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Alameda County
AUG 03 2005
Environmental Health

July 27, 2005

The Bank of New York Trust Company, N.A. as Corporate Co-Trustee for
Carpenters Pension Trust Fund for Northern California; Northern California Carpenters PTF, LLC
c/o Ms. Mary Schroeder, McMorgan & Company LLC
One Bush Street, Suite 800
San Francisco, California 94104

RE: Second Quarter 2005 Groundwater Monitoring Report
444 Hegenberger Loop, Oakland, California
ACC Project No. 6748-017.00

Dear Ms. Schroeder:

Enclosed is the report describing the groundwater monitoring activities conducted in all monitoring wells at 444 Hegenberger Loop, Oakland, California. ACC recommends that you submit a copy of the report directly to the Alameda County Health Care Services Agency with your cover letter.

Mr. Barney Chan
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

If you have any questions regarding the report, please contact me at (510) 638-8400, ext. 109.

Sincerely,

A handwritten signature in black ink that reads 'David R. DeMent'.

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

/trb:drd

Enclosures



Alameda County
AUG 03 2005
Environmental Health

SECOND QUARTER 2005 GROUNDWATER MONITORING REPORT

Subject Property
444 Hegenberger Loop
Oakland, California

ACC Project Number 6748-017.00

Prepared for:

The Bank of New York Trust Company, N.A. as Corporate Co-Trustee for
Carpenters Pension Trust Fund for Northern California; Northern California Carpenters PTF, LLC
c/o Ms. Mary Schroeder, McMorgan & Company LLC
One Bush Street, Suite 800
San Francisco, California 94104

July 27, 2005

Prepared By:

Trevor Bausman
Project Administrator

Reviewed By:

David DeMent, PG, REA II
Environmental Division Manager

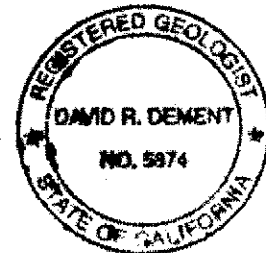


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SECOND QUARTER 2005 GROUNDWATER MONITORING REPORT

444 Hegenberger Loop
Oakland, California

1.0 INTRODUCTION

This May 2005 Groundwater Monitoring Report was prepared by ACC Environmental Consultants, Inc., (ACC) at the request of McMorgan & Company LLC on behalf of The Bank of New York Trust Company, N.A. as Corporate Co-Trustee for Carpenters Pension Trust Fund for Northern California; Northern California Carpenters PTF. Work was performed at the subject property located at 444 Hegenberger Loop, Oakland, California (Site). The project objectives were to: 1) measure the groundwater levels in each well and calculate the groundwater elevation, gradient, and flow direction; 2) obtain representative water samples from the seven existing groundwater monitoring wells and analyze the water samples for petroleum hydrocarbon constituents as gasoline and/or diesel; and 3) report the findings.

The general goal of this groundwater monitoring and sampling event was to determine current groundwater conditions, evaluate the changes in concentrations of constituents of concern, and obtain current groundwater quality data to further develop a Conceptual Site Model (CSM).

2.0 BACKGROUND

The Site is located at 444 Hegenberger Loop in the southeast corner of the intersection of Hegenberger Road and Hegenberger Loop. The rectangular lot is approximately 250 feet long by 200 feet wide and is approximately 9 feet above mean sea level.

The available data indicate that a series of subsurface investigations have been conducted at the Site since 1997. A site assessment in April 1997 indicated the presence of petroleum hydrocarbons in soils and groundwater beneath the Site but no reportable concentrations of methyl tertiary butyl ether (MTBE). A subsequent investigation conducted in July and October 1997 confirmed previous investigation findings and that no underground storage tanks (USTs) remained at the Site.

Tetra Tech EM Inc. (Tetra Tech) installed five 2-inch-diameter groundwater monitoring wells in November 1998. The five monitoring wells were screened from 5 to 20 feet below ground surface (bgs). Well MW-1 was subsequently destroyed in December 1999 and well MW-6 was installed in the estimated downgradient direction of the former waste oil tank. Well MW-6 was screened from 10 to 20 feet bgs. In December 2000, Tetra Tech installed offsite wells MW-7 and MW-8 estimated to be in the downgradient direction of the Site. Wells MW-7 and MW-8 were screened from 5 to 20 feet bgs. Groundwater monitoring was performed periodically from December 1998 to October 2001 in the existing wells.

Tetra Tech reported the findings of a Sensitive Receptor Survey in its March 8, 2001 *Fourth Quarter Groundwater Monitoring Report, December 2000*. According to the California Department of Water resources, 40 monitoring wells and two irrigation wells were located at 11

sites within the search distance. One irrigation well is reportedly located approximately 500 feet cross gradient from the Site and a second irrigation well is located approximately 2,800 feet crossgradient of the Site.

2.1 Subsurface Conditions

Soil boring logs from wells MW-7 and MW-8, included in the March 8, 2001 *Fourth Quarter Groundwater Monitoring Report, December 2000*, indicate that clay and silty clay is present from the surface to the minimum depth of 11.5 feet bgs and sandy gravels and sands are present from approximately 12 to 15 feet bgs to 20.5 feet bgs, the total depth of the soil borings. Silty clays logged at 10 to 10.5 feet bgs are described as dry to moist, medium plasticity, and medium stiff. Sandy gravels logged from 15 to 16 feet bgs are described as saturated, coarse to fine grained sand, and fine to medium grained gravel.

The data summarized in the soil boring logs directly contradicts other conclusions presented in the March 8, 2001 *Fourth Quarter Groundwater Monitoring Report, December 2000*. In the *Subsurface Soil Conditions and Hydrology* section of the report, Tetra Tech states that "Groundwater is usually encountered within five feet bgs," and in the *Preferential Pathways* section "the utility trenches may act as preferential pathways and could allow for movement of petroleum hydrocarbons to the north and west beyond the site." Saturated permeable soils are not logged shallower than 12 feet bgs. Utility trenches in the vicinity of the Site likely exist no deeper than seven feet bgs, therefore, interception or preferential movement of groundwater along utility trenches is highly unlikely. Groundwater elevations are typically measured approximately 5 feet bgs in the monitoring wells due to semi-confined aquifer conditions.

3.0 GROUNDWATER MONITORING AND SAMPLING

ACC conducted groundwater monitoring on May 16, 2005. Work at the Site included measuring depth to water, subjectively evaluating groundwater in the wells, purging and sampling the wells, and submitting the samples to a state-certified laboratory for analysis.

3.1 Groundwater Monitoring

Before groundwater sampling, the depth to the surface of the water table was measured from the top of the polyvinyl chloride well casing using a Solinst water level meter. Based on well elevation data reported by Tetra Tech, the groundwater monitoring wells were surveyed relative to mean sea level in December 2000. ACC measured depth to water using an electronic Solinst meter and the water level measurements were recorded to the nearest 0.01 foot. Information regarding well elevations and groundwater depths is summarized in Table 1.

TABLE 1 - GROUNDWATER DEPTH INFORMATION

Well No.	Date Sampled	Well Elevation ⁽¹⁾ (above MSL)	Depth to Groundwater	Groundwater Elevation	
MW-1	12/02/98	100.74	2.90	97.84	
	03/08/99		3.43	97.31	
	07/01/99		3.81	96.93	
	08/18/99		3.62	97.12	
	09/15/99		3.69	97.05	
	12/27/99		3.81	96.93	
	Well Destroyed				
MW-2	12/02/98	102.44	4.61	97.83	
	03/08/99		5.16	97.28	
	07/01/99		5.91	96.53	
	08/18/99		5.53	96.91	
	09/15/99		5.55	96.89	
	12/27/99		5.55	96.89	
	03/24/00		5.44	97.00	
	06/09/00	9.05 ⁽²⁾	---	FP	
	12/14/00	5.00	4.05		
	05/07/01	5.69	3.36		
	10/04/01	5.60	3.45		
	02/09/05	5.00	4.05		
	05/16/05	3.98	5.07		
MW-3	12/02/98	102.00	4.24	97.76	
	03/08/99		4.90	97.10	
	07/01/99		5.35	96.65	
	08/18/99		5.21	96.79	
	09/15/99		5.26	96.74	
	12/27/99		5.42	96.58	
	03/24/00		5.81	96.19	
	06/09/00		5.43	96.57	
	12/14/00		8.60 ⁽²⁾	4.85	3.75
	05/07/01		5.37	3.23	
	10/04/01		5.27	3.33	
	02/09/05		4.45	4.15	
	05/16/05		3.81	4.79	
MW-4	12/02/98	100.00	2.20	97.80	
	03/08/99		2.80	97.20	
	07/01/99		5.23	64.77	
	08/18/99		5.00	95.00	
	09/15/99		4.99	95.01	
	12/27/99		5.23	94.77	
	03/24/00		5.39	94.61	
	06/09/00		5.24	94.76	
	12/14/00		8.50 ⁽²⁾	4.60	3.90
	05/07/01		5.20	3.30	
10/04/01	5.08	3.42			

Well No.	Date Sampled	Well Elevation ⁽¹⁾ (above MSL)	Depth to Groundwater	Groundwater Elevation
	02/09/05		4.45	4.05
	05/16/05		3.98	4.52
MW-5	12/02/98	102.22	4.59	97.63
	03/08/99		5.20	97.02
	07/01/99		5.59	96.63
	08/18/99		5.37	96.85
	09/15/99		5.55	96.67
	12/27/99		5.48	96.74
	03/24/00		6.02	96.20
	06/09/00		5.59	96.63
	12/14/00	8.84 ⁽²⁾	5.10	3.74
	05/07/01		5.52	3.32
	10/04/01		5.45	3.39
	02/09/05		4.90	3.94
	05/16/05		3.92	4.92
MW-6	03/24/00	102.58	5.49	97.09
	06/09/00		5.87	96.71
	12/14/00	9.19 ⁽²⁾	5.13	4.06
	05/07/01		5.89	3.30
	10/04/01		5.71	3.48
	02/09/05		5.20	3.99
	05/16/05		3.98	5.21
MW-7	12/14/00	8.10 ⁽²⁾	3.48	4.62
	05/07/01		5.13	2.97
	10/04/01		4.87	3.23
	02/09/05		4.15	3.95
	05/16/05		3.79	4.31
MW-8	12/14/00	8.68 ⁽²⁾	5.10	3.58
	05/07/01		5.74	2.94
	10/04/01		5.52	3.16
	02/09/05		4.80	3.88
	05/16/05		3.41	5.27

Notes: All measurements in feet

⁽¹⁾ Well elevation measured to top of casing

⁽²⁾ Well elevation relative to established City of Oakland Benchmark (feet above sea level)

3.2 Groundwater Gradient

The calculated groundwater flow direction and gradient, as determined from monitoring well data obtained on May 16, 2005, is illustrated on Figure 3. The groundwater elevation measured in well MW-8 was not used due its suspect value. Generally, revised groundwater piezometric surface contours approximate historic values and groundwater flow direction trends west-northwest. The calculated groundwater gradient averaged 0.004 foot per foot. Historical groundwater gradients and calculated flow directions are summarized in Table 2.

TABLE 2 – GROUNDWATER GRADIENT AND FLOW DIRECTION

Date Monitored	Gradient (foot/foot)	Direction
12/02/98	0.00091	West
03/08/99	0.00086	Southwest
07/01/99	0.0011	Southwest
08/18/99	0.0013	West
09/15/99	0.04089 ⁽¹⁾	North ⁽¹⁾
	0.00125 ⁽⁵⁾	West
12/27/99	0.0010 ⁽⁵⁾	West ⁽⁵⁾
	0.0489 ⁽¹⁾	North ⁽¹⁾
03/29/00	0.0469 ⁽¹⁾	Northwest
	0.0131 ⁽²⁾	West-Southwest
06/09/00	0.03 ⁽³⁾	North
	0.0011 ⁽²⁾	South-southwest
12/14/00	0.003 ⁽¹⁾	North
	0.006 ⁽⁴⁾	North
05/07/01	0.0014	Northwest
	0.0025 ⁽⁶⁾	Northwest
10/04/01	0.0013	Northwest
	0.001 ⁽⁶⁾	Northwest
02/09/05	0.001	Southwest
05/16/05	0.004	West-Northwest

- Notes:
- (1) Flow component from MW-2 to MW-4
 - (2) Flow component from MW-6 to area of MW-5
 - (3) Flow component from MW-2, MW-3, and MW-4 and from MW-6 to MW-4
 - (4) Flow component from MW-7 to MW-8
 - (5) Flow component among wells MW-2, MW-3, and MW-5
 - (6) Flow component from MW-3 to MW-7

3.3 Groundwater Sampling

Before groundwater sampling, each well was purged using a disposable polyethylene bailer. Groundwater samples were collected after four well casing volumes of water were measured for temperature and dissolved oxygen (DO), and removed. Following purging, each well was allowed to recharge before sampling. When recovery to 80 percent of the static water level was observed, a sample was collected for analysis. Groundwater conditions monitored during purging and sampling were recorded on monitoring well worksheets, included as Appendix 1.

Wells were sampled using disposable polyethylene bailers attached to a new rope for each well. From each monitoring well, approved, laboratory-supplied sample vials were filled to overflowing and sealed to eliminate trapped air in the vial. Once filled, sample vials were inverted and tapped to test for air bubbles. Sample containers were labeled with self adhesive, preprinted tags. The samples were stored in a pre-chilled, insulated container pending delivery to STL San Francisco (STL-SF), a state-certified analytical laboratory, for analysis.

Water purged during the development and sampling of the monitoring wells was temporarily stored onsite in Department of Transportation approved 55-gallon drums pending laboratory analysis and proper disposal.

4.0 RESULTS OF GROUNDWATER SAMPLING

Groundwater samples collected from each well were submitted to STL-SF following chain of custody protocol. All groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and xylenes (BTEX), and methyl tertiary butyl ether (MTBE) by EPA Method 8260B and water samples from wells MW-2, MW-5, and MW-6 were further analyzed for total petroleum hydrocarbons as diesel (TPHd) by EPA Method 3510/8015M. A copy of the chain of custody record and laboratory analytical reports is included as Appendix 2. A summary of the groundwater results obtained from each monitoring well is presented in Table 3.

TABLE 3 - GROUNDWATER SAMPLE ANALYTICAL RESULTS

Well No.	Date Sampled	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
MW-1	12/02/98	< 50	< 50	---	< 0.05	< 0.05	< 0.05	< 0.05
	03/08/99	190	< 50	---	< 0.3	< 0.3	< 0.3	< 0.3
	07/01/99	< 50	< 50	---	< 0.5	< 0.5	< 0.5	< 0.5
	08/18/99	< 50	3,100	---	< 0.5	9.6	12	12
	09/15/99	< 50	< 50	---	< 0.5	< 0.5	< 0.5	< 0.5
	12/27/99	---	---	---	---	---	---	---
	Destroyed	---	---	---	---	---	---	---
	MW-2	12/02/98	99	< 50	---	4.6	0.85	0.57
03/08/99		210	180	---	200 ⁽⁹⁾	0.74	1.3	2.3
07/01/99		< 50	1,100	---	190	13	33	36
08/18/99		---	---	---	---	---	---	---
09/15/99		100	990	---	330	9.7	11	19
12/27/99		< 50	1,000	---	260	7.2	1.3	10
03/24/00		31,000	1,900	---	110	4.8	9.5	12
06/09/00		---	---	---	---	---	---	---
12/14/00		470	1,600	< 2/20	450	18	61	26
05/07/01		300	950	---	120	5.8	8.5	32
10/04/01		170	370	---	55	2.8	17	4.2
02/09/05		< 50	160	< 0.50	69	1.2	1.3	< 1.0
05/16/05	140	650	< 0.50	96	4.7	15	7.5	
MW-3	12/02/98	300	970	---	160	6.5	16	9
	03/08/99	1,400	2,600	---	1,800	30	67	26
	07/01/99	150	3,000	---	1	< 0.5	32	36
	08/18/99	---	---	---	---	---	---	---
	09/15/99	110	1,100	---	350	8.3	5.4	10
	12/27/99	70	560	---	170	2.1	7.6	3.1
	03/24/00	1,000	8,400	---	4100	71	190	75

Well No.	Date Sampled	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
MW-3 Cont.	06/09/00	320	2,700	---	1,100	17	18	<10
	12/14/00	<100	710	<0.5/5	140	2.2	3.3	1.2
	05/07/01	<400	1,500	---	270	7.9	11	5.6
	10/04/01	<50	140	---	45	<0.3	1.3	<0.6
	02/09/05	---	7,700	<5.0	670	16	83	36
	05/16/05	---	7,100	<5.0	1,200	20	110	49
MW-4	12/02/98	620	<50	---	1.1	0.37	<0.3	2
	03/08/99	<50	1,300	---	1,900 ⁽¹⁰⁾	9.4	1.2	11
	07/01/99	<50	610	---	120	<0.5	<0.5	<0.5
	08/18/99	---	---	---	---	---	---	---
	09/15/99	59	830	---	320	6.5	1.7	<2.0
	12/27/99	<50	55	---	5.8	<0.5	<0.5	<0.5
	03/24/00	77	430	---	240	3.3	0.98	1.5
	06/09/00	<50	220	---	91	0.93	<0.5	<0.5
	12/14/00	<50	96	<0.5	15	<0.5	<0.5	<0.5
	05/07/01	<100	380	---	130	2.5	1.7	2.5
	10/04/01	<50	76	---	21	<0.3	<0.3	<0.6
	02/09/05	---	2,000	<2.5	440	12	9.3	7.6
	05/16/05	---	2,400	<2.5	610	16	11	8.0
MW-5	12/02/98	620	<50	---	1.1	0.37	<0.3	2
	03/08/99	<50	58	---	23	0.31	<0.3	1.8
	07/01/99	64	1,900	---	160	10	13	22
	08/18/99	---	---	---	---	---	---	---
	09/15/99	<50	410	---	64	2.1	1.3	2.7
	12/27/99	<50	130	---	15	0.73	<0.5	<0.5
	03/24/00	460	2,500	---	560	57	18	87
	06/09/00	140	2,600	---	770	63	15	71
	12/14/00	<50	220	<0.5/5	17	0.63	1.7	1.1
	05/07/01	<200	3,200	---	450	44	54	66
	10/04/01	<50	<50	---	3.6	<0.3	<0.3	<0.6
	02/09/05	57	1,100	0.58	160	14	50	9.6
	05/16/05	340	4,700	<10	730	79	340	36
MW-6	03/24/00	470	2,400	---	430	16	340	73
	06/09/00	<50	540	---	190	1.2	3.7	4.5
	12/14/00	<50	<50	<0.5/5	0.51	<0.5	<0.5	0.94
	05/07/01	<50	<50	---	4.4	<0.5	<0.5	<0.5
	10/04/01	<50	<50	---	<0.3	<0.3	<0.3	<0.6
	02/09/05	<50	<50	<0.50	0.94	<0.50	<0.50	<1.0
	05/16/05	<50	<50	<0.50	0.55	<0.50	<0.50	<1.0
	MW-7	12/14/00	<50	<50	<0.5/5	<0.5	<0.5	<0.5
05/07/01		<50	<50	---	<0.5	<0.5	<0.5	<0.5
10/04/01		<50	<50	---	<0.3	<0.3	<0.3	<0.6
02/09/05		---	<50	0.55	<0.50	<0.50	<0.50	<1.0
05/16/05		---	<50	<0.50	<0.50	<0.50	<0.50	<1.0

Well No.	Date Sampled	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
MW-8	12/14/00	< 50	< 50	0.52	< 0.5	< 0.5	< 0.5	< 0.5
	05/07/01	< 50	< 50	---	< 0.5	< 0.5	< 0.5	< 0.5
	10/04/01	< 50	< 50	---	< 0.3	< 0.3	< 0.3	< 0.6
	02/09/05	---	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
	05/16/05	---	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0

Notes: µg/L = micrograms per liter (approximately equivalent to ppb)

--- = analysis not performed

Select data flags have been removed from the previously reported data table

5.0 DISCUSSION

This report documents the second monitoring and sampling event conducted in 2005. Previous groundwater monitoring and sampling was conducted from December 2000 to October 2001. Measured groundwater elevations differed from the February monitoring and sampling event, increasing from 0.36 to 1.39 feet in the seven respective groundwater monitoring wells. During this event, and excluding data from well MW-8, the calculated groundwater flow direction was west-northwest at an average gradient of 0.004 foot per foot. These values are generally consistent with historical trends and would be expected based on local topography and surface water drainage pathways. When the suspect groundwater elevation value from well MW-8 was removed, the elevation contours better approximated previously reported groundwater flow direction and gradient values. ACC believes that tidal fluctuations, apparent in San Leandro Creek located approximately 200 feet west and northwest of the Site, are responsible for the variation in changes in groundwater elevation measured in the monitoring wells. In addition, tidal fluctuations may be responsible for the varying calculated groundwater flow directions and gradients reported for the Site from September 1999 to May 2001, and the varying groundwater elevations reported for each respective well from February to May 2005.

Reported TPHd was 340 micrograms per Liter (µg/L) in well MW-5, 140 µg/L in well MW-2, but was not detected above its laboratory reporting limit in wells MW-6. TPHg was reported in wells MW-2 through MW-5 at concentrations ranging from 650 to 7,100 µg/L but was not detected above its laboratory reporting limit in wells MW-6 through MW-8. Detectable TPHg concentrations increased in wells MW-2, MW-4, and MW-5 and decreased in well MW-3. BTEX concentrations were also reported in wells MW-2 through MW-5 but generally remain present at relatively low concentrations. Benzene was reported at concentrations ranging from 0.55 µg/L in well MW-6 to 1,200 µg/L in well MW-3. MTBE was not detected above its laboratory reporting limit and does not appear to be a constituent of concern.

In comparison to the May 2005 sampling event, TPHd, TPHg, and BTEX concentrations generally increased slightly. These increases were likely due to increased seasonal contact between groundwater and residual petroleum hydrocarbons in soil above the water table.

6.0 CONCLUSIONS

Based on findings of this well monitoring and sampling event, and comparison to historical well monitoring and sampling data, ACC concludes the following:

- The calculated groundwater flow direction and gradient is generally consistent with historical trends, topography, and surface drainage;
- TPHd, TPHg, BTEX concentrations generally increased slightly but were consistent with the previous sampling event, and no detectable TPHg, BTEX, or MTBE concentrations were reported in offsite monitoring wells MW-7 and MW-8;
- Wells MW-3, MW-4, and MW-5 reported slight increases in TPHg or BTEX and these monitoring wells are located in proximity of the former UST and product dispensers;
- Groundwater is semi-confined and rises seven to eight feet in the well casings;
- Natural attenuation processes are preferentially degrading BTEX and reported TPHg and BTEX concentrations indicate that no significant source of gasoline impact to groundwater is present; and
- TPHg and BTEX are the primary constituents of concern and any additional investigation or groundwater monitoring should target these analytes.

7.0 RECOMMENDATIONS

Based on our review of historical site investigation findings and the results of recently completed groundwater monitoring, ACC recommends the following:

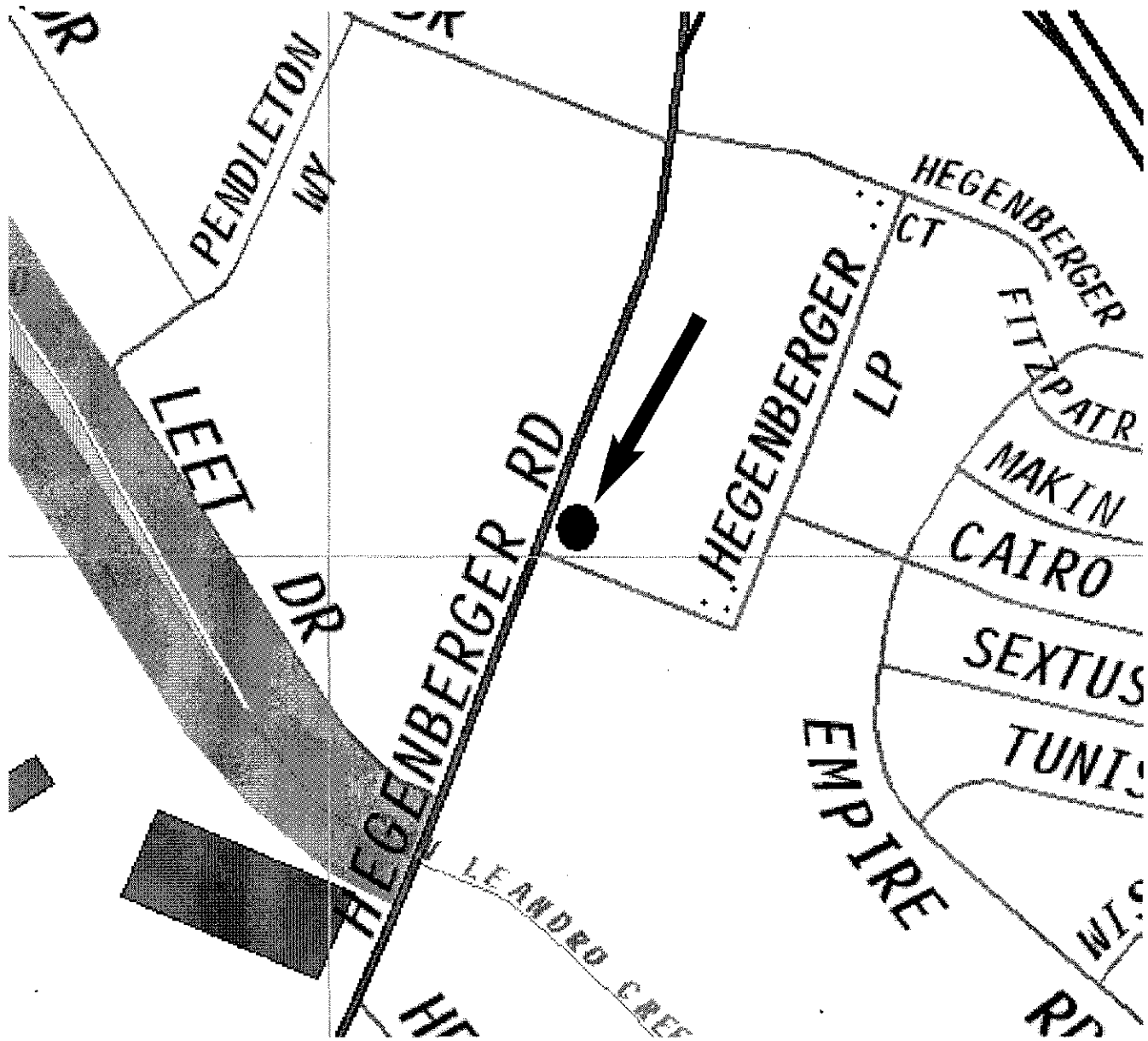
- Prepare and submit a Conceptual Site Model to the lead regulatory agency and evaluate the need for and scope of any additional site investigation and identify what additional investigation data is needed to evaluate the Site for full regulatory closure; and
- As required by the lead regulatory agency, obtain the data necessary to make the Site Geotracker compliant in anticipation of eventual regulatory site closure.

8.0 LIMITATIONS


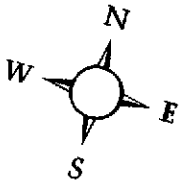
The service performed by ACC has been conducted in a manner consistent with the levels of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the area. No other warranty, expressed or implied, is made.

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

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



Source: The Thomas Guide, Bay Area, 2004

Title: Location Map 444 Hegenberger Loop Oakland, California	
Figure Number: 1	Scale: None
Project Number: 6748-017.00	Drawn By: ANW
 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510) 638-8400 Fax: (510) 638-8404	Date: 06/18/05
	

MW-8

HEGENBERGER ROAD

MW-7

HEGENBERGER LOOP

MW-3

MW-4

MW-2

MW-6

MW-5

former UST areas

former dispenser islands

MW-1
(DESTROYED)

Legend



Groundwater Monitoring Well Location

Title: **Site Plan**
444 Hagenberger Loop
Oakland, California

Figure Number: 2

Scale: 1" = 60'

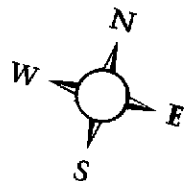
Project Number: 6748-017.00


Drawn By: ANW

Date: 02/18/05

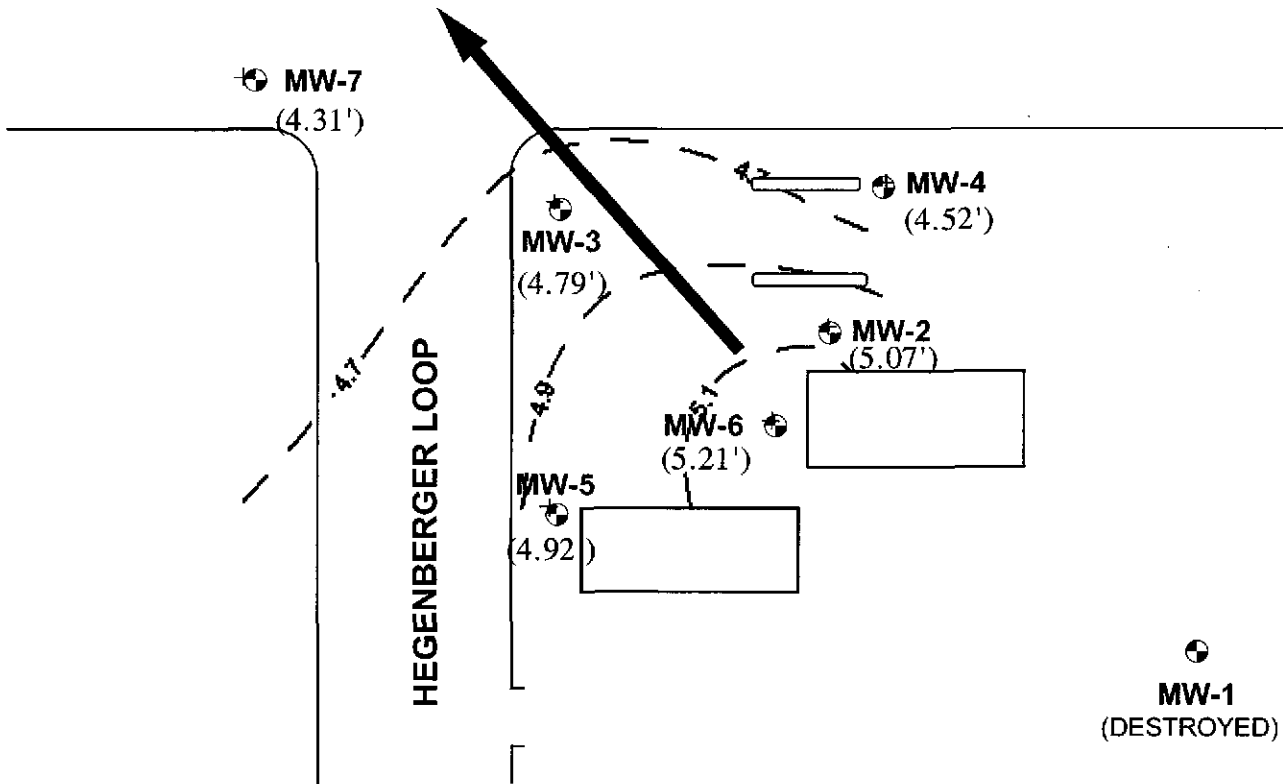


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MW-8
 (5.27')

HEGENBERGER ROAD



Groundwater gradient based upon monitoring data collected on May 16, 2005

Legend

- 
MW-8
 (5.27') Groundwater Monitoring Well Location/
 Groundwater Elevation Recorded in ft.
- 
 Calculated Groundwater Elevation Contour
- 
 Groundwater Flow Direction

Title: **Gradient Map**
444 Hegenberger Loop
Oakland, California

Figure Number: 3

Scale: 1" = 60'

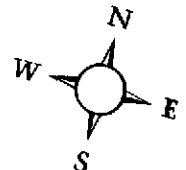
Project Number: 6748-017.00

Drawn By: ANW

Date: 06/18/05



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 Oakland, California 94621
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JOB NAME:	PURGE METHOD: <i>MANUAL BAIL</i>
SITE ADDRESS: <i>444 HASENBERRY LOOP</i>	SAMPLED BY: <i>O.W.</i>
JOB #: <i>6748-01700</i>	LABORATORY: <i>STL-SF.</i>
DATE: <i>05-16-05</i>	ANALYSIS: <i>TPH_g - BTEX - MTBE - TPH_g</i>
Onsite Drum Inventory SOIL:	MONITORING <input checked="" type="checkbox"/> DEVELOPING <input type="checkbox"/>
EMPTY: WATER: <i>2 @ 100%</i>	SAMPLING <input checked="" type="checkbox"/>

	PURGE VOL.	PURGE WATER READINGS						OBSERVATIONS	
	(Gal)	pH	Temp.(C)	Cond.	Sal.	Turb.	D.O.	<input type="checkbox"/>	
WELL: MW-2								<input type="checkbox"/>	Froth
DEPTH OF BORING: <i>19.31</i>	<i>2.3</i>		<i>64.0</i>					<input type="checkbox"/>	Sheen
DEPTH TO WATER: <i>5.07</i>								<input checked="" type="checkbox"/>	Odor Type <i>Fuscl</i>
WATER COLUMN: <i>14.24</i>								<input type="checkbox"/>	Free Product
WELL DIAMETER: <i>2"</i>									Amount _____ Type _____
WELL VOLUME: <i>2.3</i>								<input type="checkbox"/>	Other
COMMENTS: <i>10:40</i>									
WELL: MW-3								<input type="checkbox"/>	Froth
DEPTH OF BORING: <i>16.29</i>	<i>2.0</i>		<i>64.1</i>					<input type="checkbox"/>	Sheen
DEPTH TO WATER: <i>4.74</i>								<input checked="" type="checkbox"/>	Odor Type <i>Fusc</i>
WATER COLUMN: <i>11.55</i>								<input type="checkbox"/>	Free Product
WELL DIAMETER: <i>2"</i>									Amount _____ Type _____
WELL VOLUME: <i>2.0</i>								<input type="checkbox"/>	Other
COMMENTS: <i>11:25</i>									
WELL: MW-4								<input type="checkbox"/>	Froth
DEPTH OF BORING: <i>19.33</i>	<i>2.5</i>		<i>65.1</i>					<input type="checkbox"/>	Sheen
DEPTH TO WATER: <i>4.52</i>								<input type="checkbox"/>	Odor Type _____
WATER COLUMN: <i>14.81</i>								<input type="checkbox"/>	Free Product
WELL DIAMETER: <i>2"</i>									Amount _____ Type _____
WELL VOLUME: <i>2.5</i>								<input checked="" type="checkbox"/>	Other <i>SUT-11</i>
COMMENTS: <i>11:05</i>									

JOB NAME:	PURGE METHOD: <i>MANUAL BAIL</i>
SITE ADDRESS: <i>444 HAGENBERGEN LOOP</i>	SAMPLED BY: <i>A.W.</i>
JOB #: <i>6748-017-00</i>	LABORATORY: <i>STL-SF</i>
DATE: <i>05-16-05</i>	ANALYSIS: <i>TPH, BTEX, MTBE, TPHd</i>
Onsite Drum Inventory SOIL:	MONITORING <input checked="" type="checkbox"/> DEVELOPING <input type="checkbox"/>
EMPTY: WATER: <i>2 @ 100%</i>	SAMPLING <input checked="" type="checkbox"/>

	PURGE VOL	PURGE WATER READINGS						OBSERVATIONS	
	(Gal)	pH	Temp.(C)	Cond.	Sal.	Turb.	D.O.	<input type="checkbox"/> Froth	<input type="checkbox"/> Sheen
WELL: MW-5 DEPTH OF BORING: <i>19.48</i> DEPTH TO WATER: <i>4.92</i> WATER COLUMN: <i>14.56</i> WELL DIAMETER: <i>2"</i> WELL VOLUME: <i>205</i> COMMENTS: <i>10:95</i>	<i>2.5</i>		<i>64.8</i>					<input type="checkbox"/>	<input type="checkbox"/>
								<input type="checkbox"/> Odor Type _____	<input type="checkbox"/> Free Product
								Amount _____ Type _____	<input type="checkbox"/> Other
WELL: MW-6 DEPTH OF BORING: <i>15.74</i> DEPTH TO WATER: <i>5.21</i> WATER COLUMN: <i>10.53</i> WELL DIAMETER: <i>2"</i> WELL VOLUME: <i>1.6</i> COMMENTS: <i>10:28</i>	<i>1.6</i>		<i>64.7</i>					<input type="checkbox"/>	<input type="checkbox"/>
								<input type="checkbox"/>	<input type="checkbox"/>
								<input type="checkbox"/> Odor Type _____	<input type="checkbox"/> Free Product
								Amount _____ Type _____	<input type="checkbox"/> Other
WELL: MW-7 DEPTH OF BORING: <i>19.71</i> DEPTH TO WATER: <i>4.31</i> WATER COLUMN: <i>15.40</i> WELL DIAMETER: <i>2"</i> WELL VOLUME: <i>2.5</i> COMMENTS: <i>1:44</i>	<i>2.5</i>		<i>66.1</i>					<input type="checkbox"/>	<input type="checkbox"/>
								<input type="checkbox"/>	<input type="checkbox"/>
								<input type="checkbox"/> Odor Type _____	<input type="checkbox"/> Free Product
								Amount _____ Type _____	<input type="checkbox"/> Other

JOB NAME:	PURGE METHOD: MANUAL BAIC
SITE ADDRESS: 444 HAGEN BERGER LOOP	SAMPLED BY: AW
JOB #: 6748-017-00	LABORATORY: SIL-DF
DATE: 05-16-05	ANALYSIS: PAH-BTEX-MTBE-TPHd
Onsite Drum Inventory SOIL:	MONITORING <input checked="" type="checkbox"/> DEVELOPING <input type="checkbox"/>
EMPTY: WATER: 2 @ 100%	SAMPLING <input checked="" type="checkbox"/>

	PURGE VOL	PURGE WATER READINGS						OBSERVATIONS	
		(Gal)	pH	Temp.(C)	Cond.	Sal.	Turb.	D.O.	<input type="checkbox"/> Froth
WELL: mw-8	2.5		67.1					<input type="checkbox"/>	<input type="checkbox"/>
DEPTH OF BORING: 20.30								<input type="checkbox"/>	<input type="checkbox"/>
DEPTH TO WATER: 5.27								<input type="checkbox"/>	<input type="checkbox"/>
WATER COLUMN: 15.03								<input type="checkbox"/>	<input type="checkbox"/>
WELL DIAMETER: 2"								<input type="checkbox"/>	<input type="checkbox"/>
WELL VOLUME: 2.5								<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS: 1:55								<input type="checkbox"/>	<input type="checkbox"/>
WELL:								<input type="checkbox"/>	<input type="checkbox"/>
DEPTH OF BORING:								<input type="checkbox"/>	<input type="checkbox"/>
DEPTH TO WATER:								<input type="checkbox"/>	<input type="checkbox"/>
WATER COLUMN:								<input type="checkbox"/>	<input type="checkbox"/>
WELL DIAMETER:								<input type="checkbox"/>	<input type="checkbox"/>
WELL VOLUME:								<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS:								<input type="checkbox"/>	<input type="checkbox"/>
WELL:								<input type="checkbox"/>	<input type="checkbox"/>
DEPTH OF BORING:								<input type="checkbox"/>	<input type="checkbox"/>
DEPTH TO WATER:								<input type="checkbox"/>	<input type="checkbox"/>
WATER COLUMN:								<input type="checkbox"/>	<input type="checkbox"/>
WELL DIAMETER:								<input type="checkbox"/>	<input type="checkbox"/>
WELL VOLUME:								<input type="checkbox"/>	<input type="checkbox"/>
COMMENTS:								<input type="checkbox"/>	<input type="checkbox"/>

ACC Environmental Consultants

May 31, 2005

7977 Capwell Drive, Suite 100
Oakland, CA 94621

Attn.: Aaron Wolf

Project#: 6748-017.00

Project: 444 Hegenberger Loop

Dear Mr. Wolf,

Attached is our report for your samples received on 05/17/2005 17:07

This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 07/01/2005 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

You can also contact me via email. My email address is: dsharma@stl-inc.com

Sincerely,



Dimple Sharma
Project Manager

Severn Trent Laboratories, Inc.

STL San Francisco * 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 * www.stl-inc.com * CA DHS ELAP# 2496

Diesel with Silica Gel Clean-up

ACC Environmental Consultants

Attn.: Aaron Wolf

7977 Capwell Drive, Suite 100

Oakland, CA 94621

Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6748-017.00

444 Hegenberger Loop

Received: 05/17/2005 17:07

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-2	05/16/2005 12:59	Water	1
MW-5	05/16/2005 12:50	Water	4
MW-6	05/16/2005 12:54	Water	5

Severn Trent Laboratories, Inc.

STL San Francisco * 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 * www.stl-inc.com * CA DHS ELAP# 2496

05/24/2005 15:20

Diesel with Silica Gel Clean-up

ACC Environmental Consultants

Attn.: Aaron Wolf

7977 Capwell Drive, Suite 100

Oakland, CA 94621

Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6748-017.00

444 Hegenberger Loop

Received: 05/17/2005 17:07

Prep(s): 3510/8015M	Test(s): 8015M
Sample ID: MW-2	Lab ID: 2005-05-0494 - 1
Sampled: 05/16/2005 12:59	Extracted: 5/19/2005 12:26
Matrix: Water	QC Batch#: 2005/05/19-06.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	140	50	ug/L	1.00	05/20/2005 12:21	Q2
Surrogate(s)						
o-Terphenyl	94.7	60-130	%	1.00	05/20/2005 12:21	

Diesel with Silica Gel Clean-up

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Oakland, CA 94621

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Project: 6748-017.00

444 Hegenberger Loop

Received: 05/17/2005 17:07

Prep(s): 3510/8015M	Test(s): 8015M
Sample ID: MW-5	Lab ID: 2005-05-0494 - 4
Sampled: 05/16/2005 12:50	Extracted: 5/19/2005 12:26
Matrix: Water	QC Batch#: 2005/05/19-06.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	340	50	ug/L	1.00	05/20/2005 12:48	Q2
Surrogate(s) o-Terphenyl	81.3	60-130	%	1.00	05/20/2005 12:48	

Diesel with Silica Gel Clean-up

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Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6748-017.00

444 Hegenberger Loop

Received: 05/17/2005 17:07

Prep(s): 3510/8015M	Test(s): 8015M
Sample ID: MW-6	Lab ID: 2005-05-0494 - 5
Sampled: 05/16/2005 12:54	Extracted: 5/19/2005 12:26
Matrix: Water	QC Batch#: 2005/05/19-06.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	ND	50	ug/L	1.00	05/20/2005 13:15	
Surrogate(s) o-Terphenyl	103.3	60-130	%	1.00	05/20/2005 13:15	

Diesel with Silica Gel Clean-up

ACC Environmental Consultants

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Project: 6748-017.00

444 Hegenberger Loop

Received: 05/17/2005 17:07

Batch QC Report

Prep(s): 3510/8015M

Method Blank

MB: 2005/05/19-06.10-001

Water

Test(s): 8015M

QC Batch # 2005/05/19-06.10

Date Extracted: 05/19/2005 12:26

Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	50	ug/L	05/20/2005 11:28	
Surrogates(s) o-Terphenyl	83.8	60-130	%	05/20/2005 11:28	

Diesel with Silica Gel Clean-up

ACC Environmental Consultants

Attn.: Aaron Wolf

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Project: 6748-017.00

Received: 05/17/2005 17:07

444 Hegenberger Loop

Batch QC Report

Prep(s): 3510/8015M

Test(s): 8015M

Laboratory Control Spike

Water

QC Batch # 2005/05/19-06.10

LCS 2005/05/19-06.10-002

Extracted: 05/19/2005

Analyzed: 05/20/2005 13:52

LCSD 2005/05/19-06.10-003

Extracted: 05/19/2005

Analyzed: 05/20/2005 14:19

Compound	Conc. ug/L		Exp. Conc.	Recovery %		RPD	Ctrl. Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Diesel	784	837	1000	78.4	83.7	6.5	60-130	25		
Surrogates(s) o-Terphenyl	18.3	18.6	20.0	91.6	92.8		60-130	0		

Diesel with Silica Gel Clean-up

ACC Environmental Consultants

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Oakland, CA 94621

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Project: 6748-017.00

444 Hegenberger Loop

Received: 05/17/2005 17:07

Legend and Notes

Result Flag

Q2

Quantit. of unknown hydrocarbon(s) in sample based on diesel.

Fuel Oxygenates by 8260B

ACC Environmental Consultants

Attn.: Aaron Wolf

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Project: 6748-017.00

444 Hegenberger Loop

Received: 05/17/2005 17:07

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-2	05/16/2005 12:59	Water	1
MW-3	05/16/2005 13:08	Water	2
MW-4	05/16/2005 13:04	Water	3
MW-5	05/16/2005 12:50	Water	4
MW-6	05/16/2005 12:54	Water	5
MW-7	05/16/2005 14:40	Water	6
MW-8	05/16/2005 14:45	Water	7

Fuel Oxygenates by 8260B

ACC Environmental Consultants

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Oakland, CA 94621

Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6748-017.00

444 Hegenberger Loop

Received: 05/17/2005 17:07

Prep(s): 5030B	Test(s): 8260B
Sample ID: MW-2	Lab ID: 2005-05-0494 - 1
Sampled: 05/16/2005 12:59	Extracted: 5/25/2005 22:02
Matrix: Water	QC Batch#: 2005/05/25-02.66
pH: <2	

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	650	50	ug/L	1.00	05/25/2005 22:02	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	05/25/2005 22:02	
Benzene	96	0.50	ug/L	1.00	05/25/2005 22:02	
Toluene	4.7	0.50	ug/L	1.00	05/25/2005 22:02	
Ethylbenzene	15	0.50	ug/L	1.00	05/25/2005 22:02	
Total xylenes	7.5	1.0	ug/L	1.00	05/25/2005 22:02	
Surrogate(s)						
1,2-Dichloroethane-d4	97.1	73-130	%	1.00	05/25/2005 22:02	
Toluene-d8	90.1	81-114	%	1.00	05/25/2005 22:02	

Fuel Oxygenates by 8260B

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Project: 6748-017.00

444 Hegenberger Loop

Received: 05/17/2005 17:07

Prep(s):	5030B	Test(s):	8260B
Sample ID:	MW-5	Lab ID:	2005-05-0494 - 4
Sampled:	05/16/2005 12:50	Extracted:	5/26/2005 04:10
Matrix:	Water	QC Batch#:	2005/05/25-02.62
Analysis Flag: L2, pH: <2 (See Legend and Note Section)			

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	4700	1000	ug/L	20.00	05/26/2005 04:10	
Methyl tert-butyl ether (MTBE)	ND	10	ug/L	20.00	05/26/2005 04:10	
Benzene	730	10	ug/L	20.00	05/26/2005 04:10	
Toluene	79	10	ug/L	20.00	05/26/2005 04:10	
Ethylbenzene	340	10	ug/L	20.00	05/26/2005 04:10	
Total xylenes	36	20	ug/L	20.00	05/26/2005 04:10	
Surrogate(s)						
1,2-Dichloroethane-d4	112.7	73-130	%	20.00	05/26/2005 04:10	
Toluene-d8	100.3	81-114	%	20.00	05/26/2005 04:10	

Fuel Oxygenates by 8260B

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Project: 6748-017.00

444 Hegenberger Loop

Received: 05/17/2005 17:07

Prep(s): 5030B	Test(s): 8260B
Sample ID: MW-6	Lab ID: 2005-05-0494 - 5
Sampled: 05/16/2005 12:54	Extracted: 5/25/2005 22:27
Matrix: Water	QC Batch#: 2005/05/25-02.66
pH: <2	

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	05/25/2005 22:27	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	05/25/2005 22:27	
Benzene	0.55	0.50	ug/L	1.00	05/25/2005 22:27	
Toluene	ND	0.50	ug/L	1.00	05/25/2005 22:27	
Ethylbenzene	ND	0.50	ug/L	1.00	05/25/2005 22:27	
Total xylenes	ND	1.0	ug/L	1.00	05/25/2005 22:27	
Surrogate(s)						
1,2-Dichloroethane-d4	94.2	73-130	%	1.00	05/25/2005 22:27	
Toluene-d8	92.5	81-114	%	1.00	05/25/2005 22:27	

Fuel Oxygenates by 8260B

ACC Environmental Consultants

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Project: 6748-017.00

444 Hegenberger Loop

Received: 05/17/2005 17:07

Prep(s):	5030B	Test(s):	8260B
Sample ID:	MW-7	Lab ID:	2005-05-0494 - 6
Sampled:	05/16/2005 14:40	Extracted:	5/25/2005 22:52
Matrix:	Water	QC Batch#:	2005/05/25-02.66
pH:	<2		

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	05/25/2005 22:52	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	05/25/2005 22:52	
Benzene	ND	0.50	ug/L	1.00	05/25/2005 22:52	
Toluene	ND	0.50	ug/L	1.00	05/25/2005 22:52	
Ethylbenzene	ND	0.50	ug/L	1.00	05/25/2005 22:52	
Total xylenes	ND	1.0	ug/L	1.00	05/25/2005 22:52	
Surrogate(s)						
1,2-Dichloroethane-d4	91.5	73-130	%	1.00	05/25/2005 22:52	
Toluene-d8	94.0	81-114	%	1.00	05/25/2005 22:52	

Fuel Oxygenates by 8260B

ACC Environmental Consultants

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Oakland, CA 94621

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Project: 6748-017.00

444 Hegenberger Loop

Received: 05/17/2005 17:07

Prep(s):	5030B	Test(s):	8260B
Sample ID:	MW-8	Lab ID:	2005-05-0494 - 7
Sampled:	05/16/2005 14:45	Extracted:	5/25/2005 23:17
Matrix:	Water	QC Batch#:	2005/05/25-02.66
pH:	<2		

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	05/25/2005 23:17	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	05/25/2005 23:17	
Benzene	ND	0.50	ug/L	1.00	05/25/2005 23:17	
Toluene	ND	0.50	ug/L	1.00	05/25/2005 23:17	
Ethylbenzene	ND	0.50	ug/L	1.00	05/25/2005 23:17	
Total xylenes	ND	1.0	ug/L	1.00	05/25/2005 23:17	
Surrogate(s)						
1,2-Dichloroethane-d4	101.9	73-130	%	1.00	05/25/2005 23:17	
Toluene-d8	94.1	81-114	%	1.00	05/25/2005 23:17	

Fuel Oxygenates by 8260B

ACC Environmental Consultants

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Oakland, CA 94621

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Project: 6748-017.00

444 Hegenberger Loop

Received: 05/17/2005 17:07

Batch QC Report

Prep(s): 5030B

Method Blank

MB: 2005/05/25-02.62-001

Water

Test(s): 8260B

QC Batch # 2005/05/25-02.62

Date Extracted: 05/25/2005 19:24

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	05/25/2005 19:24	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	05/25/2005 19:24	
Benzene	ND	0.5	ug/L	05/25/2005 19:24	
Toluene	ND	0.5	ug/L	05/25/2005 19:24	
Ethylbenzene	ND	0.5	ug/L	05/25/2005 19:24	
Total xylenes	ND	1.0	ug/L	05/25/2005 19:24	
Surrogates(s)					
1,2-Dichloroethane-d4	106.2	73-130	%	05/25/2005 19:24	
Toluene-d8	102.0	81-114	%	05/25/2005 19:24	

Fuel Oxygenates by 8260B

ACC Environmental Consultants

Attn.: Aaron Wolf

7977 Capwell Drive, Suite 100

Oakland, CA 94621

Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6748-017.00

Received: 05/17/2005 17:07

444 Hegenberger Loop

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Method Blank

Water

QC Batch # 2005/05/25-02.66

MB: 2005/05/25-02.66-027

Date Extracted: 05/25/2005 18:27

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	05/25/2005 18:27	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	05/25/2005 18:27	
Benzene	ND	0.5	ug/L	05/25/2005 18:27	
Toluene	ND	0.5	ug/L	05/25/2005 18:27	
Ethylbenzene	ND	0.5	ug/L	05/25/2005 18:27	
Total xylenes	ND	1.0	ug/L	05/25/2005 18:27	
Surrogates(s)					
1,2-Dichloroethane-d4	90.8	73-130	%	05/25/2005 18:27	
Toluene-d8	95.6	81-114	%	05/25/2005 18:27	

Fuel Oxygenates by 8260B

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Project: 6748-017.00

444 Hegenberger Loop

Received: 05/17/2005 17:07

Batch QC Report

Prep(s): 5030B

Method Blank

MB: 2005/05/27-01.64-033

Water

Test(s): 8260B

QC Batch # 2005/05/27-01.64

Date Extracted: 05/27/2005 07:33

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	05/27/2005 07:33	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	05/27/2005 07:33	
Benzene	ND	0.5	ug/L	05/27/2005 07:33	
Toluene	ND	0.5	ug/L	05/27/2005 07:33	
Ethylbenzene	ND	0.5	ug/L	05/27/2005 07:33	
Total xylenes	ND	1.0	ug/L	05/27/2005 07:33	
Surrogates(s)					
1,2-Dichloroethane-d4	81.6	73-130	%	05/27/2005 07:33	
Toluene-d8	96.0	81-114	%	05/27/2005 07:33	

Fuel Oxygenates by 8260B

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Oakland, CA 94621

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Project: 6748-017.00

Received: 05/17/2005 17:07

444 Hegenberger Loop

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike

Water

QC Batch # 2005/05/25-02.62

LCS 2005/05/25-02.62-002

Extracted: 05/25/2005

Analyzed: 05/25/2005 18:58

LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	19.7		25.0	78.8			65-165	20		
Benzene	24.2		25.0	96.8			69-129	20		
Toluene	26.6		25.0	106.4			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	454		500	90.8			73-130	0		
Toluene-d8	511		500	102.2			81-114	0		

Fuel Oxygenates by 8260B

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Project: 6748-017.00

Received: 05/17/2005 17:07

444 Hegenberger Loop

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike

Water

QC Batch # 2005/05/25-02.66

LCS 2005/05/25-02.66-002

Extracted: 05/25/2005

Analyzed: 05/25/2005 18:02

LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	24.0		25.0	96.0			65-165	20		
Benzene	23.4		25.0	93.6			69-129	20		
Toluene	27.1		25.0	108.4			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	411		500	82.2			73-130			
Toluene-d8	506		500	101.2			81-114			

Severn Trent Laboratories, Inc.

STL San Francisco * 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 * www.stl-inc.com * CA DHS ELAP# 2496

05/29/2005 08:53

Page 13 of 18

Fuel Oxygenates by 8260B

ACC Environmental Consultants

Attn.: Aaron Wolf

7977 Capwell Drive, Suite 100

Oakland, CA 94621

Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6748-017.00

444 Hegenberger Loop

Received: 05/17/2005 17:07

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike

Water

QC Batch # 2005/05/27-01.64

LCS 2005/05/27-01.64-009

Extracted: 05/27/2005

Analyzed: 05/27/2005 07:09

LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	24.0		25.0	96.0			65-165	20		
Benzene	24.0		25.0	96.0			69-129	20		
Toluene	25.6		25.0	102.4			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	387		500	77.4			73-130			
Toluene-d8	491		500	98.2			81-114			

Fuel Oxygenates by 8260B

ACC Environmental Consultants

Attn.: Aaron Wolf

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Oakland, CA 94621

Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6748-017.00

444 Hegenberger Loop

Received: 05/17/2005 17:07

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Matrix Spike (MS / MSD)

Water

QC Batch # 2005/05/25-02.62

MS/MSD

Lab ID: 2005-05-0553 - 002

MS: 2005/05/25-02.62-047

Extracted: 05/25/2005

Analyzed: 05/25/2005 20:47

Dilution: 1.00

MSD: 2005/05/25-02.62-013

Extracted: 05/25/2005

Analyzed: 05/25/2005 21:13

Dilution: 1.00

Sample / Analysis Flag(s): MS: N1 (See Legend and Note Section)

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	29.9	24.8	8.31	25.0	86.4	66.0	26.8	65-165	20		R1
Benzene	24.0	23.5	ND	25.0	96.0	94.0	2.1	69-129	20		
Toluene	24.0	25.2	ND	25.0	96.0	100.8	4.9	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	591	451		500	118.2	90.2		73-130			
Toluene-d8	512	516		500	102.4	103.2		81-114			

Fuel Oxygenates by 8260B

ACC Environmental Consultants

Attn.: Aaron Wolf

7977 Capwell Drive, Suite 100
Oakland, CA 94621
Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6748-017.00
444 Hegenberger Loop

Received: 05/17/2005 17:07

Batch QC Report			
Prep(s):	5030B	Test(s):	8260B
Matrix Spike (MS / MSD)	Water	QC Batch # 2005/05/25-02.66	
MS/MSD		Lab ID:	2005-05-0559 - 001
MS: 2005/05/25-02.66-031	Extracted: 05/25/2005	Analyzed:	05/25/2005 19:31
		Dilution:	1.00
MSD: 2005/05/25-02.66-056	Extracted: 05/25/2005	Analyzed:	05/25/2005 19:56
		Dilution:	1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	28.5	29.1	6.52	25.0	87.9	90.3	2.7	65-165	20		
Benzene	20.0	21.2	ND	25.0	80.0	84.8	5.8	69-129	20		
Toluene	22.3	23.0	ND	25.0	89.2	92.0	3.1	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	432	440		500	86.4	88.0		73-130			
Toluene-d8	509	484		500	101.8	96.8		81-114			

Fuel Oxygenates by 8260B

ACC Environmental Consultants

Attn.: Aaron Wolf

7977 Capwell Drive, Suite 100
Oakland, CA 94621
Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6748-017.00
444 Hegenberger Loop

Received: 05/17/2005 17:07

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Matrix Spike (MS / MSD)

Water

QC Batch # 2005/05/27-01.64

MS/MSD

Lab ID: 2005-05-0610 - 001

MS: 2005/05/27-01.64-019

Extracted: 05/27/2005

Analyzed: 05/27/2005 11:19

Dilution: 1.00

MSD: 2005/05/27-01.64-042

Extracted: 05/27/2005

Analyzed: 05/27/2005 11:42

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	26.5	28.5	ND	25.0	106.0	114.0	7.3	65-165	20		
Benzene	23.7	25.6	0.534	25.0	92.7	102.4	9.9	69-129	20		
Toluene	26.0	26.7	ND	25.0	104.0	106.8	2.7	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	456	490		500	91.2	98.0		73-130			
Toluene-d8	505	498		500	100.9	99.6		81-114			

Fuel Oxygenates by 8260B

ACC Environmental Consultants

Attn.: Aaron Wolf

7977 Capwell Drive, Suite 100

Oakland, CA 94621

Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6748-017.00

444 Hegenberger Loop

Received: 05/17/2005 17:07

Legend and Notes

Analysis Flag

L2

Reporting limits were raised due to high level of analyte present in the sample.

N1

Internal standard out of range.

Result Flag

R1

Analyte RPD was out of QC limits.

Sample Receipt Checklist

Submission #: 2005- 05-0494

Checklist completed by: <u>JM</u>		DATE: <u>05-18-05</u>													
Courier: <input checked="" type="checkbox"/> STL SF	Courier: <input type="checkbox"/> Fedex <input type="checkbox"/> UPS <input type="checkbox"/> Other		Client: <input type="checkbox"/>												
Log-In Details		Yes	No												
1 Custody seals intact on shipping container/samples		/	/												
2 Chain of custody present?		/	/												
3 Chain of custody signed when relinquished and received?		/	/												
4 All samples checked when COC relinquished		/	/												
5 Chain of custody agrees with sample labels?		/	/												
6 Samples in proper container/bottle?		/	/												
7 Sample containers intact?		/	/												
8 Sufficient sample volume for indicated test?		/	/												
9 All samples received within holding time?		/	/												
Cooler Temperature Compliance Check															
<table border="1" style="width:100%;"> <tr> <th style="width:50%;">Temperature Blank Reading</th> <th style="width:50%;">Cooler Sample Temperature</th> </tr> <tr> <td style="text-align: center; vertical-align: middle;">5°C</td> <td> <table border="1" style="width:100%;"> <tr> <th>#1</th> <th>#2</th> <th>#3</th> <th>Average</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table> </td> </tr> </table>		Temperature Blank Reading	Cooler Sample Temperature	5°C	<table border="1" style="width:100%;"> <tr> <th>#1</th> <th>#2</th> <th>#3</th> <th>Average</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	#1	#2	#3	Average					<p><small>* No temp blank is submitted individual temperatures should be taken in per SOP.</small></p>	
Temperature Blank Reading	Cooler Sample Temperature														
5°C	<table border="1" style="width:100%;"> <tr> <th>#1</th> <th>#2</th> <th>#3</th> <th>Average</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	#1	#2	#3	Average										
#1	#2	#3	Average												
Reason for Elevated Temperature <input type="checkbox"/> Ice Melted <input type="checkbox"/> Insufficient ice <input type="checkbox"/> <input type="checkbox"/> Samp. in boxes <input type="checkbox"/> Sampled < 4hr <input type="checkbox"/> Ice not req		Samples with Temp > 6°C - Comments 													
VOA Sample Inspection															
Are bubbles present in any of the VOA vials?	Small Med. Large			Samples with broken, cracked or leaking containers											
	Sample #	○	○		○										
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>										
		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>										
Water - pH acceptable upon receipt?	Yes	No	Samples with Unacceptable pH												
<input type="checkbox"/> pH adjusted— Preservative used:	<input type="checkbox"/> HNO ₃ <input type="checkbox"/> HCl <input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> ZnOAc — Lot #(s) _____														
Comments:															
Project Management [Routing for instruction of indicated discrepancy(ies)]															
Project Manager: (initials) _____		Date: _____ / _____ /05		Client contacted: Yes <input type="checkbox"/> No <input type="checkbox"/>											
Summary of discussion:															
Corrective Action (per PM/Client):															



STL San Francisco

Chain of Custody

2005-05-0444

1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 484-1096

Reference #: 115164

Date 0516-05 Page 1 of 1

Report To					Analysis Request															Number of Containers
Attn: Aaron Wolf Company: ACC ENVIRONMENTAL CONSULTANTS Address: 7977 CAPWELL DRIVE, OAKLAND, CA P: (510) 638-8400 Email: awolf@accenv.com Bill To: ACC ENVIRONMENTAL Sampled By: Aaron Wolf Attn: Aaron Phone ext: X102					<input type="checkbox"/> TPH EPA 8015/8016/8017	<input type="checkbox"/> BTX EPA 8011/8012/8013	<input type="checkbox"/> Purgeable Aromatics BTX EPA 8011/8012/8013	<input type="checkbox"/> TPH EPA 8015/8016/8017	<input type="checkbox"/> Silica Gel Other	<input type="checkbox"/> Fuel Tests EPA 8206 Gas EPA 8207 EPA 8208 EPA 8209 EPA 8210	<input type="checkbox"/> Pungible Halocarbons (VOCs) EPA 8021	<input type="checkbox"/> Volatile Organics GC/MS (VOCs) EPA 8210/8211/8212	<input type="checkbox"/> Semivolatiles GC/MS EPA 8213/8214/8215	<input type="checkbox"/> Oil and Grease EPA 8014/8015	<input type="checkbox"/> Pesticides EPA 8016/8017/8018	<input type="checkbox"/> PCBs EPA 8019/8020	<input type="checkbox"/> Metals EPA 8022/8023/8024/8025	<input type="checkbox"/> WET (STLC) TCLP	<input type="checkbox"/> Heavy Metals EPA 8026/8027/8028/8029/8030	
MW-2	0514	12:59	H ₂ O	HCl	X		X													4
MW-3	1	1:08	H ₂ O	HCl	X															3
MW-4	1	1:08	H ₂ O	HCl	X															3
MW-5	1	12:50	H ₂ O	HCl	X		X													4
MW-6	1	12:57	H ₂ O	HCl	X		X													4
MW-7	1	2:40	H ₂ O	HCl	X															3
MW-8	1	2:45	H ₂ O	HCl	X															3

Project Info		Sample Receipt	
Project Name: 444 Hagenberger Loop	# of Containers: 24	Project #: 6748-017.00	Head Space:
PO#:	Temp: 5°C	Credit Card#:	Conforms to record:
T A T	Std 5 Day	72h	48h
Report: <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 <input type="checkbox"/> EDD <input type="checkbox"/> State Tank Fund EDF		Special Instructions / Comments:	
T0608100514			

1) Relinquished by:
[Signature]
Signature: _____ Time: **3:15**
Printed Name: **Aaron Wolf** Date: **05/16/05**
Company: **ACC ENVIRONMENTAL CONSULTANTS**

1) Received by:
[Signature]
Signature: _____ Time: _____
Printed Name: **Aaron Wolf** Date: **5/17/05**
Company: **STL-SF**

2) Relinquished by:
[Signature]
Signature: _____ Time: _____
Printed Name: _____ Date: _____
Company: _____

2) Received by:
[Signature]
Signature: _____ Time: **17:07**
Printed Name: **T. Bullock** Date: **5/17/05**
Company: **STL-SF**

3) Relinquished by:
Signature: _____ Time: _____
Printed Name: _____ Date: _____
Company: _____

3) Received by:
Signature: _____ Time: _____
Printed Name: _____ Date: _____
Company: _____