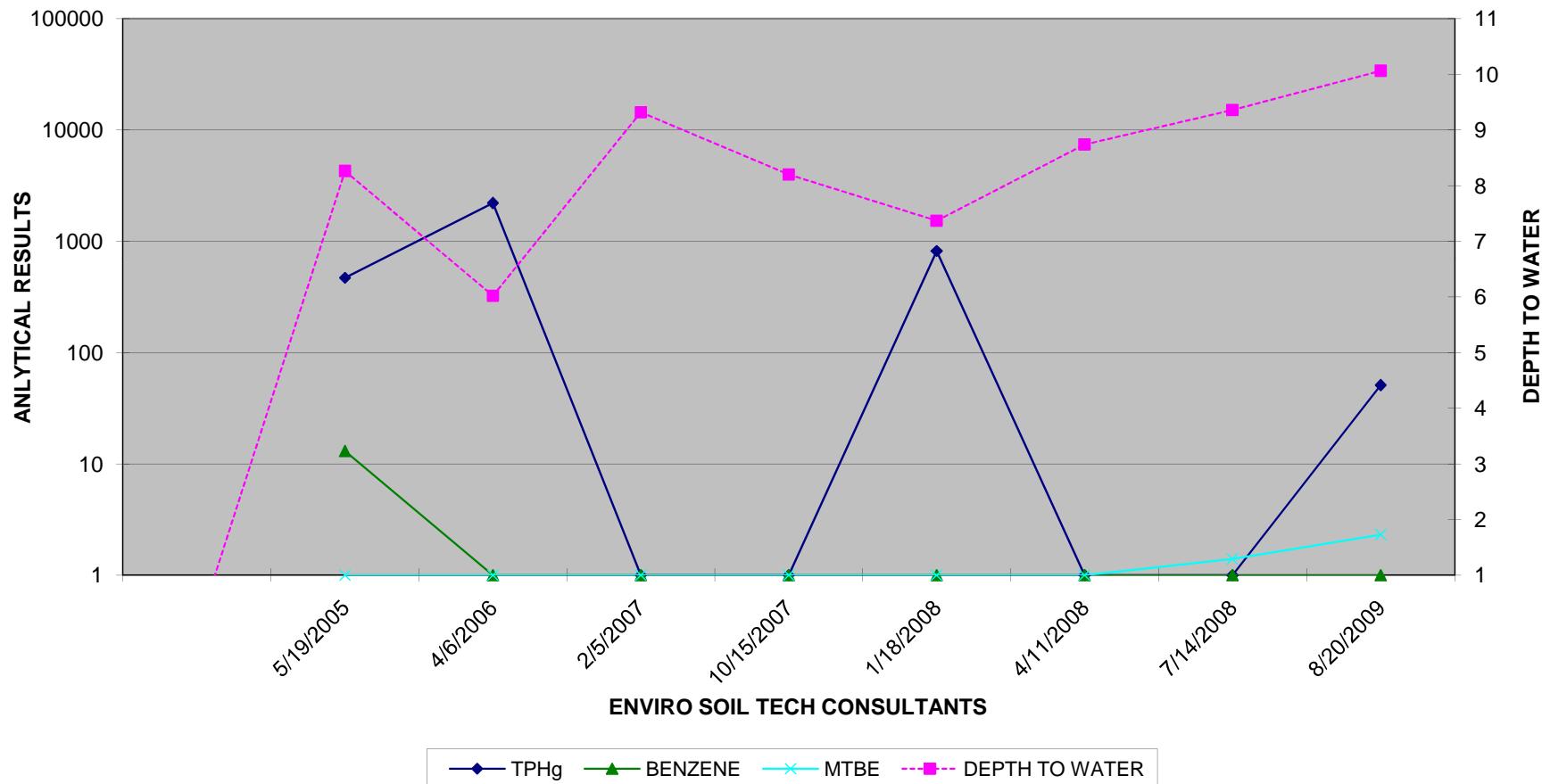
**File No.: 12-04-770-GI**  
**TPHg, BENZENE & MTBE FOR STMW- 1 ( $\mu\text{g/L}$ )**  
**AND DEPTH TO WATER MEASUREMENT (Feet)**



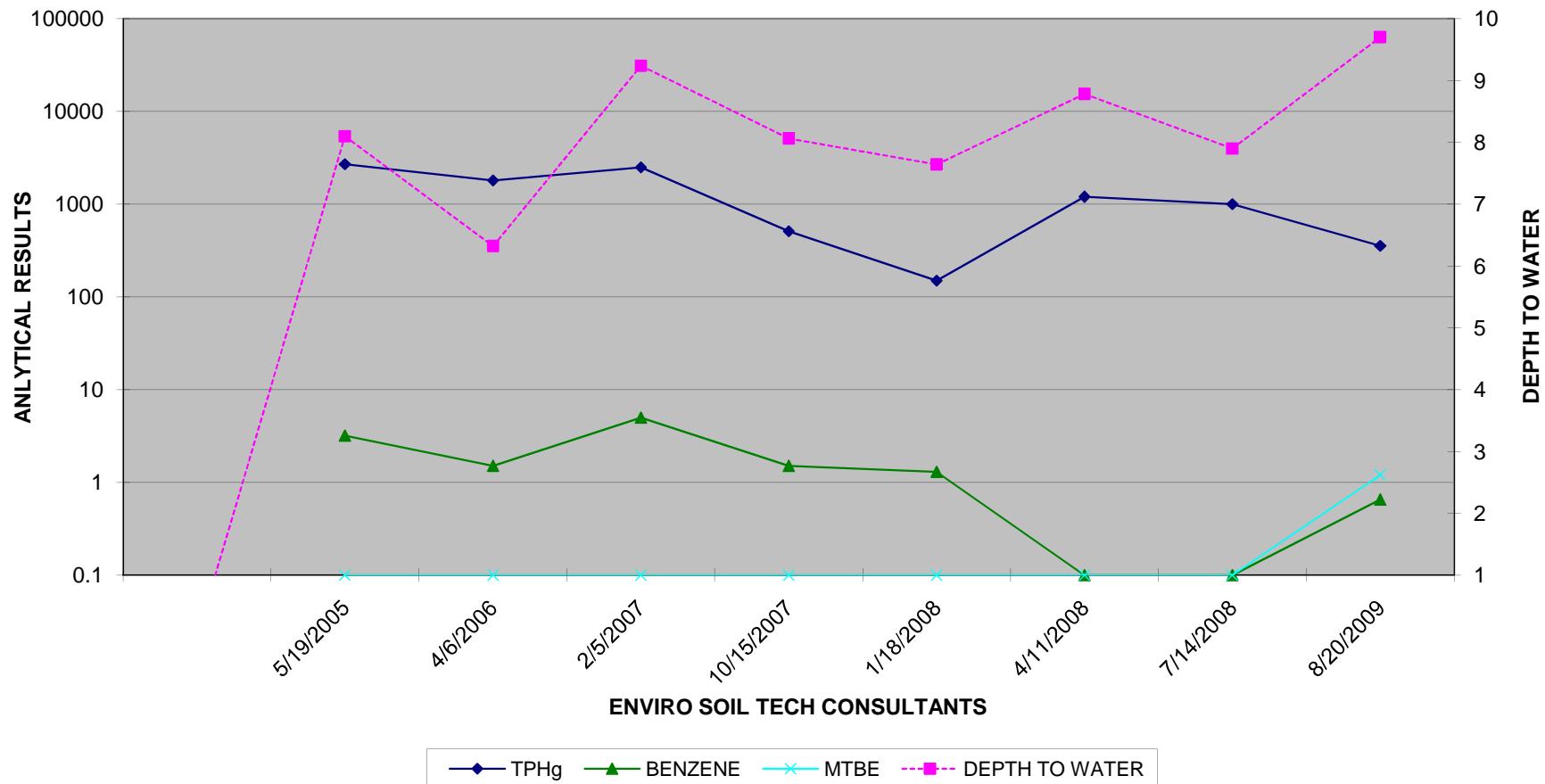
File No.: 12-04-770-GI  
TPHg, BENZENE & MTBE FOR STMW- 2 ( $\mu\text{g/L}$ )  
AND DEPTH TO WATER MEASUREMENT (Feet)



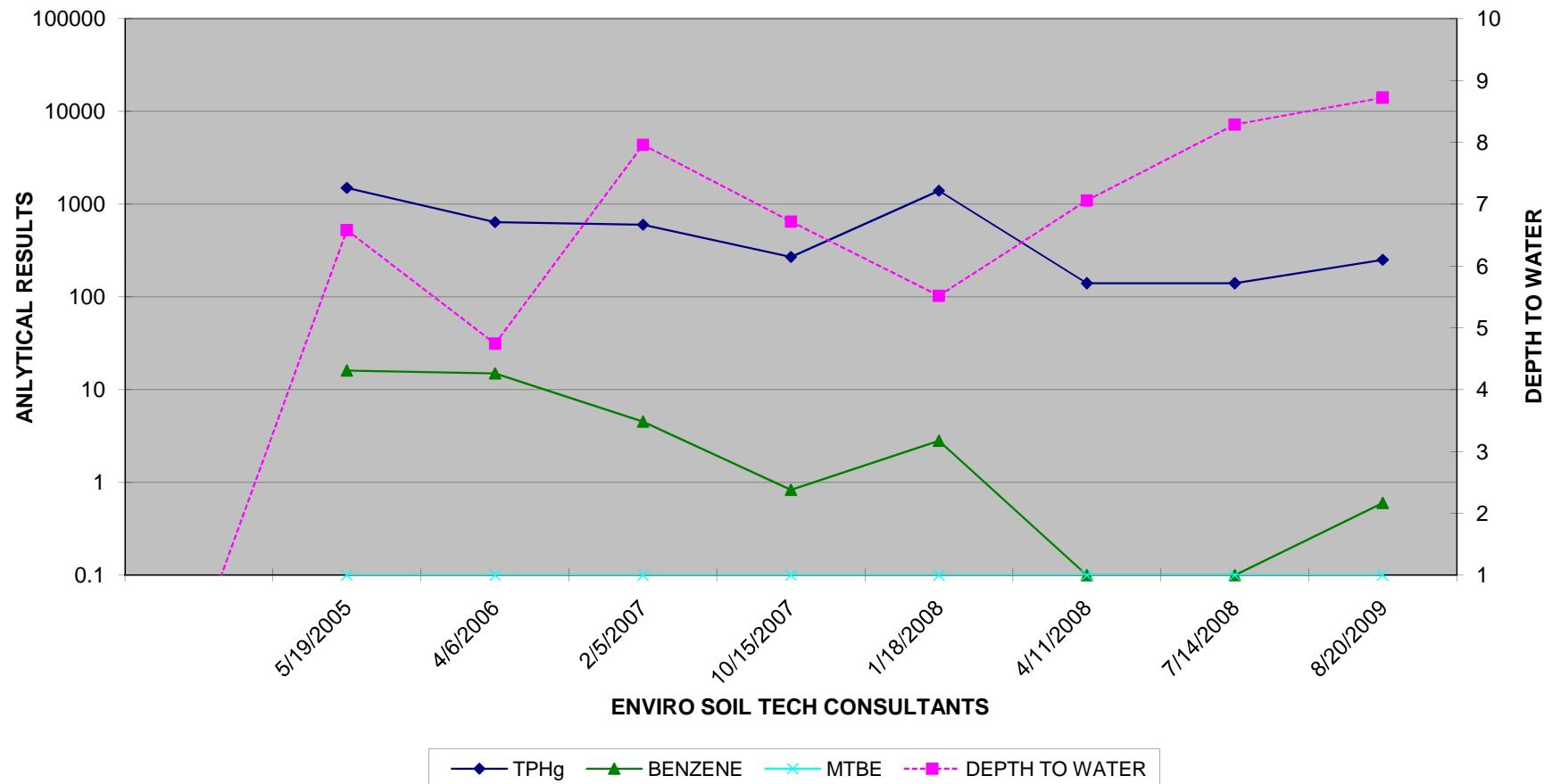
File No.: 12-04-770-GI  
TPHg, BENZENE & MTBE FOR STMW- 3 ( $\mu\text{g/L}$ )  
AND DEPTH TO WATER MEASUREMENT (Feet)



File No.: 12-04-770-GI  
TPHg, BENZENE & MTBE FOR STMW- 4 ( $\mu\text{g/L}$ )  
AND DEPTH TO WATER MEASUREMENT (Feet)



**File No.: 12-04-770-GI**  
**TPHg, BENZENE & MTBE FOR STMW- 5 ( $\mu\text{g/L}$ )**  
**AND DEPTH TO WATER MEASUREMENT (Feet)**



File No. 12-04-770-GI  
September 14, 2009

## **A P P E N D I X "D"**

### **STANDARD OPERATION PROCEDURE**

**ENVIRO SOIL TECH CONSULTANTS**

## **GROUNDWATER SAMPLING**

Prior to collection of groundwater samples, all of the sampling equipment (i.e. bailer, cables, bladder pump, discharge lines and etc.) was cleaned by pumping TSP water solution followed by distilled water.

Prior to purging, the well "Water Sampling Field Survey Forms" were filled out (depth to water and total depth of water column were measured and recorded). The well was then bailed or pumped to remove four to ten well volumes or until the discharged water temperature, conductivity and pH stabilized. "Stabilized" is defined as three consecutive readings within 15% of one another.

The groundwater sample was collected when the water level in the well recovered to 80% of its static level.

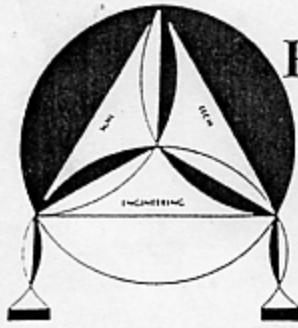
Forty milliliter (ml.), glass volatile organic analysis (VOA) vials and one liter amber glass bottles with Teflon septa were used as sample containers. The groundwater sample was decanted into each glass bottle and VOA vial in such a manner that there was a meniscus at the top. The cap was quickly placed over the top of the glass bottle and vial and securely tightened. The glass bottles and VOA vials were then inverted and tapped to see if air bubbles were present. If none were present, the sample was labeled and refrigerated for delivery under chain-of-custody to the laboratory. The label information would include a sample identification number, job identification number, date, time, type of analysis requested, and the sampler's name.

File No. 12-04-770-GI  
September 14, 2009

## **A P P E N D I X "E"**

### **FIELD NOTES**

**ENVIRO SOIL TECH CONSULTANTS**



# ENVIRO SOIL TECH CONSULTANTS

Environmental & Geotechnical Consultants

131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111

Tel: (408) 297-1500

Fax: (408) 292-2116

FILE NO.: 12-04-770-GI

WELL NO.: JTMW-1

DATE: Aug 20, 09

SAMPLER: FARHAD

DEPTH TO WELL: 20 feet

1 WELL VOLUME: 1.795

DEPTH TO WATER: 9 feet

5 WELL VOLUME: 8.975

HEIGHT OF WATER COLUMN: 11 feet

ACTUAL PURGED VOLUME: 7.5

CASING DIAMETER: V 2"

4"

## CALCULATIONS:

$$2'' - \pi \times 0.1632 \times 11 = 1.7952 \times 5 = 8.975$$

$$4'' - 0.653$$

PURGE METHOD:  BAILER  DISPLACEMENT PUMP  OTHER

SAMPLE METHOD:  BAILER  OTHER

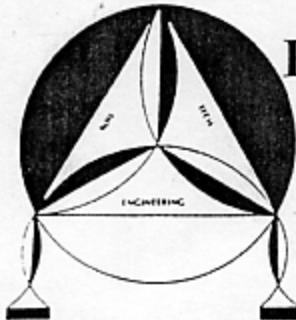
SHEEN:  NO  YES, DESCRIBE: \_\_\_\_\_

ODOR:  NO  YES, DESCRIBE: \_\_\_\_\_

## FIELD MEASUREMENTS

TIME	VOLUME	pH	TEMP.	E.C.
	1.50	6.91	19.7	595
	3.00	6.92	18.9	566
	4.50	6.89	18.6	535
	6.00 dry well	6.94	18.6	520
	7.50	6.92	18.5	517

10.24 feet



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131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111

Tel: (408) 297-1500

Fax: (408) 292-2116

FILE NO.: 12-04-770-GI

DATE: Aug 20, 09

DEPTH TO WELL: 20 feet

DEPTH TO WATER: 9.46

HEIGHT OF WATER COLUMN: 10.54

WELL NO.: STMW-2

SAMPLER: FARHAD

1 WELL VOLUME: 1.720

5 WELL VOLUME: 8,600

ACTUAL PURGED VOLUME: 7.5

CASING DIAMETER: ✓ 2"                          4"

## CALCULATIONS:

$$2'' - \pi \times 0.1632 \times 10.54 = 1.720^{x5} = 8.6004$$

$$4'' - 0.653$$

PURGE METHOD: ✓ BAILER                          DISPLACEMENT PUMP                          OTHER

SAMPLE METHOD: ✓ BAILER                          OTHER

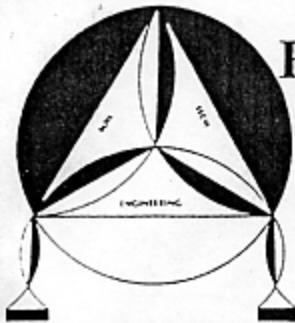
SHEEN: ✓ NO                          YES, DESCRIBE:

ODOR: ✓ NO                          YES, DESCRIBE:

## FIELD MEASUREMENTS

TIME	VOLUME	pH	TEMP.	E.C.
	1.50	6.66	19.0	471
	3.00	6.69	18.4	470
	4.50	6.82	17.9	470
	6.00 (tdr)	6.82	17.7	475
	7.50	6.91	17.7	479

11,40 feet



# ENVIRO SOIL TECH CONSULTANTS

Environmental & Geotechnical Consultants

131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111

Tel: (408) 297-1500

Fax: (408) 292-2116

FILE NO.: 12-04-770-GI

DATE: Aug 20, 09

DEPTH TO WELL: 20 feet

DEPTH TO WATER: 10.06 feet

HEIGHT OF WATER COLUMN: 9.94 feet

WELL NO.: STMW-3

SAMPLER: FARHAD

1 WELL VOLUME: 8.51 1.6222

5 WELL VOLUME: 8.111

ACTUAL PURGED VOLUME: 7.5

CASING DIAMETER: ✓ 2" 4"

## CALCULATIONS:

$$2'' - \times 0.1632 \times 9.94 = 1.6222^{\frac{1}{5}} = 8.111$$

$$4'' - 0.653$$

PURGE METHOD: ✓ BAILER        DISPLACEMENT PUMP        OTHER

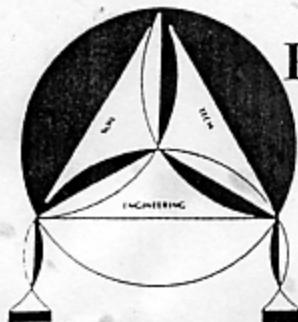
SAMPLE METHOD: ✓ BAILER        OTHER

SHEEN: ✓ NO        YES, DESCRIBE: \_\_\_\_\_

ODOR: ✓ NO        YES, DESCRIBE: \_\_\_\_\_

## FIELD MEASUREMENTS

TIME	VOLUME	pH	TEMP.	E.C.
	1.5	6.97	18.7	810
	3.0	7.02 get dry	18.3	786
	4.5	7.16 get,	18.7	740
	6.0	6.99 get,	20.8	541
	7.5	6.90 get,	19.4	599



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Environmental & Geotechnical Consultants

131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111

Tel: (408) 297-1500

Fax: (408) 292-2116

FILE NO.: 12-04-770-GI

DATE: Aug 20. 09

DEPTH TO WELL: 20 feet

DEPTH TO WATER: 9.70 feet

HEIGHT OF WATER COLUMN: 10.30 feet

WELL NO.: ST MW-4

SAMPLER: FARHAD

1 WELL VOLUME: 1.681

5 WELL VOLUME: 8.405

ACTUAL PURGED VOLUME: 7.5

CASING DIAMETER: ✓ 2" 4"

## CALCULATIONS:

$$2'' - \pi \times 0.1632 \times 10.30 = 1.681 \times 5 = 8,405$$

4'' - 0.653

PURGE METHOD: ✓ BAILER        DISPLACEMENT PUMP        OTHER

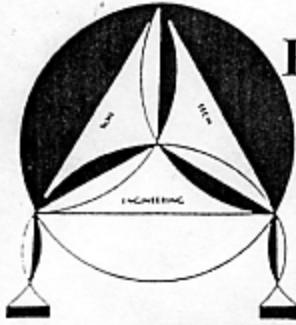
SAMPLE METHOD: ✓ BAILER        OTHER

SHEEN:        NO ✓ YES, DESCRIBE: Rim bow

ODOR:        NO ✓ YES, DESCRIBE: smell something look like sewer

## FIELD MEASUREMENTS

TIME	VOLUME	pH	TEMP.	E.C.
	1.5	6.86	18.9	591
	3.0	6.88	18.5	588
	4.5	7.03	18.6	606
	6.0	6.97	18.2	614
	7.5	7.06 get dry	18.1	616



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Environmental & Geotechnical Consultants

131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111

Tel: (408) 297-1500

Fax: (408) 292-2116

FILE NO.: 12-04-770-GI

DATE: Aug 20, 09

DEPTH TO WELL: 20 feet

DEPTH TO WATER: 8.72 feet

HEIGHT OF WATER COLUMN: 11.28 feet

CASING DIAMETER: ✓ 2"

WELL NO.: STMW-5

SAMPLER: FARHAD

1 WELL VOLUME: 1.841

5 WELL VOLUME: 9.204

ACTUAL PURGED VOLUME: 7.5

## CALCULATIONS:

$$2'' - \pi \times 0.1632 \times 11.28 = 1.841 \times 5 = 9.204$$

$$4'' - 0.653$$

PURGE METHOD: ✓ BAILER        DISPLACEMENT PUMP        OTHER

SAMPLE METHOD: ✓ BAILER        OTHER

SHEEN: ✓ NO        YES, DESCRIBE: \_\_\_\_\_

ODOR: ✓ NO        YES, DESCRIBE: \_\_\_\_\_

## FIELD MEASUREMENTS

TIME	VOLUME	pH	TEMP.	E.C.
	1.5	6.92	19.7	566
	3	6.86	19.1	588
	4.5	6.87	18.9	628
	6.0 <i>gddy</i>	6.92	18.5	647
	7.50 <i>n.s.</i>	6.94	18.4	648

131W3

File No. 12-04-770-GI  
September 14, 2009

## **A P P E N D I X "F"**

### **LABORATORY REPORT**

**ENVIRO SOIL TECH CONSULTANTS**



09/04/09

## Technical Report for

**Enviro Soil Tech Consultants**

**T06019784055-5630 San Pablo Avenue, Oakland, CA**

**12-04-770GI**

**Accutest Job Number: C7199**

**Sampling Date: 08/20/09**



**Report to:**

**Enviro Soil Tech Consultants  
131 Tully Road  
San Jose, CA 95111  
info@envirosoiltech.com**

**ATTN: Frank Hamedi**

**Total number of pages in report: 62**



Test results contained within this data package meet the requirements  
of the National Environmental Laboratory Accreditation Conference  
and/or state specific certification programs as applicable.

**Laurie Glantz-Murphy  
Laboratory Director**

**Client Service contact: Diane Theesen 408-588-0200**

**Certifications: CA (08258CA)**

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.



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1

2

3

4

5

6



## Sample Summary

Enviro Soil Tech Consultants

Job No: C7199

T06019784055-5630 San Pablo Avenue, Oakland, CA  
Project No: 12-04-770GI

Sample Number	Collected Date	Time By	Matrix Received	Code Type	Client Sample ID	
C7199-1	08/20/09	10:02 HF	08/21/09	AQ	Ground Water	STMW-1
C7199-2	08/20/09	10:56 HF	08/21/09	AQ	Ground Water	STMW-2
C7199-3	08/20/09	11:43 HF	08/21/09	AQ	Ground Water	STMW-3
C7199-4	08/20/09	12:28 HF	08/21/09	AQ	Ground Water	STMW-4
C7199-5	08/20/09	13:20 HF	08/21/09	AQ	Ground Water	STMW-5



IT'S ALL IN THE CHEMISTRY

## Sample Results

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### Report of Analysis

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Accutest Laboratories

**Report of Analysis**

Page 1 of 3

**Client Sample ID:** STMW-1  
**Lab Sample ID:** C7199-1  
**Matrix:** AQ - Ground Water  
**Method:** SW846 8260B  
**Project:** T06019784055-5630 San Pablo Avenue, Oakland, CA

**Date Sampled:** 08/20/09**Date Received:** 08/21/09**Percent Solids:** n/a

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	M8536.D	1	08/31/09	XB	n/a	n/a	VM283
Run #2							

**Purge Volume**

Run #1 10.0 ml  
 Run #2

**VOA 8260 List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	20	10	ug/l	
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.30	ug/l	
74-97-5	Bromo(chloromethane)	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.30	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.30	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	5.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.30	ug/l	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.30	ug/l	
124-48-1	Dibromo(chloromethane)	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.30	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.30	ug/l	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

Page 2 of 3

<b>Client Sample ID:</b>	STMW-1	<b>Date Sampled:</b>	08/20/09
<b>Lab Sample ID:</b>	C7199-1	<b>Date Received:</b>	08/21/09
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T06019784055-5630 San Pablo Avenue, Oakland, CA		

**VOA 8260 List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	20	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	20	5.0	ug/l	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.8	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
1868-53-7	Dibromofluoromethane	108%		60-130%
2037-26-5	Toluene-D8	107%		60-130%

ND = Not detected      MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest Laboratories

## Report of Analysis

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<b>Client Sample ID:</b>	STMW-1	<b>Date Sampled:</b>	08/20/09
<b>Lab Sample ID:</b>	C7199-1	<b>Date Received:</b>	08/21/09
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T06019784055-5630 San Pablo Avenue, Oakland, CA		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		60-130%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

**Report of Analysis**

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<b>Client Sample ID:</b>	STMW-1	<b>Date Sampled:</b>	08/20/09
<b>Lab Sample ID:</b>	C7199-1	<b>Date Received:</b>	08/21/09
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8015B		
<b>Project:</b>	T06019784055-5630 San Pablo Avenue, Oakland, CA		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	JK8054.D	1	08/25/09	JA	n/a	n/a	GJK311
Run #2							

<b>Purge Volume</b>
Run #1      10.0 ml
Run #2

**TPH Volatiles**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
	TPH-GRO (C6-C10)	ND	0.050	0.025	mg/l	
<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>		
460-00-4	4-Bromofluorobenzene	131%		64-153%		

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

**Report of Analysis**

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<b>Client Sample ID:</b>	STMW-1	<b>Date Sampled:</b>	08/20/09
<b>Lab Sample ID:</b>	C7199-1	<b>Date Received:</b>	08/21/09
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8015B M SW846 3510C		
<b>Project:</b>	T06019784055-5630 San Pablo Avenue, Oakland, CA		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	GG7545.D	1	08/26/09	JH	08/26/09	OP1267	GGG272
Run #2							

	<b>Initial Volume</b>	<b>Final Volume</b>
Run #1	1060 ml	1.0 ml
Run #2		

**TPH Extractable**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
	TPH (C10-C28)	ND	0.094	0.047	mg/l	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
630-01-3	Hexacosane	76%		45-140%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

**Report of Analysis**

Page 1 of 3

<b>Client Sample ID:</b>	STMW-2	<b>Date Sampled:</b>	08/20/09
<b>Lab Sample ID:</b>	C7199-2	<b>Date Received:</b>	08/21/09
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T06019784055-5630 San Pablo Avenue, Oakland, CA		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	M8537.D	1	08/31/09	XB	n/a	n/a	VM283
Run #2							

<b>Purge Volume</b>	
Run #1	10.0 ml
Run #2	

**VOA 8260 List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	20	10	ug/l	
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.30	ug/l	
74-97-5	Bromo(chloromethane)	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.30	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.30	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	5.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.30	ug/l	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.30	ug/l	
124-48-1	Dibromo(chloromethane)	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.30	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.30	ug/l	

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

Page 2 of 3

<b>Client Sample ID:</b>	STMW-2	<b>Date Sampled:</b>	08/20/09
<b>Lab Sample ID:</b>	C7199-2	<b>Date Received:</b>	08/21/09
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T06019784055-5630 San Pablo Avenue, Oakland, CA		

**VOA 8260 List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	20	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	20	5.0	ug/l	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
1868-53-7	Dibromofluoromethane	107%		60-130%
2037-26-5	Toluene-D8	105%		60-130%

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

**Report of Analysis**

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<b>Client Sample ID:</b>	STMW-2	<b>Date Sampled:</b>	08/20/09
<b>Lab Sample ID:</b>	C7199-2	<b>Date Received:</b>	08/21/09
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T06019784055-5630 San Pablo Avenue, Oakland, CA		

**VOA 8260 List**

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
460-00-4	4-Bromofluorobenzene	101%		60-130%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	STMW-2	<b>Date Sampled:</b>	08/20/09
<b>Lab Sample ID:</b>	C7199-2	<b>Date Received:</b>	08/21/09
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8015B		
<b>Project:</b>	T06019784055-5630 San Pablo Avenue, Oakland, CA		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	JK8055.D	1	08/26/09	JA	n/a	n/a	GJK311
Run #2							

<b>Purge Volume</b>
Run #1      10.0 ml
Run #2

**TPH Volatiles**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
	TPH-GRO (C6-C10)	ND	0.050	0.025	mg/l	
<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>		
460-00-4	4-Bromofluorobenzene	128%		64-153%		

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	STMW-2	<b>Date Sampled:</b>	08/20/09
<b>Lab Sample ID:</b>	C7199-2	<b>Date Received:</b>	08/21/09
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8015B M SW846 3510C		
<b>Project:</b>	T06019784055-5630 San Pablo Avenue, Oakland, CA		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	GG7546.D	1	08/26/09	JH	08/26/09	OP1267	GGG272
Run #2							

	<b>Initial Volume</b>	<b>Final Volume</b>
Run #1	1060 ml	1.0 ml
Run #2		

**TPH Extractable**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
	TPH (C10-C28)	ND	0.094	0.047	mg/l	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
630-01-3	Hexacosane	80%		45-140%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

**Report of Analysis**

Page 1 of 3

**Client Sample ID:** STMW-3  
**Lab Sample ID:** C7199-3  
**Matrix:** AQ - Ground Water  
**Method:** SW846 8260B  
**Project:** T06019784055-5630 San Pablo Avenue, Oakland, CA

**Date Sampled:** 08/20/09**Date Received:** 08/21/09**Percent Solids:** n/a

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	M8538.D	1	08/31/09	XB	n/a	n/a	VM283
Run #2							

**Purge Volume**

Run #1 10.0 ml  
 Run #2

**VOA 8260 List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	20	10	ug/l	
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.30	ug/l	
74-97-5	Bromo(chloromethane)	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.30	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.30	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	5.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.30	ug/l	
108-20-3	Di-Isopropyl ether	0.95	5.0	0.50	ug/l	J
594-20-7	2,2-Dichloropropane	ND	1.0	0.30	ug/l	
124-48-1	Dibromo(chloromethane)	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.30	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.30	ug/l	

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

**Report of Analysis**

Page 2 of 3

<b>Client Sample ID:</b>	STMW-3	<b>Date Sampled:</b>	08/20/09
<b>Lab Sample ID:</b>	C7199-3	<b>Date Received:</b>	08/21/09
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T06019784055-5630 San Pablo Avenue, Oakland, CA		

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	20	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	20	5.0	ug/l	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	2.3	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		60-130%
2037-26-5	Toluene-D8	106%		60-130%

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

**Report of Analysis**

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<b>Client Sample ID:</b>	STMW-3	<b>Date Sampled:</b>	08/20/09
<b>Lab Sample ID:</b>	C7199-3	<b>Date Received:</b>	08/21/09
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T06019784055-5630 San Pablo Avenue, Oakland, CA		

**VOA 8260 List**

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
460-00-4	4-Bromofluorobenzene	105%		60-130%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

**Report of Analysis**

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<b>Client Sample ID:</b>	STMW-3	<b>Date Sampled:</b>	08/20/09
<b>Lab Sample ID:</b>	C7199-3	<b>Date Received:</b>	08/21/09
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8015B		
<b>Project:</b>	T06019784055-5630 San Pablo Avenue, Oakland, CA		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	JK8056.D	1	08/26/09	JA	n/a	n/a	GJK311
Run #2							

<b>Purge Volume</b>	
Run #1	10.0 ml
Run #2	

**TPH Volatiles**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
	TPH-GRO (C6-C10)	0.0508	0.050	0.025	mg/l	
<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>		
460-00-4	4-Bromofluorobenzene	138%		64-153%		

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	STMW-3	<b>Date Sampled:</b>	08/20/09
<b>Lab Sample ID:</b>	C7199-3	<b>Date Received:</b>	08/21/09
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8015B M SW846 3510C		
<b>Project:</b>	T06019784055-5630 San Pablo Avenue, Oakland, CA		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	GG7547.D	1	08/26/09	JH	08/26/09	OP1267	GGG272
Run #2							

	<b>Initial Volume</b>	<b>Final Volume</b>
Run #1	1060 ml	1.0 ml
Run #2		

**TPH Extractable**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
	TPH (C10-C28)	ND	0.094	0.047	mg/l	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
630-01-3	Hexacosane	71%		45-140%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

**Report of Analysis**

Page 1 of 3

**Client Sample ID:** STMW-4  
**Lab Sample ID:** C7199-4  
**Matrix:** AQ - Ground Water  
**Method:** SW846 8260B  
**Project:** T06019784055-5630 San Pablo Avenue, Oakland, CA

**Date Sampled:** 08/20/09**Date Received:** 08/21/09**Percent Solids:** n/a

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	M8589.D	1	09/02/09	XB	n/a	n/a	VM284
Run #2							

**Purge Volume**

Run #1 10.0 ml  
 Run #2

**VOA 8260 List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	20	10	ug/l	
71-43-2	Benzene	0.65	1.0	0.30	ug/l	J
108-86-1	Bromobenzene	ND	1.0	0.30	ug/l	
74-97-5	Bromo(chloromethane)	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.30	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	2.0	5.0	0.50	ug/l	J
135-98-8	sec-Butylbenzene	5.5	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	0.76	5.0	0.50	ug/l	J
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.30	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	5.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.30	ug/l	
108-20-3	Di-Isopropyl ether	2.4	5.0	0.50	ug/l	J
594-20-7	2,2-Dichloropropane	ND	1.0	0.30	ug/l	
124-48-1	Dibromo(chloromethane)	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.30	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.30	ug/l	

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	STMW-4	<b>Date Sampled:</b>	08/20/09
<b>Lab Sample ID:</b>	C7199-4	<b>Date Received:</b>	08/21/09
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T06019784055-5630 San Pablo Avenue, Oakland, CA		

**VOA 8260 List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	0.40	1.0	0.30	ug/l	J
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	20	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	21.2	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	0.92	5.0	0.50	ug/l	J
108-10-1	4-Methyl-2-pentanone	ND	20	5.0	ug/l	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.2	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	8.1	5.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
1868-53-7	Dibromofluoromethane	118%		60-130%
2037-26-5	Toluene-D8	100%		60-130%

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

**Report of Analysis**

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<b>Client Sample ID:</b>	STMW-4	<b>Date Sampled:</b>	08/20/09
<b>Lab Sample ID:</b>	C7199-4	<b>Date Received:</b>	08/21/09
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T06019784055-5630 San Pablo Avenue, Oakland, CA		

**VOA 8260 List**

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
460-00-4	4-Bromofluorobenzene	120%		60-130%

ND = Not detected      MDL - Method Detection Limit  
RL = Reporting Limit  
E = Indicates value exceeds calibration range

J = Indicates an estimated value  
B = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound

Accutest Laboratories

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	STMW-4	<b>Date Sampled:</b>	08/20/09
<b>Lab Sample ID:</b>	C7199-4	<b>Date Received:</b>	08/21/09
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8015B		
<b>Project:</b>	T06019784055-5630 San Pablo Avenue, Oakland, CA		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	JK8057.D	1	08/26/09	JA	n/a	n/a	GJK311
Run #2							

<b>Purge Volume</b>
Run #1      10.0 ml
Run #2

**TPH Volatiles**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
	TPH-GRO (C6-C10)	0.355	0.050	0.025	mg/l	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
460-00-4	4-Bromofluorobenzene	695% <sup>a</sup>		64-153%

(a) Outside control limits due to matrix interference.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	STMW-4	<b>Date Sampled:</b>	08/20/09
<b>Lab Sample ID:</b>	C7199-4	<b>Date Received:</b>	08/21/09
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8015B M SW846 3510C		
<b>Project:</b>	T06019784055-5630 San Pablo Avenue, Oakland, CA		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	GG7548.D	1	08/26/09	JH	08/26/09	OP1267	GGG272
Run #2							

	<b>Initial Volume</b>	<b>Final Volume</b>
Run #1	1060 ml	1.0 ml
Run #2		

**TPH Extractable**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
	TPH (C10-C28) <sup>a</sup>	0.105	0.094	0.047	mg/l	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
630-01-3	Hexacosane	76%		45-140%

(a) Higher boiling gasoline compounds in the Diesel range (C10-C16).

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

**Report of Analysis**

Page 1 of 3

**Client Sample ID:** STMW-5  
**Lab Sample ID:** C7199-5  
**Matrix:** AQ - Ground Water  
**Method:** SW846 8260B  
**Project:** T06019784055-5630 San Pablo Avenue, Oakland, CA

**Date Sampled:** 08/20/09**Date Received:** 08/21/09**Percent Solids:** n/a

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	M8539.D	1	08/31/09	XB	n/a	n/a	VM283
Run #2							

**Purge Volume**

Run #1 10.0 ml  
 Run #2

**VOA 8260 List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	20	10	ug/l	
71-43-2	Benzene	0.60	1.0	0.30	ug/l	J
108-86-1	Bromobenzene	ND	1.0	0.30	ug/l	
74-97-5	Bromo(chloromethane)	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.30	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	1.1	5.0	0.50	ug/l	J
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.30	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	5.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.30	ug/l	
108-20-3	Di-Isopropyl ether	3.5	5.0	0.50	ug/l	J
594-20-7	2,2-Dichloropropane	ND	1.0	0.30	ug/l	
124-48-1	Dibromo(chloromethane)	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.30	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.30	ug/l	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

Page 2 of 3

<b>Client Sample ID:</b>	STMW-5	<b>Date Sampled:</b>	08/20/09
<b>Lab Sample ID:</b>	C7199-5	<b>Date Received:</b>	08/21/09
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T06019784055-5630 San Pablo Avenue, Oakland, CA		

**VOA 8260 List**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	20	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	2.1	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	20	5.0	ug/l	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	0.58	5.0	0.50	ug/l	J
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
1868-53-7	Dibromofluoromethane	106%		60-130%
2037-26-5	Toluene-D8	106%		60-130%

ND = Not detected      MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

**Report of Analysis**

Page 3 of 3

<b>Client Sample ID:</b>	STMW-5	<b>Date Sampled:</b>	08/20/09
<b>Lab Sample ID:</b>	C7199-5	<b>Date Received:</b>	08/21/09
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T06019784055-5630 San Pablo Avenue, Oakland, CA		

**VOA 8260 List**

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
460-00-4	4-Bromofluorobenzene	110%		60-130%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	STMW-5	<b>Date Sampled:</b>	08/20/09
<b>Lab Sample ID:</b>	C7199-5	<b>Date Received:</b>	08/21/09
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8015B		
<b>Project:</b>	T06019784055-5630 San Pablo Avenue, Oakland, CA		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	JK8058.D	1	08/26/09	JA	n/a	n/a	GJK311
Run #2							

<b>Purge Volume</b>
Run #1      10.0 ml
Run #2

**TPH Volatiles**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
	TPH-GRO (C6-C10)	0.251	0.050	0.025	mg/l	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
460-00-4	4-Bromofluorobenzene	255% <sup>a</sup>		64-153%

(a) Outside control limits due to matrix interference.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	STMW-5	<b>Date Sampled:</b>	08/20/09
<b>Lab Sample ID:</b>	C7199-5	<b>Date Received:</b>	08/21/09
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8015B M SW846 3510C		
<b>Project:</b>	T06019784055-5630 San Pablo Avenue, Oakland, CA		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	GG7549.D	1	08/26/09	JH	08/26/09	OP1267	GGG272
Run #2							

	<b>Initial Volume</b>	<b>Final Volume</b>
Run #1	1060 ml	1.0 ml
Run #2		

**TPH Extractable**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
	TPH (C10-C28)	ND	0.094	0.047	mg/l	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
630-01-3	Hexacosane	71%		45-140%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound



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## Section 3

3

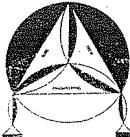
### Misc. Forms

#### Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY RECORD									
PROJ. NO.	NAME			5630 San Pablo Ave., Oakland					
SAMPLERS: (Signature)				Hamed Far					
NO.	DATE	TIME	WT 105	LOCATION	CONTAINER	ANALYSES REQUESTED (2)	EDF#	RECEIVED BY	RECEIVED BY
1	8/21/09	10:02		STMW-1	-1	6	✓ ✓ ✓	EDF# T06019784055	
2		10:56		STMW-2	-2	6	✓ ✓ ✓		
3		11:43		STMW-3	-3	6	✓ ✓ ✓		
4		12:28		STMW-4	-4	6	✓ ✓ ✓		*Full list,
5		13:20		STMW-5	-5	6	✓ ✓ ✓		
<p>4 vials each (W/Ha) 2 w/ Ambers each N/P</p> <p>Temp: 25°C</p>									
Relinquished by: (Signature)				Date / Time	Received by: (Signature)	Relinquished by: (Signature)			
Hamed Far				8/21/09	12:12				
Relinquished by: (Signature)				Date / Time	Received by: (Signature)	Relinquished by: (Signature)			
				8/21/09	14:00				
Relinquished by: (Signature)				Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks		
							Please send lab report to Frank Hamed		



ENVIRO SOIL TECH CONSULTANTS

Environmental & Geotechnical Consultants  
131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
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C7199: Chain of Custody

Page 1 of 1



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## Section 4

4

### GC/MS Volatiles

#### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary

Page 1 of 3

Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM283-MB	M8531.D	1	08/31/09	XB	n/a	n/a	VM283

The QC reported here applies to the following samples:

Method: SW846 8260B

C7199-1, C7199-2, C7199-3, C7199-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	10	ug/l	
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.30	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.30	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.30	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	5.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.30	ug/l	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.30	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	0.50	ug/l	

## Method Blank Summary

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Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM283-MB	M8531.D	1	08/31/09	XB	n/a	n/a	VM283

The QC reported here applies to the following samples:

Method: SW846 8260B

C7199-1, C7199-2, C7199-3, C7199-5

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	20	5.0	ug/l	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	

CAS No. Surrogate Recoveries Limits

1868-53-7 Dibromofluoromethane 106% 60-130%

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## Method Blank Summary

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Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM283-MB	M8531.D	1	08/31/09	XB	n/a	n/a	VM283

The QC reported here applies to the following samples:

Method: SW846 8260B

C7199-1, C7199-2, C7199-3, C7199-5

CAS No.	Surrogate Recoveries	Limits
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2037-26-5	Toluene-D8	103%	60-130%
460-00-4	4-Bromofluorobenzene	102%	60-130%

## Method Blank Summary

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Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM284-MB2	M8575.D	1	09/01/09	XB	n/a	n/a	VM284

The QC reported here applies to the following samples:

Method: SW846 8260B

C7199-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	10	ug/l	
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.30	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.30	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.30	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	5.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.30	ug/l	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.30	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	0.50	ug/l	

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4

## Method Blank Summary

Page 2 of 3

Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM284-MB2	M8575.D	1	09/01/09	XB	n/a	n/a	VM284

The QC reported here applies to the following samples:

Method: SW846 8260B

C7199-4

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	20	5.0	ug/l	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	

CAS No. Surrogate Recoveries Limits

1868-53-7 Dibromofluoromethane 112% 60-130%

4.1.2  
4

## Method Blank Summary

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Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM284-MB2	M8575.D	1	09/01/09	XB	n/a	n/a	VM284

The QC reported here applies to the following samples:

Method: SW846 8260B

C7199-4

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	103% 60-130%
460-00-4	4-Bromofluorobenzene	99% 60-130%

2037-26-5	Toluene-D8	103% 60-130%
460-00-4	4-Bromofluorobenzene	99% 60-130%

4.1.2  
4

## Method Blank Summary

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Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM284-MB	M8558.D	1	09/01/09	XB	n/a	n/a	VM284

The QC reported here applies to the following samples:

Method: SW846 8260B

VM284-BS

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	10	ug/l	
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.30	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.30	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.30	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	5.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.30	ug/l	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.30	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	0.50	ug/l	

## Method Blank Summary

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Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM284-MB	M8558.D	1	09/01/09	XB	n/a	n/a	VM284

The QC reported here applies to the following samples:

Method: SW846 8260B

VM284-BS

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	20	5.0	ug/l	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	

CAS No. Surrogate Recoveries Limits

1868-53-7 Dibromofluoromethane 106% 60-130%

## Method Blank Summary

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Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM284-MB	M8558.D	1	09/01/09	XB	n/a	n/a	VM284

The QC reported here applies to the following samples:

Method: SW846 8260B

VM284-BS

CAS No.	Surrogate Recoveries	Limits
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2037-26-5	Toluene-D8	102%	60-130%
460-00-4	4-Bromofluorobenzene	100%	60-130%

**Blank Spike Summary**

Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM283-BS	M8534.D	1	08/31/09	XB	n/a	n/a	VM283

**The QC reported here applies to the following samples:****Method:** SW846 8260B

C7199-1, C7199-2, C7199-3, C7199-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	80	70.3	88	60-130
71-43-2	Benzene	20	20.5	103	60-130
108-86-1	Bromobenzene	20	18.9	95	60-130
74-97-5	Bromochloromethane	20	20.1	101	60-130
75-27-4	Bromodichloromethane	20	22.4	112	60-130
75-25-2	Bromoform	20	17.5	88	60-130
104-51-8	n-Butylbenzene	20	21.9	110	60-130
135-98-8	sec-Butylbenzene	20	20.3	102	60-130
98-06-6	tert-Butylbenzene	20	20.4	102	60-130
108-90-7	Chlorobenzene	20	19.6	98	60-130
75-00-3	Chloroethane	20	21.1	106	60-130
67-66-3	Chloroform	20	23.0	115	60-130
95-49-8	o-Chlorotoluene	20	20.2	101	60-130
106-43-4	p-Chlorotoluene	20	22.1	111	60-130
56-23-5	Carbon tetrachloride	20	21.0	105	60-130
75-34-3	1,1-Dichloroethane	20	22.4	112	60-130
75-35-4	1,1-Dichloroethylene	20	18.5	93	60-130
563-58-6	1,1-Dichloropropene	20	20.4	102	60-130
96-12-8	1,2-Dibromo-3-chloropropane	20	17.9	90	60-130
106-93-4	1,2-Dibromoethane	20	18.2	91	60-130
107-06-2	1,2-Dichloroethane	20	21.6	108	60-130
78-87-5	1,2-Dichloropropane	20	22.0	110	60-130
142-28-9	1,3-Dichloropropane	20	19.8	99	60-130
108-20-3	Di-Isopropyl ether	20	21.4	107	60-130
594-20-7	2,2-Dichloropropane	20	22.6	113	60-130
124-48-1	Dibromochloromethane	20	19.9	100	60-130
75-71-8	Dichlorodifluoromethane	20	20.1	101	60-130
156-59-2	cis-1,2-Dichloroethylene	20	20.8	104	60-130
10061-01-5	cis-1,3-Dichloropropene	20	22.0	110	60-130
541-73-1	m-Dichlorobenzene	20	19.8	99	60-130
95-50-1	o-Dichlorobenzene	20	19.8	99	60-130
106-46-7	p-Dichlorobenzene	20	19.7	99	60-130
156-60-5	trans-1,2-Dichloroethylene	20	19.8	99	60-130
10061-02-6	trans-1,3-Dichloropropene	20	20.6	103	60-130
100-41-4	Ethylbenzene	20	20.6	103	60-130
637-92-3	Ethyl Tert Butyl Ether	20	23.0	115	60-130

## Blank Spike Summary

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Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM283-BS	M8534.D	1	08/31/09	XB	n/a	n/a	VM283

The QC reported here applies to the following samples:

Method: SW846 8260B

C7199-1, C7199-2, C7199-3, C7199-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
591-78-6	2-Hexanone	80	74.4	93	60-130
87-68-3	Hexachlorobutadiene	20	24.9	125	60-130
98-82-8	Isopropylbenzene	20	21.0	105	60-130
99-87-6	p-Isopropyltoluene	20	21.0	105	60-130
108-10-1	4-Methyl-2-pentanone	80	80.3	100	60-130
74-83-9	Methyl bromide	20	24.3	122	60-130
74-87-3	Methyl chloride	20	32.1	161* a	60-130
74-95-3	Methylene bromide	20	20.2	101	60-130
75-09-2	Methylene chloride	20	20.6	103	60-130
78-93-3	Methyl ethyl ketone	80	66.3	83	60-130
1634-04-4	Methyl Tert Butyl Ether	20	21.2	106	60-130
91-20-3	Naphthalene	20	16.8	84	60-130
103-65-1	n-Propylbenzene	20	20.6	103	60-130
100-42-5	Styrene	20	20.2	101	60-130
994-05-8	Tert-Amyl Methyl Ether	20	21.3	107	60-130
75-65-0	Tert-Butyl Alcohol	100	84.9	85	60-130
630-20-6	1,1,1,2-Tetrachloroethane	20	19.9	100	60-130
71-55-6	1,1,1-Trichloroethane	20	22.6	113	60-130
79-34-5	1,1,2,2-Tetrachloroethane	20	17.1	86	60-130
79-00-5	1,1,2-Trichloroethane	20	18.6	93	60-130
87-61-6	1,2,3-Trichlorobenzene	20	19.8	99	60-130
96-18-4	1,2,3-Trichloropropane	20	17.5	88	60-130
120-82-1	1,2,4-Trichlorobenzene	20	20.2	101	60-130
95-63-6	1,2,4-Trimethylbenzene	20	20.9	105	60-130
108-67-8	1,3,5-Trimethylbenzene	20	20.9	105	60-130
127-18-4	Tetrachloroethylene	20	18.3	92	60-130
108-88-3	Toluene	20	18.8	94	60-130
79-01-6	Trichloroethylene	20	19.3	97	60-130
75-69-4	Trichlorofluoromethane	20	24.2	121	60-130
75-01-4	Vinyl chloride	20	18.8	94	60-130
1330-20-7	Xylene (total)	60	58.8	98	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	109%	60-130%

**Blank Spike Summary**

Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM283-BS	M8534.D	1	08/31/09	XB	n/a	n/a	VM283

**The QC reported here applies to the following samples:****Method:** SW846 8260B

C7199-1, C7199-2, C7199-3, C7199-5

CAS No.	Surrogate Recoveries	BSP	Limits
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2037-26-5	Toluene-D8	101%	60-130%
460-00-4	4-Bromofluorobenzene	106%	60-130%

(a) High percent recovery; not detected in associated samples.

## Blank Spike Summary

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Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM283-BS	M8535.D	1	08/31/09	XB	n/a	n/a	VM283

The QC reported here applies to the following samples:

Method: SW846 8260B

C7199-1, C7199-2, C7199-3, C7199-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
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CAS No.	Surrogate Recoveries	BSP	Limits
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1868-53-7	Dibromofluoromethane	108%	60-130%
2037-26-5	Toluene-D8	104%	60-130%
460-00-4	4-Bromofluorobenzene	102%	60-130%

**Blank Spike Summary**

Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM284-BS	M8554.D	1	09/01/09	XB	n/a	n/a	VM284

**The QC reported here applies to the following samples:****Method:** SW846 8260B

C7199-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	80	78.7	98	60-130
71-43-2	Benzene	20	20.0	100	60-130
108-86-1	Bromobenzene	20	19.2	96	60-130
74-97-5	Bromochloromethane	20	20.7	104	60-130
75-27-4	Bromodichloromethane	20	22.0	110	60-130
75-25-2	Bromoform	20	18.2	91	60-130
104-51-8	n-Butylbenzene	20	20.7	104	60-130
135-98-8	sec-Butylbenzene	20	19.6	98	60-130
98-06-6	tert-Butylbenzene	20	19.9	100	60-130
108-90-7	Chlorobenzene	20	19.5	98	60-130
75-00-3	Chloroethane	20	20.8	104	60-130
67-66-3	Chloroform	20	22.0	110	60-130
95-49-8	o-Chlorotoluene	20	19.2	96	60-130
106-43-4	p-Chlorotoluene	20	21.2	106	60-130
56-23-5	Carbon tetrachloride	20	20.1	101	60-130
75-34-3	1,1-Dichloroethane	20	21.4	107	60-130
75-35-4	1,1-Dichloroethylene	20	18.0	90	60-130
563-58-6	1,1-Dichloropropene	20	19.7	99	60-130
96-12-8	1,2-Dibromo-3-chloropropane	20	17.0	85	60-130
106-93-4	1,2-Dibromoethane	20	18.9	95	60-130
107-06-2	1,2-Dichloroethane	20	20.8	104	60-130
78-87-5	1,2-Dichloropropane	20	21.5	108	60-130
142-28-9	1,3-Dichloropropane	20	19.6	98	60-130
108-20-3	Di-Isopropyl ether	20	21.6	108	60-130
594-20-7	2,2-Dichloropropane	20	21.5	108	60-130
124-48-1	Dibromochloromethane	20	20.3	102	60-130
75-71-8	Dichlorodifluoromethane	20	18.4	92	60-130
156-59-2	cis-1,2-Dichloroethylene	20	21.0	105	60-130
10061-01-5	cis-1,3-Dichloropropene	20	21.7	109	60-130
541-73-1	m-Dichlorobenzene	20	19.4	97	60-130
95-50-1	o-Dichlorobenzene	20	19.8	99	60-130
106-46-7	p-Dichlorobenzene	20	19.5	98	60-130
156-60-5	trans-1,2-Dichloroethylene	20	20.0	100	60-130
10061-02-6	trans-1,3-Dichloropropene	20	20.2	101	60-130
100-41-4	Ethylbenzene	20	19.8	99	60-130
637-92-3	Ethyl Tert Butyl Ether	20	22.4	112	60-130

## Blank Spike Summary

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Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM284-BS	M8554.D	1	09/01/09	XB	n/a	n/a	VM284

The QC reported here applies to the following samples:

Method: SW846 8260B

C7199-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
591-78-6	2-Hexanone	80	79.2	99	60-130
87-68-3	Hexachlorobutadiene	20	23.6	118	60-130
98-82-8	Isopropylbenzene	20	20.4	102	60-130
99-87-6	p-Isopropyltoluene	20	20.5	103	60-130
108-10-1	4-Methyl-2-pentanone	80	85.1	106	60-130
74-83-9	Methyl bromide	20	25.5	128	60-130
74-87-3	Methyl chloride	20	24.7	124	60-130
74-95-3	Methylene bromide	20	20.5	103	60-130
75-09-2	Methylene chloride	20	20.6	103	60-130
78-93-3	Methyl ethyl ketone	80	77.7	97	60-130
1634-04-4	Methyl Tert Butyl Ether	20	21.6	108	60-130
91-20-3	Naphthalene	20	17.6	88	60-130
103-65-1	n-Propylbenzene	20	19.8	99	60-130
100-42-5	Styrene	20	20.0	100	60-130
994-05-8	Tert-Amyl Methyl Ether	20	21.6	108	60-130
75-65-0	Tert-Butyl Alcohol	100	96.9	97	60-130
630-20-6	1,1,1,2-Tetrachloroethane	20	19.6	98	60-130
71-55-6	1,1,1-Trichloroethane	20	21.1	106	60-130
79-34-5	1,1,2,2-Tetrachloroethane	20	18.2	91	60-130
79-00-5	1,1,2-Trichloroethane	20	19.1	96	60-130
87-61-6	1,2,3-Trichlorobenzene	20	19.1	96	60-130
96-18-4	1,2,3-Trichloropropane	20	18.3	92	60-130
120-82-1	1,2,4-Trichlorobenzene	20	20.0	100	60-130
95-63-6	1,2,4-Trimethylbenzene	20	20.1	101	60-130
108-67-8	1,3,5-Trimethylbenzene	20	20.1	101	60-130
127-18-4	Tetrachloroethylene	20	18.2	91	60-130
108-88-3	Toluene	20	18.4	92	60-130
79-01-6	Trichloroethylene	20	19.8	99	60-130
75-69-4	Trichlorofluoromethane	20	23.1	116	60-130
75-01-4	Vinyl chloride	20	18.2	91	60-130
1330-20-7	Xylene (total)	60	58.4	97	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	105%	60-130%

**Blank Spike Summary**

Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM284-BS	M8554.D	1	09/01/09	XB	n/a	n/a	VM284

**The QC reported here applies to the following samples:****Method:** SW846 8260B

C7199-4

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	99%	60-130%
460-00-4	4-Bromofluorobenzene	101%	60-130%

## Blank Spike Summary

Page 1 of 1

Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM284-BS	M8557.D	1	09/01/09	XB	n/a	n/a	VM284

The QC reported here applies to the following samples:

Method: SW846 8260B

C7199-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
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CAS No.	Surrogate Recoveries	BSP	Limits
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1868-53-7	Dibromofluoromethane	106%	60-130%
2037-26-5	Toluene-D8	103%	60-130%
460-00-4	4-Bromofluorobenzene	101%	60-130%

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C7199-2MS	M8549.D	1	09/01/09	XB	n/a	n/a	VM283
C7199-2MSD	M8550.D	1	09/01/09	XB	n/a	n/a	VM283
C7199-2	M8537.D	1	08/31/09	XB	n/a	n/a	VM283

The QC reported here applies to the following samples:

Method: SW846 8260B

C7199-1, C7199-2, C7199-3, C7199-5

CAS No.	Compound	C7199-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	80	56.0	70	60.5	76	8	60-130/25	
71-43-2	Benzene	ND	20	19.7	99	19.5	98	1	60-130/25	
108-86-1	Bromobenzene	ND	20	18.9	95	18.8	94	1	60-130/25	
74-97-5	Bromochloromethane	ND	20	19.0	95	19.1	96	1	60-130/25	
75-27-4	Bromodichloromethane	ND	20	20.5	103	20.6	103	0	60-130/25	
75-25-2	Bromoform	ND	20	16.0	80	16.5	83	3	60-130/25	
104-51-8	n-Butylbenzene	ND	20	20.4	102	20.2	101	1	60-130/25	
135-98-8	sec-Butylbenzene	ND	20	19.8	99	20.0	100	1	60-130/25	
98-06-6	tert-Butylbenzene	ND	20	19.9	100	20.0	100	1	60-130/25	
108-90-7	Chlorobenzene	ND	20	19.1	96	19.3	97	1	60-130/25	
75-00-3	Chloroethane	ND	20	19.7	99	19.6	98	1	60-130/25	
67-66-3	Chloroform	ND	20	20.7	104	20.5	103	1	60-130/25	
95-49-8	o-Chlorotoluene	ND	20	18.5	93	19.1	96	3	60-130/25	
106-43-4	p-Chlorotoluene	ND	20	21.8	109	20.8	104	5	60-130/25	
56-23-5	Carbon tetrachloride	ND	20	19.5	98	19.4	97	1	60-130/25	
75-34-3	1,1-Dichloroethane	ND	20	20.5	103	20.3	102	1	60-130/25	
75-35-4	1,1-Dichloroethylene	ND	20	17.7	89	17.3	87	2	60-130/25	
563-58-6	1,1-Dichloropropene	ND	20	19.2	96	18.9	95	2	60-130/25	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	14.0	70	14.9	75	6	60-130/25	
106-93-4	1,2-Dibromoethane	ND	20	17.0	85	16.8	84	1	60-130/25	
107-06-2	1,2-Dichloroethane	ND	20	18.5	93	18.7	94	1	60-130/25	
78-87-5	1,2-Dichloropropane	ND	20	20.7	104	20.6	103	0	60-130/25	
142-28-9	1,3-Dichloropropane	ND	20	18.0	90	18.1	91	1	60-130/25	
108-20-3	Di-Isopropyl ether	ND	20	20.2	101	20.1	101	0	60-130/25	
594-20-7	2,2-Dichloropropane	ND	20	17.0	85	17.1	86	1	60-130/25	
124-48-1	Dibromochloromethane	ND	20	18.9	95	18.8	94	1	60-130/25	
75-71-8	Dichlorodifluoromethane	ND	20	17.2	86	17.8	89	3	60-130/25	
156-59-2	cis-1,2-Dichloroethylene	ND	20	20.0	100	19.5	98	3	60-130/25	
10061-01-5	cis-1,3-Dichloropropene	ND	20	19.8	99	19.7	99	1	60-130/25	
541-73-1	m-Dichlorobenzene	ND	20	19.1	96	19.3	97	1	60-130/25	
95-50-1	o-Dichlorobenzene	ND	20	19.2	96	19.4	97	1	60-130/25	
106-46-7	p-Dichlorobenzene	ND	20	19.2	96	19.0	95	1	60-130/25	
156-60-5	trans-1,2-Dichloroethylene	ND	20	19.3	97	19.0	95	2	60-130/25	
10061-02-6	trans-1,3-Dichloropropene	ND	20	17.8	89	18.1	91	2	60-130/25	
100-41-4	Ethylbenzene	ND	20	19.6	98	19.4	97	1	60-130/25	
637-92-3	Ethyl Tert Butyl Ether	ND	20	20.4	102	20.0	100	2	60-130/25	

# Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C7199-2MS	M8549.D	1	09/01/09	XB	n/a	n/a	VM283
C7199-2MSD	M8550.D	1	09/01/09	XB	n/a	n/a	VM283
C7199-2	M8537.D	1	08/31/09	XB	n/a	n/a	VM283

The QC reported here applies to the following samples:

Method: SW846 8260B

C7199-1, C7199-2, C7199-3, C7199-5

CAS No.	Compound	C7199-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND	80	61.4	77	65.1	81	6	60-130/25	
87-68-3	Hexachlorobutadiene	ND	20	24.3	122	24.3	122	0	60-130/25	
98-82-8	Isopropylbenzene	ND	20	20.2	101	20.1	101	0	60-130/25	
99-87-6	p-Isopropyltoluene	ND	20	20.1	101	20.3	102	1	60-130/25	
108-10-1	4-Methyl-2-pentanone	ND	80	65.5	82	68.9	86	5	60-130/25	
74-83-9	Methyl bromide	ND	20	21.9	110	22.7	114	4	60-130/25	
74-87-3	Methyl chloride	ND	20	23.3	117	23.2	116	0	60-130/25	
74-95-3	Methylene bromide	ND	20	18.2	91	18.4	92	1	60-130/25	
75-09-2	Methylene chloride	ND	20	19.2	96	18.9	95	2	60-130/25	
78-93-3	Methyl ethyl ketone	ND	80	57.5	72	57.9	72	1	60-130/25	
1634-04-4	Methyl Tert Butyl Ether	ND	20	19.5	98	18.8	94	4	60-130/25	
91-20-3	Naphthalene	ND	20	15.1	76	16.7	84	10	60-130/25	
103-65-1	n-Propylbenzene	ND	20	19.7	99	19.6	98	1	60-130/25	
100-42-5	Styrene	ND	20	17.7	89	17.4	87	2	60-130/25	
994-05-8	Tert-Amyl Methyl Ether	ND	20	19.0	95	18.7	94	2	60-130/25	
75-65-0	Tert-Butyl Alcohol	ND	100	72.3	72	75.7	76	5	60-130/25	
630-20-6	1,1,1,2-Tetrachloroethane	ND	20	19.3	97	19.3	97	0	60-130/25	
71-55-6	1,1,1-Trichloroethane	ND	20	20.2	101	19.7	99	3	60-130/25	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	15.6	78	16.6	83	6	60-130/25	
79-00-5	1,1,2-Trichloroethane	ND	20	17.3	87	17.6	88	2	60-130/25	
87-61-6	1,2,3-Trichlorobenzene	ND	20	17.8	89	18.9	95	6	60-130/25	
96-18-4	1,2,3-Trichloropropane	ND	20	14.7	74	15.3	77	4	60-130/25	
120-82-1	1,2,4-Trichlorobenzene	ND	20	18.8	94	19.4	97	3	60-130/25	
95-63-6	1,2,4-Trimethylbenzene	ND	20	19.5	98	19.6	98	1	60-130/25	
108-67-8	1,3,5-Trimethylbenzene	ND	20	19.7	99	19.6	98	1	60-130/25	
127-18-4	Tetrachloroethylene	ND	20	18.1	91	17.7	89	2	60-130/25	
108-88-3	Toluene	ND	20	18.5	93	18.3	92	1	60-130/25	
79-01-6	Trichloroethylene	ND	20	19.2	96	19.1	96	1	60-130/25	
75-69-4	Trichlorofluoromethane	ND	20	20.8	104	21.5	108	3	60-130/25	
75-01-4	Vinyl chloride	ND	20	16.5	83	16.8	84	2	60-130/25	
1330-20-7	Xylene (total)	ND	60	57.9	97	57.4	96	1	60-130/25	

CAS No.	Surrogate Recoveries	MS	MSD	C7199-2	Limits
1868-53-7	Dibromofluoromethane	101%	97%	107%	60-130%

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## Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C7199-2MS	M8549.D	1	09/01/09	XB	n/a	n/a	VM283
C7199-2MSD	M8550.D	1	09/01/09	XB	n/a	n/a	VM283
C7199-2	M8537.D	1	08/31/09	XB	n/a	n/a	VM283

The QC reported here applies to the following samples:

Method: SW846 8260B

C7199-1, C7199-2, C7199-3, C7199-5

CAS No.	Surrogate Recoveries	MS	MSD	C7199-2	Limits
2037-26-5	Toluene-D8	100%	100%	105%	60-130%
460-00-4	4-Bromofluorobenzene	99%	99%	101%	60-130%

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C7240-9MS	M8592.D	1	09/02/09	XB	n/a	n/a	VM284
C7240-9MSD	M8593.D	1	09/02/09	XB	n/a	n/a	VM284
C7240-9 a	M8584.D	1	09/02/09	XB	n/a	n/a	VM284

The QC reported here applies to the following samples:

Method: SW846 8260B

C7199-4

CAS No.	Compound	C7240-9 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	80	65.1	81	63.2	79	3	60-130/25	
71-43-2	Benzene	3.3	20	22.7	97	23.0	99	1	60-130/25	
108-86-1	Bromobenzene	ND	20	17.3	87	18.0	90	4	60-130/25	
74-97-5	Bromochloromethane	ND	20	19.5	98	19.5	98	0	60-130/25	
75-27-4	Bromodichloromethane	ND	20	22.2	111	22.0	110	1	60-130/25	
75-25-2	Bromoform	ND	20	16.6	83	16.2	81	2	60-130/25	
104-51-8	n-Butylbenzene	ND	20	17.4	87	20.0	100	14	60-130/25	
135-98-8	sec-Butylbenzene	ND	20	17.3	87	18.9	95	9	60-130/25	
98-06-6	tert-Butylbenzene	ND	20	17.3	87	19.0	95	9	60-130/25	
108-90-7	Chlorobenzene	ND	20	17.9	90	18.8	94	5	60-130/25	
75-00-3	Chloroethane	ND	20	20.7	104	21.2	106	2	60-130/25	
67-66-3	Chloroform	ND	20	22.6	113	22.5	113	0	60-130/25	
95-49-8	o-Chlorotoluene	ND	20	16.9	85	17.8	89	5	60-130/25	
106-43-4	p-Chlorotoluene	ND	20	19.3	97	22.0	110	13	60-130/25	
56-23-5	Carbon tetrachloride	ND	20	20.6	103	20.7	104	0	60-130/25	
75-34-3	1,1-Dichloroethane	ND	20	22.1	111	22.1	111	0	60-130/25	
75-35-4	1,1-Dichloroethylene	ND	20	17.4	87	17.7	89	2	60-130/25	
563-58-6	1,1-Dichloropropene	ND	20	19.3	97	19.6	98	2	60-130/25	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	16.8	84	17.4	87	4	60-130/25	
106-93-4	1,2-Dibromoethane	ND	20	17.5	88	17.0	85	3	60-130/25	
107-06-2	1,2-Dichloroethane	ND	20	21.3	107	20.7	104	3	60-130/25	
78-87-5	1,2-Dichloropropane	ND	20	21.8	109	21.2	106	3	60-130/25	
142-28-9	1,3-Dichloropropane	ND	20	19.0	95	18.2	91	4	60-130/25	
108-20-3	Di-Isopropyl ether	ND	20	21.6	108	21.5	108	0	60-130/25	
594-20-7	2,2-Dichloropropane	ND	20	17.8	89	17.3	87	3	60-130/25	
124-48-1	Dibromochloromethane	ND	20	19.0	95	18.5	93	3	60-130/25	
75-71-8	Dichlorodifluoromethane	ND	20	20.4	102	20.4	102	0	60-130/25	
156-59-2	cis-1,2-Dichloroethylene	ND	20	20.4	102	20.4	102	0	60-130/25	
10061-01-5	cis-1,3-Dichloropropene	ND	20	20.1	101	19.9	100	1	60-130/25	
541-73-1	m-Dichlorobenzene	ND	20	16.8	84	18.6	93	10	60-130/25	
95-50-1	o-Dichlorobenzene	ND	20	17.5	88	18.7	94	7	60-130/25	
106-46-7	p-Dichlorobenzene	ND	20	16.9	85	18.6	93	10	60-130/25	
156-60-5	trans-1,2-Dichloroethylene	ND	20	19.4	97	19.7	99	2	60-130/25	
10061-02-6	trans-1,3-Dichloropropene	ND	20	18.7	94	18.4	92	2	60-130/25	
100-41-4	Ethylbenzene	0.84	J	20	19.1	91	20.1	96	5	60-130/25
637-92-3	Ethyl Tert Butyl Ether	ND		20	23.2	116	22.7	114	2	60-130/25

# Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C7240-9MS	M8592.D	1	09/02/09	XB	n/a	n/a	VM284
C7240-9MSD	M8593.D	1	09/02/09	XB	n/a	n/a	VM284
C7240-9 a	M8584.D	1	09/02/09	XB	n/a	n/a	VM284

The QC reported here applies to the following samples:

Method: SW846 8260B

C7199-4

CAS No.	Compound	C7240-9 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND	80	74.4	93	70.2	88	6	60-130/25	
87-68-3	Hexachlorobutadiene	ND	20	20.1	101	23.4	117	15	60-130/25	
98-82-8	Isopropylbenzene	ND	20	18.2	91	19.6	98	7	60-130/25	
99-87-6	p-Isopropyltoluene	ND	20	17.3	87	19.3	97	11	60-130/25	
108-10-1	4-Methyl-2-pentanone	ND	80	81.4	102	76.2	95	7	60-130/25	
74-83-9	Methyl bromide	ND	20	19.8	99	21.6	108	9	60-130/25	
74-87-3	Methyl chloride	ND	20	28.7	144* b	28.1	141* b	2	60-130/25	
74-95-3	Methylene bromide	ND	20	19.5	98	18.9	95	3	60-130/25	
75-09-2	Methylene chloride	ND	20	20.5	103	20.1	101	2	60-130/25	
78-93-3	Methyl ethyl ketone	ND	80	65.9	82	62.0	78	6	60-130/25	
1634-04-4	Methyl Tert Butyl Ether	ND	20	21.4	107	20.9	105	2	60-130/25	
91-20-3	Naphthalene	ND	20	16.4	82	17.2	86	5	60-130/25	
103-65-1	n-Propylbenzene	ND	20	17.2	86	19.1	96	10	60-130/25	
100-42-5	Styrene	ND	20	18.0	90	18.8	94	4	60-130/25	
994-05-8	Tert-Amyl Methyl Ether	ND	20	21.6	108	20.9	105	3	60-130/25	
75-65-0	Tert-Butyl Alcohol	22.7	100	110	87	107	84	3	60-130/25	
630-20-6	1,1,1,2-Tetrachloroethane	ND	20	19.0	95	19.3	97	2	60-130/25	
71-55-6	1,1,1-Trichloroethane	ND	20	21.8	109	22.1	111	1	60-130/25	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	16.5	83	16.1	81	2	60-130/25	
79-00-5	1,1,2-Trichloroethane	ND	20	18.3	92	17.6	88	4	60-130/25	
87-61-6	1,2,3-Trichlorobenzene	ND	20	16.9	85	18.9	95	11	60-130/25	
96-18-4	1,2,3-Trichloropropane	ND	20	16.4	82	15.3	77	7	60-130/25	
120-82-1	1,2,4-Trichlorobenzene	ND	20	17.1	86	19.0	95	11	60-130/25	
95-63-6	1,2,4-Trimethylbenzene	ND	20	18.1	91	19.8	99	9	60-130/25	
108-67-8	1,3,5-Trimethylbenzene	ND	20	18.1	91	19.4	97	7	60-130/25	
127-18-4	Tetrachloroethylene	ND	20	15.9	80	16.6	83	4	60-130/25	
108-88-3	Toluene	ND	20	17.4	87	17.9	90	3	60-130/25	
79-01-6	Trichloroethylene	ND	20	18.2	91	18.7	94	3	60-130/25	
75-69-4	Trichlorofluoromethane	ND	20	24.5	123	24.6	123	0	60-130/25	
75-01-4	Vinyl chloride	ND	20	18.5	93	18.6	93	1	60-130/25	
1330-20-7	Xylene (total)	ND	60	52.9	88	56.0	93	6	60-130/25	

CAS No.	Surrogate Recoveries	MS	MSD	C7240-9	Limits
1868-53-7	Dibromofluoromethane	110%	108%	119%	60-130%

## Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C7240-9MS	M8592.D	1	09/02/09	XB	n/a	n/a	VM284
C7240-9MSD	M8593.D	1	09/02/09	XB	n/a	n/a	VM284
C7240-9 a	M8584.D	1	09/02/09	XB	n/a	n/a	VM284

The QC reported here applies to the following samples:

Method: SW846 8260B

C7199-4

CAS No.	Surrogate Recoveries	MS	MSD	C7240-9	Limits
2037-26-5	Toluene-D8	102%	100%	106%	60-130%
460-00-4	4-Bromofluorobenzene	105%	102%	103%	60-130%

(a) Sample was not preserved to a pH < 2.

(b) Outside of in-house control limits.

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Northern California

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Laboratories



## Section 5

### GC Volatiles

#### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

Page 1 of 1

Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GJK311-MB	JK8049.D	1	08/25/09	JA	n/a	n/a	GJK311

The QC reported here applies to the following samples:

Method: SW846 8015B

C7199-1, C7199-2, C7199-3, C7199-4, C7199-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.050	0.025	mg/l	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	123%      64-153%

## Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GJK311-BS	JK8052.D	1	08/25/09	JA	n/a	n/a	GJK311
GJK311-BSD	JK8053.D	1	08/25/09	JA	n/a	n/a	GJK311

The QC reported here applies to the following samples:

Method: SW846 8015B

C7199-1, C7199-2, C7199-3, C7199-4, C7199-5

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	0.125	0.111	89	0.107	86	4	65-135/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	131%	122%	64-153%

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C7219-2MS	JK8066.D	1	08/26/09	JA	n/a	n/a	GJK311
C7219-2MSD	JK8067.D	1	08/26/09	JA	n/a	n/a	GJK311
C7219-2	JK8065.D	1	08/26/09	JA	n/a	n/a	GJK311

The QC reported here applies to the following samples:

Method: SW846 8015B

C7199-1, C7199-2, C7199-3, C7199-4, C7199-5

CAS No.	Compound	C7219-2		Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
		mg/l	Q							
	TPH-GRO (C6-C10)	0.0560		0.125	0.158	82	0.156	80	1	65-135/25

CAS No.	Surrogate Recoveries	MS	MSD	C7219-2	Limits
460-00-4	4-Bromofluorobenzene	131%	130%	122%	64-153%



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## Section 6

### GC Semi-volatiles

#### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries



## Method Blank Summary

Page 1 of 1

Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1267-MB	GG7540.D	1	08/26/09	JH	08/26/09	OP1267	GGG272

The QC reported here applies to the following samples:

Method: SW846 8015B M

C7199-1, C7199-2, C7199-3, C7199-4, C7199-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	79% 45-140%

## Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: C7199

Account: ESTCASJ Enviro Soil Tech Consultants

Project: T06019784055-5630 San Pablo Avenue, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1267-BS	GG7541.D	1	08/26/09	JH	08/26/09	OP1267	GGG272
OP1267-BSD	GG7542.D	1	08/26/09	JH	08/26/09	OP1267	GGG272

The QC reported here applies to the following samples:

Method: SW846 8015B M

C7199-1, C7199-2, C7199-3, C7199-4, C7199-5

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1	0.678	68	0.715	72	5	45-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	73%	86%	45-140%