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21 October 2008

Mr. Roger Papler, P.G.
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

Subject: Results of Third Quarter 2008 Groundwater and SVE Monitoring
Hopyard Cleaners, 2771 Hopyard Road, Pleasanton, California
Self-Monitoring Program No. R2-2006-0059

Dear Mr. Papler:

On behalf of the property owner, Ms. Clare Leung, Geosyntec Consultants (Geosyntec) prepared this third quarter 2008 groundwater and soil vapor extraction (SVE) monitoring report for Hopyard Cleaners located at 2771 Hopyard Road, in Pleasanton, California (the "Site"). A site location map is provided in Figure 1. The work described in this report was performed in compliance with the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) Order No. R2-2008-0032, issued on 29 May 2008.

The Site monitoring well network consists of seven wells (MW-1 through MW-7). For discussion purposes, the uppermost groundwater zone beneath the Site, which occurs from about 20 to 35 feet below ground surface (ft bgs), is referred to as the A Zone, and the deep groundwater from about 40 to 60 ft bgs is referred to as the B Zone. Wells MW-1 through MW-4 are screened in the A Zone, and wells MW-5 through MW-7 are screened in the B Zone. Well completion details are summarized in Table 1. Well locations relative to the Site are shown on Figure 2. Wells MW-1 through MW-5 were sampled for this quarterly monitoring event. Wells MW-6 and MW-7 were installed in August 2008 after the third quarter monitoring was conducted. These two wells will be included in the site-wide groundwater monitoring program starting fourth quarter 2008.

The SVE system with five SVE wells was installed at the Site in the weeks of 4 and 11 August 2008. A pilot test of the SVE system was conducted on 19 and 21 August 2008, and full-scale

SVE operations began on 21 August 2008. The SVE installation, pilot test, and start-up were documented in the *SVE Installation and Pilot Test Report*, which was submitted to the RWQCB on 29 September 2008.

WORK PERFORMED THIS QUARTER

The following work was performed during the third quarter 2008:

- The third quarter groundwater monitoring event was performed on 14 July 2008 using passive diffusion bag (PDB) samplers. This work is discussed in detail in the following sections.

- Two additional B Zone groundwater monitoring wells were installed in August 2008 in the cul-de-sacs of Corte Mente and Corte Libre southwest of the Site, and monitoring of these two wells via PDB will begin in the fourth quarter 2008. The groundwater monitoring well installation was documented in the *B Zone Groundwater Monitoring Well Installation Report*, which was submitted to the RWQCB on 15 September 2008. Based on the 30 September 2008 comments from the RWQCB and a subsequent discussion with the RWQCB, the cross-sections that were included in the report were revised. The contact lines were modified to better reflect uncertainty in the subsurface stratigraphy. The revised figures are provided as Attachment 1.

- The *Soil Vapor Extraction System Design and Operation Plan* was submitted to the RWQCB on 15 July 2008 and the *Revised Soil Vapor Extraction System Design and Operation Plan* was submitted to the RWQCB on 31 July 2008.

- A technical report documenting the procedures to be used to minimize human exposure to soil and groundwater prior to meeting cleanup standards at the Site was submitted to the RWQCB on 27 July 2008 in the form of a deed restriction.

- The SVE was installed at the Site in August 2008. A pilot test was conducted on 19 and 21 August 2008, and SVE operations began on 21 August 2008. The SVE installation, pilot test, and start-up was documented in the *SVE Installation and Pilot Test Report*, which was submitted to the RWQCB on 26 September 2008.

- Soil oxidant demand (SOD) samples were collected on 21 August 2008 per the *Soil Oxidant Demand Characterization Work Plan* dated 20 June 2008.

QUARTERLY GROUNDWATER MONITORING

Quarterly groundwater monitoring was performed at the Site on 14 July 2008. PDBs were used to collect samples from MW-1 through MW-5. A study to test the appropriateness of using PDBs was proposed in the *Results of Fourth Quarter 2007 Groundwater Monitoring* report submitted to the RWQCB on 31 January 2008[1] and was verbally approved by the RWQCB in a conference call on 12 March 2008. The PDB study was completed in the first and second quarters 2008. In general, cis-1,2-DCE, PCE, and TCE concentrations were slightly higher in samples collected from PDBs compared to samples collected using a submersible pump. Sample results reported as non detect using the conventional sampling method were also non detect using the PDB sampling method. These results indicate that PDB samplers are an appropriate and reliable method of monitoring volatile organic compounds (VOCs) at this Site. Therefore, PDBs have replaced sampling via peristaltic pump beginning this quarter (third quarter 2008).

Sampling and Analytical Procedures

The groundwater sampling fieldwork was performed by Environmental Sampling Services, Inc. (ESS), of Martinez, California. ESS's report, including field procedures and sampling logs, is provided in Attachment 2.

The PDBs were deployed during the second quarter 2008 monitoring event. On 14 July 2008, the PDBs were removed from the wells and sampled. Samples were hand-delivered to Test America of Pleasanton, California, for analysis. Groundwater samples from the Site monitoring wells were analyzed for VOCs by EPA Method 8260B.

New PDBs for the fourth quarter 2008 sampling event in wells MW-1 through MW-5 were deployed on 14 July 2008 after third quarter 2008 monitoring was complete.

Groundwater Elevations and Flow Conditions

Table 2 summarizes groundwater elevations measured during this and previous sampling events. Groundwater in the A Zone (MW-1 through MW-4) beneath the Site was encountered between 13.23 and 14.21 feet bgs. These depths correspond to groundwater elevations between 311.98

[1] Geosyntec Consultants, 2008. *Results of the Fourth Quarter 2007 Groundwater Monitoring, Hopyard Cleaners, 2771 Hopyard Road, Pleasanton, California, Self-Monitoring Program No. R2-2006-0059,* 31 January 2008.

and 312.46 feet above Mean Sea Level (MSL). Groundwater in the B Zone monitored by MW-5 was encountered at 32.16 feet bgs, which corresponds to an elevation of 295.03 feet MSL.

Water levels measured in the A Zone wells taken during the third quarter 2008 event were used to construct groundwater elevation contours, as shown in Figure 3. The third quarter 2008 groundwater contours indicate a general groundwater flow to the north with an average gradient of 0.0048 feet per feet (ft/ft) (25.5 feet per mile (ft/mi)). This gradient and flow direction is consistent with previous monitoring events, as shown on Table 3.

Data QA/QC

Geosyntec performed a quality assurance/quality control (QA/QC) review of the analytical data. Data were reviewed for completeness, accuracy, precision, sample contamination, conformance with holding times, and detection limits within acceptable ranges. Based on this review, the data are acceptable.

Analytical Results

Laboratory analytical reports are provided in Attachment 3. Table 4 summarizes analytical results for groundwater samples collected during the third quarter 2008 event together with historical results. Analytical results for the current sampling event are also shown on Figure 3. Isoconcentration contour maps for tetrachloroethene (PCE) and trichloroethene (TCE) are shown on Figures 4 through 6. The isoconcentration contours were drawn using current data from monitoring wells along with results from grab groundwater samples previously collected at the Site.

This is the eighth monitoring event since wells MW-1 through MW-3 were installed in September 2006 and the fifth monitoring event for wells MW-4 and MW-5. Analytical results for samples taken from the five monitoring wells show the highest VOC concentrations at MW-2. The PCE concentrations at well MW-2 were 9,500 and 8,100 micrograms per liter (µg/L) in the sample and duplicate sample, respectively. Although the 9,500 µg/L result is above historical PCE concentrations, which have ranged from 4,700 to 8,200 µg/L, the increase in PCE concentration with respect to the last monitoring event is consistent with the seasonal fluctuations in concentration that have been observed in this well over the past two years. VOC concentrations observed in MW-1 and MW-3 through MW-5 were consistent with historical results.

SVE PERFORMANCE MONITORING

Startup monitoring of the SVE system was performed on day 1 through 5, day 7, and day 9 of system startup to evaluate system performance and air emissions for the Bay Area Air Quality Management District Permit to Operate (BAAQMD PTO). Monitoring was performed weekly for the first month and monthly thereafter. The first monthly monitoring was conducted on 18 September 2008. SVE monitoring was conducted by Geosyntec and Mako Industries (Mako) of Livermore, California. The SVE system layout is shown on Figure 2.

SVE Monitoring Procedures

SVE monitoring includes the following procedures:

- Perform photoionization detector (PID) screening via Tedlar® bags of:
    - Samples collected from the system influent, mid-point between the two granular activated carbon (GAC) vessels, and the system effluent to evaluate air emissions, and
    - Samples collected at each SVE wellhead, shown on Figure 2.
- Record vacuum response at each SVE wellhead;
- Record flow rate and vacuum response at the manifold;
- Record vacuum, temperature, and flow rate readings at system influent;
- Record hour meter;
- Inspect the moisture separator water level and drain into 55-gallon drums, if necessary; and
- Record the electrical meter reading.

As discussed in the *SVE Installation and Pilot Test Report*, influent SVE samples were collected in 1-liter Summa canisters for laboratory analysis by TO-15 during start-up testing. The laboratory analytical results indicate that PCE is the primary constituent of concern being removed from the target remediation zone. The analytical results showed similar VOC concentrations to PID reading collected at the same time, indicating that PID screening is effective at monitoring SVE performance.

SVE Monitoring Results

Results of the system monitoring and mass removal are shown in Table 5, and results of the SVE well monitoring are shown in Table 6. SVE well locations are shown on Figure 2, Figure 7 shows system influent VOC concentrations over time, and Figure 8 shows the SVE cumulative mass removal.

Influent concentrations of VOCs into the SVE system have ranged from 0.7 to 13.0 parts per million by volume (ppmv) with the highest concentrations detected during system startup (Table 5 and Figure 7). After almost one month of operations, the SVE system has removed approximately 4.42 pounds (lbs) of VOCs as equivalent PCE (Table 5 and Figure 8).

As shown on Table 6, PID screening of the SVE wells indicate that the highest concentrations of VOCs are consistently being extracted from SVE-1, while the lowest concentrations are being extracted from SVE-3 and SVE-5.

SVE Operations and Maintenance

The system has been under continuous operation since startup on 21 August 2008, except for an approximately 2-hour time period on 29 August 2008 when the blower shut-off switch was tripped.

Maintenance on the system has been performed to reduce the noise from the effluent and blower, including installation of a larger muffler on the system effluent, splitting the effluent into two discharge pipes, and installing foam around the blower box and along the southwest fence of the compound. Although these measures have reduced the noise, Geosyntec received complaints concerning the noise at night from residents in the vicinity of the dry cleaners (both across Hopyard Road and Valley Road). In response to these complaints, the SVE system operation schedule was modified on 3 September 2008. A timer was installed by Mako to have the system run from the hours of 8 am to 10 pm.

In addition, the 0 to 30 in Hg vacuum gauges at each of the five wellheads were replaced on 18 September 2008 by Environmental Remediation Resources Group of Concord, California. More sensitive vacuum gauges that range from 0 to 100 inches of water were installed.

FUTURE WORK

The following work will be completed during the fourth quarter 2008:

- The *Revised Remedial Action Plan*, including a human health risk assessment will be submitted to the RWQCB during the fourth quarter 2008.

- The next quarterly groundwater monitoring event will be performed in the fourth quarter 2008. A stratification study will be conducted for MW-6 and MW-7 during the fourth quarter monitoring, with PDBs installed in the upper 5 feet and lower 5 feet of each screen interval. The results of the quarterly monitoring will be discussed in the fourth quarter 2008 monitoring report due to the RWQCB on 31 January 2008.

- SVE monitoring will continue on a monthly basis. Results of the October, November, and December monitoring will be discussed in the fourth quarter 2008 monitoring report due to the RWQCB on 31 January 2008.

- The results of the SOD sampling will be submitted to the RWQCB along with the ISCO implementation work plan by 3 November 2008.

If you have any questions or comments, please contact Angela Liang at (510) 285-2700.

Sincerely,

Melissa Asher, P.E.
Engineer

Hanchih (Angela) Liang, Ph.D., P.E.
Senior Engineer

Attachments:

Table 1	Well Construction Summary
Table 2	Groundwater Elevations
Table 3	Groundwater Gradient Summary – A Zone

Table 4	Groundwater Analytical Summary
Table 5	SVE System Performance Monitoring Results
Table 6	SVE Well Monitoring Results
Figure 1	Site Location
Figure 2	Site Layout and Vicinity Map
Figure 3	Third Quarter 2008 Groundwater Elevation Contours and Analytical Results
Figure 4	Third Quarter 2008 PCE Isoconcentration Contours in A Zone Groundwater (20 to 35 ft bgs)
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Figure 6	Third Quarter 2008 TCE Isoconcentration Contours in A Zone Groundwater (20 to 35 ft bgs)
Figure 7	SVE Influent Concentrations Over Time
Figure 8	SVE Cumulative Mass Removal
Attachment 1	Revised Cross-Sections
Attachment 2	Environmental Sampling Services Field Report
Attachment 3	Laboratory Analytical Report

Copy with Attachments: Ms. Clare Leung, Hopyard Cleaners
Ms. Joy Ricigliano, Zurich Insurance
Mr. Mark Peterson, GES
Mr. Wyman Hong, Zone 7 Water Agency
Mr. Jerry Wickham, Alameda County Environmental Health
Ms. Danielle Stefani, City of Pleasanton Fire Department
Mr. William Henderlong, Town & Country Properties

TABLES

Table 1
Monitoring Well Construction Summary
Hopyard Cleaners
Pleasanton, California

Well I.D.	Date of Completion	Northing	Easting	TOC Elevation (MSL)	Total Depth (ft bgs)		Screen Interval Depth (ft bgs)		Well Casing Material	Well Diameter (inches)
					Borehole	Well	Top	Bottom		
A Zone Monitoring Wells										
MW-1	9/29/2006	2071427.29	6157712.24	325.77	30	30	20.00	30.00	SCH 40 PVC	2
MW-2	9/26/2006	2071357.03	6157791.18	325.69	30	30	20.00	30.00	SCH 40 PVC	2
MW-3	9/27/2006	2071461.21	6157787.94	326.27	30	30	20.00	30.00	SCH 40 PVC	2
MW-4	7/20/2007	2071382.30	6157557.57	326.27	36.5	35	25.00	35.00	SCH 40 PVC	2
B Zone Monitoring Wells										
MW-5*	7/19/2007	2071292.25	6157654.24	327.19	60	60	50.00	60.00	SCH 40 PVC	2
MW-6**	8/19/2008	2071280.12	6157384.43	324.48	59	59	49.00	59.00	SCH 40 PVC	2
MW-7**	8/20/2008	2071076.06	6157645.52	324.55	56	55	45.00	55.00	SCH 40 PVC	2

Notes:
ft bgs = feet below ground surface
MSL = mean sea level
TOC = Top of Casing
Elevations are based on NAVD 88 Datum
* Conductor casing was installed from 0 to 40 ft bgs.
** Monitoring will begin in the fourth quarter 2008.

Table 2
Groundwater Elevations
Hopyard Cleaners
Pleasanton, California

Well I.D. (Screen Interval)	TOC Elevation (ft MSL)	Sample Date	Depth to Groundwater Below TOC (ft)	Groundwater Elevation (ft MSL)
A Zone Monitoring Wells				
MW-1 (20-30 ft bgs)	325.77	7/14/2008	13.79	311.98
		5/16/2008	11.70	314.07
		2/15/2008	11.38	314.39
		1/3/2008	13.63	312.14
		8/3/2007	14.40	311.37
		5/11/2007	12.27	313.50
		2/9/2007	13.98	311.79
		11/20/2006	14.88	310.89
MW-2 (20-30 ft bgs)	325.69	7/14/2008	13.23	312.46
		5/16/2008	11.30	314.39
		2/15/2008	10.87	314.82
		1/3/2008	13.21	312.48
		8/3/2007	13.72	311.97
		5/11/2007	11.87	313.82
		2/9/2007	13.55	312.14
		11/20/2006	14.36	311.33
MW-3 (20-30 ft bgs)	326.27	7/14/2008	14.21	312.06
		5/16/2008	12.18	314.09
		2/15/2008	11.68	314.59
		1/3/2008	14.02	312.25
		8/3/2007	14.68	311.59
		5/11/2007	12.72	313.55
		2/9/2007	14.41	311.86
		11/20/2006	15.28	310.99
MW-4 (25-35 ft bgs)	326.27	7/14/2008	13.81	312.46
		5/16/2008	12.12	314.15
		2/15/2008	12.05	314.22
		1/3/2008	14.73	311.54
		8/3/2007	15.85	310.42
B Zone Monitoring Wells				
MW-5 (50-60 ft bgs)	327.19	7/14/2008	32.16	295.03
		5/16/2008	23.06	304.13
		2/15/2008	19.74	307.45
		1/3/2008	22.65	304.54
		8/3/2007	30.51	296.68

Notes:
ft MSL = feet above mean sea level
TOC = Top of Casing
ft bgs = feet below ground surface
Elevations are based on NAVD 88 Datum

Table 3
Groundwater Gradient Summary - A Zone
Hopyard Cleaners
Pleasanton, California

Date	Gradient		General Flow Direction
	ft/ft	ft/mi	
7/14/2008	0.0048	25.5	North
5/16/2008	0.0031	16.5	North-Northwest
2/15/2008	0.0038	20.5	Northwest
1/3/2008	0.0025	13.2	Northwest
8/3/2007	0.0070	37.0	West-Northwest
5/11/2007	0.0030	15.8	North-Northwest
2/9/2007	0.0010	5.3	North-Northwest
11/20/2006	0.0040	22.0	Northwest

Notes:
ft/ft = feet per feet
ft/mi = feet per mile

Table 4
Groundwater Analytical Summary
Hopyard Cleaners
Pleasanton, California

Well I.D. (Screen Interval)	Sample Date	Sampling Method	Volatile Organic Compounds - EPA Method 8260B (ug/L)		
			cis-1,2-DCE	PCE	TCE
A Zone Monitoring Wells					
MW-1 (20-30 ft bgs)	7/14/2008	PDB Sampler	230	1,700	250
	5/16/2008	Purge and Sample	250	1,600	280
	5/16/2008	PDB Sampler*	260	1,900	310
	2/29/2008	PDB Sampler*	330	2,000	330
	2/15/2008	Purge and Sample	230	1,400	250
	1/2/2008	Purge and Sample	230	1,600	270
	8/3/2007	Purge and Sample	260	1,600	270
	5/11/2007	Purge and Sample	310	2,500	310
	2/9/2007	Purge and Sample	270 / 270	2,400 / 2,300	290 / 290
	11/20/2006	Purge and Sample	370	3,100	370
MW-2 (20-30 ft bgs)	7/14/2008	PDB Sampler	820 / 830	9,500 / 8,100	530 / 500
	5/16/2008	Purge and Sample	900 / 930	5,800 / 5,900	460 / 450
	5/16/2008	PDB Sampler*	940	6,700	480
	2/29/2008	PDB Sampler*	780	5,300	360
	2/15/2008	Purge and Sample	690 / 690	4,100 / 4,000	320 / 300
	1/2/2008	Purge and Sample	940 / 890	8,200 / 8,200	560 / 580
	8/3/2007	Purge and Sample	1,200 / 1,100	8,000 / 8,100	590 / 570
	5/11/2007	Purge and Sample	1,000 / 980	7,200 / 7,300	490 / 450
	2/9/2007	Purge and Sample	760	4,700	350
	11/20/2006	Purge and Sample	800 / 800	5,700 / 5,800	370 / 360
MW-3 (20-30 ft bgs)	7/14/2008	PDB Sampler	4.3	43	4.0
	5/16/2008	Purge and Sample	5.0	39	4.3
	5/16/2008	PDB Sampler*	5.4	46	4.4
	2/29/2008	PDB Sampler*	6.9	58	5.9
	2/15/2008	Purge and Sample	6.2	44	5.1
	1/2/2008	Purge and Sample	5.2	46	4.6
	8/3/2007	Purge and Sample	4.7	37	4.2
	5/11/2007	Purge and Sample	5.5	43	4.4
	2/9/2007	Purge and Sample	5.3	42	4.2
	11/20/2006	Purge and Sample	10	93	7.2
MW-4 (25-35 ft bgs)	7/14/2008	Purge and Sample	4.7	<0.50	4.0
	5/16/2008	Purge and Sample	3.7	<0.50	2.6
	5/16/2008	PDB Sampler*	3.6	<0.50	2.7
	2/29/2008	PDB Sampler*	3.4	<0.50	3.0
	2/15/2008	Purge and Sample	4.2	<0.50	4.0
	1/3/2008	Purge and Sample	4.2	<0.50	3.5
	8/3/2007	Purge and Sample	4.6	<0.50	3.5
B Zone Monitoring Wells					
MW-5 (50-60 ft bgs)	7/14/2008	PDB Sampler	<0.50	31	<0.50
	5/16/2008	Purge and Sample	<0.50	24	<0.50
	5/16/2008	PDB Sampler*	<0.50	34	<0.50
	2/29/2008	PDB Sampler (52.5 ft bgs)*	<0.50	41	<0.50
	2/29/2008	PDB Sampler (57.5 ft bgs)*	<0.50	33	<0.50
	2/15/2008	Purge and Sample	<0.50	26	<0.50
	1/3/2008	Purge and Sample	<0.50	38	<0.50
	8/3/2007	Purge and Sample	<0.50	37	<0.50

Notes:
Table shows only compounds detected above the laboratory reporting limit.
cis-1,2-DCE = cis-1,2-dichloroethene
PCE = tetrachloroethene
TCE = trichloroethene
"-- / --" = result on right represents duplicate sample
ft bgs = feet below ground surface
PDB = Passive Diffusion Bag Sampler
* Samples collected as part of the PDB comparison study. PDBs were deployed at two depths (52.5 and 57.5 ft bgs) in MW-5 during February 2008 to evaluate stratification in the well.

Table 5
SVE System Performance Monitoring Results
Hopyard Cleaners
2771 Hopyard Road, Pleasanton, California

Sample Date	SYSTEM MEASUREMENTS								MASS REMOVAL CALCULATIONS							
	Time	Operation Time (Hour)	Influent Flow Rate (ft/min)	System Temp. (^oF)	Influent Vacuum (in Hg)	Influent Conc. (ppmv)	Mid-Point Conc. (ppmv)	Effluent Conc. (ppmv)	Vacuum (in water)	Flowrate (cfm)	Flowrate (scfm)	Total Operation Time (hr)	PCE Conc. (mg/m^3)	Mass Removal Rate (lbs/day)	Mass Removed Since Last Sampling Event (lbs)	Cumulative Mass Removal (lbs)
08/21/08	9:15	7,569.2	--	--	10.0	13.0	0.2	0.1	136	--	--	--	89.70	--	0.00	0.00
08/22/08	9:25	7,593.3	4,590	83.5	10.0	5.5	0.3	0.0	136	210.54	136.22	24.17	37.95	0.7817	0.79	0.79
08/23/08	10:00	7,618.0	4,690	78.3	9.5	0.7	0.2	0.1	129	215.13	144.06	48.75	4.83	0.2770	0.28	1.07
08/24/08	14:02	7,646.0	4,550	79.5	10	0.9	0.3	0.0	136	208.71	136.04	76.78	6.21	0.0675	0.08	1.15
08/25/08	16:22	7,672.4	4,450	87.2	10	1.1	0.3	0.1	136	204.12	131.17	103.12	7.59	0.0814	0.09	1.24
08/27/08	8:14	7,712.1	4,520	74.0	10	6.6	0.1	0.0	136	207.33	136.53	142.98	45.54	0.3261	0.54	1.78
08/29/08	8:02	7,757.7	4,380	77.9	9.5	1.8	--	--	129	200.91	134.64	190.78	12.42	0.3508	0.70	2.48
09/02/08	9:14	7,853.3	4,250	77.5	10	1.8	0.1	0.0	136	194.95	127.54	287.98	12.42	0.1424	0.58	3.06
09/08/08	8:40	7,996.2	4,290	76.8	8.5	2.1	0.1	0	116	196.78	138.60	379.14	14.49	0.1677	0.64	3.69
09/18/08	10:40	82,382.2	4,300	79.0	8.0	0.7	0.0	0.0	109	197.24	141.59	520.31	4.83	0.1230	0.72	4.42

Notes/Assumptions:

1. Inlet pipe diameter is 3".
2. SVE operations were reduced from 24 hours per day to 14 hours (8 am to 10 pm) per day on 3 September 2008.
3. Vapor density of PCE is estimated to be 6,900 g/m3 at 20C.
4. SCFM(at 14.7psia and 68°F) = CFM x[[(Pg + Patm)/(Patm)] x [(68 +460)/(Tact +460)]]
5. Mass removal calculated as mass PCE

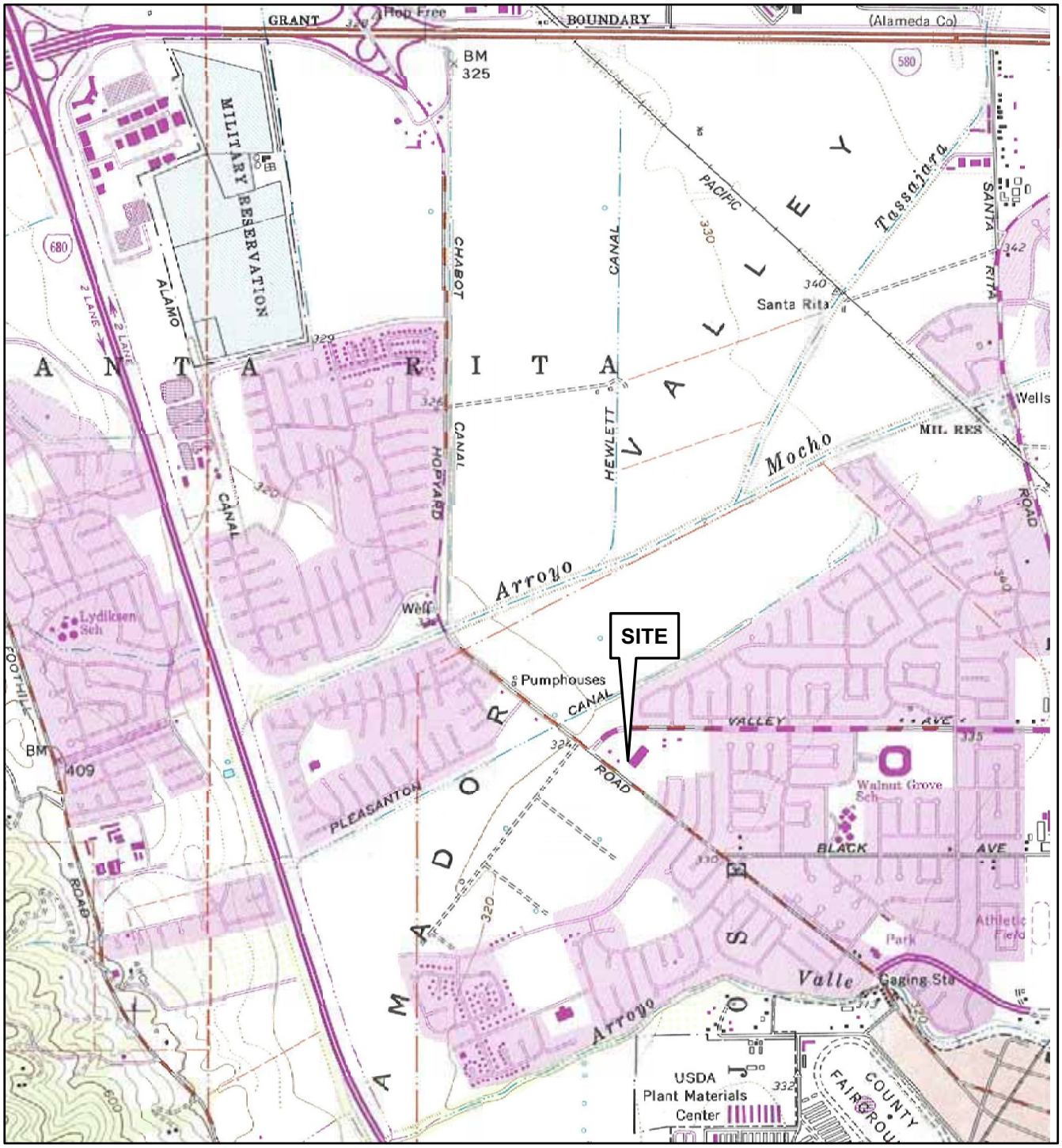
ft/min = feet per minute
^oF = degrees fahrenheit
in Hg = inches mercury
in water = inches water
cfm = cubic feet per minute
scfm = standard cubic feet per minute
hr = hour
ppmv = volumetric parts per million
yr = year
lbs = pounds

Table 6
SVE Well Monitoring Results
Hopyard Cleaners
2771 Hopyard Road, Pleasanton, California

Date	Monitoring Event	MANIFOLD			SVE-1			SVE-2			SVE-3			SVE-4			SVE-5		
		Time	Flow Rate (scfm)	Vacuum (in Hg)	Time	Vacuum (in Hg)	PID (ppmv)	Time	Vacuum (in Hg)	PID (ppmv)	Time	Vacuum (in Hg)	PID (ppmv)	Time	Vacuum (in Hg)	PID (ppmv)	Time	Vacuum (in Hg)	PID (ppmv)
21-Aug-08	Start up Day 1	9:22	240	--	9:24	0	46.8	9:22	1.5	23.8	9:21	2.0	5.0	9:25	1.5	24.3	9:20	2.0	8.8
22-Aug-08	Start-up Day 2	9:41	240	--	9:42	0	20.5	9:40	1.75	12.0	9:38	2.0	2.1	9:44	1.5	8.4	9:37	2.0	4.2
23-Aug-08	Start-up Day 3	10:35	240	--	10:38	0	12.5	10:34	1.5	7.8	10:28	0	2.3	10:26	1.0	6.4	10:31	2.0	3.6
25-Aug-08	Start-up Day 5	16:52	235	--	16:50	0	9.3	16:58	0	4.9	16:55	1.0	1.6	4:46	1.0	4.8	16:53	2.0	2.6
27-Aug-08	Start-up Day 7	8:36	240	--	8:38	0	7.2	8:36	1.5	3.6	8:35	2.0	0.6	8:39	1.5	8.9	8:34	2.0	1.5
2-Sep-08	Start-up Day 13/Week 2	9:43	230	3.5	9:44	0	3.5	9:42	1.5	2.2	9:40	1.75	0.7	9:45	1.5	1.9	9:36	1.5	1.2
8-Sep-08	Start-up Week 3	8:58	230	3.75	9:01	0	2.6	8:59	1.25	2.8	8:58	1.5	2.4	9:02	1.25	1.2	8:57	1.5	2.1
18-Sep-08	1st Month	11:14	235	4	11:16	1.2	1.8	11:14	1.5	0.8	11:12	1.5	0.0	11:17	1.3	0.8	11:10	1.5	0.5

Notes:
ft = feet
min = minute
in Hg = inches of mercury
ppmv = parts per million volume
scfm = standard cubic feet per minute

FIGURES



Topo Source: U.S.G.S 7.5 Minute Series,
Dublin, CA Quadrangle (1980)
Contour Interval = 40 Feet

SITE LOCATION MAP
HOPYARD CLEANERS
2771 HOPYARD ROAD
PLEASANTON, CALIFORNIA

N

0 1,000 2,000 Feet

Geosyntec consultants

FIGURE NO.	1
PROJECT NO.	WR0574
DATE:	OCTOBER 2008

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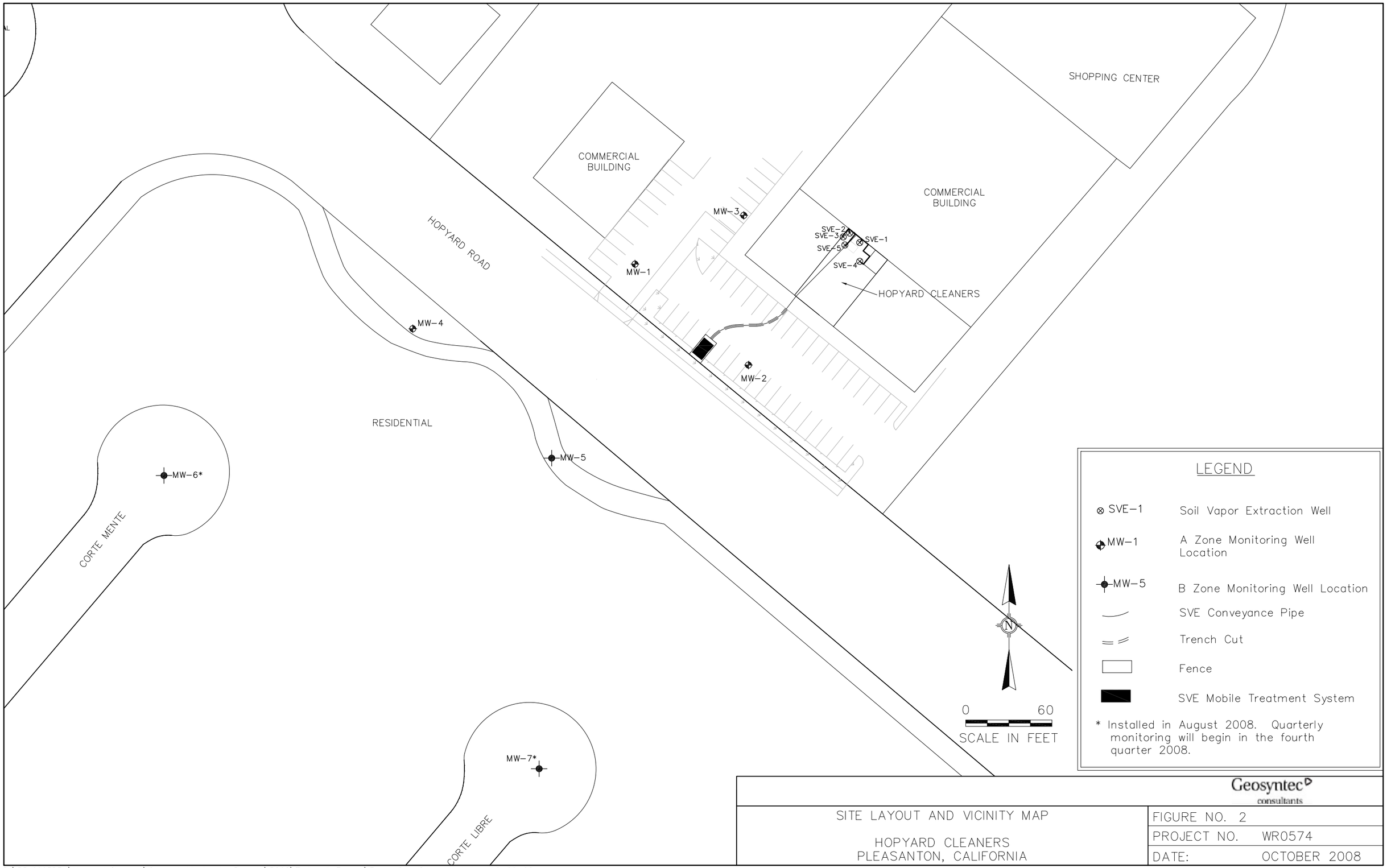

LEGEND

⊗ SVE-1	Soil Vapor Extraction Well
MW-1	A Zone Monitoring Well Location
MW-5	B Zone Monitoring Well Location
	SVE Conveyance Pipe
	Trench Cut
	Fence
	SVE Mobile Treatment System

* Installed in August 2008. Quarterly monitoring will begin in the fourth quarter 2008.

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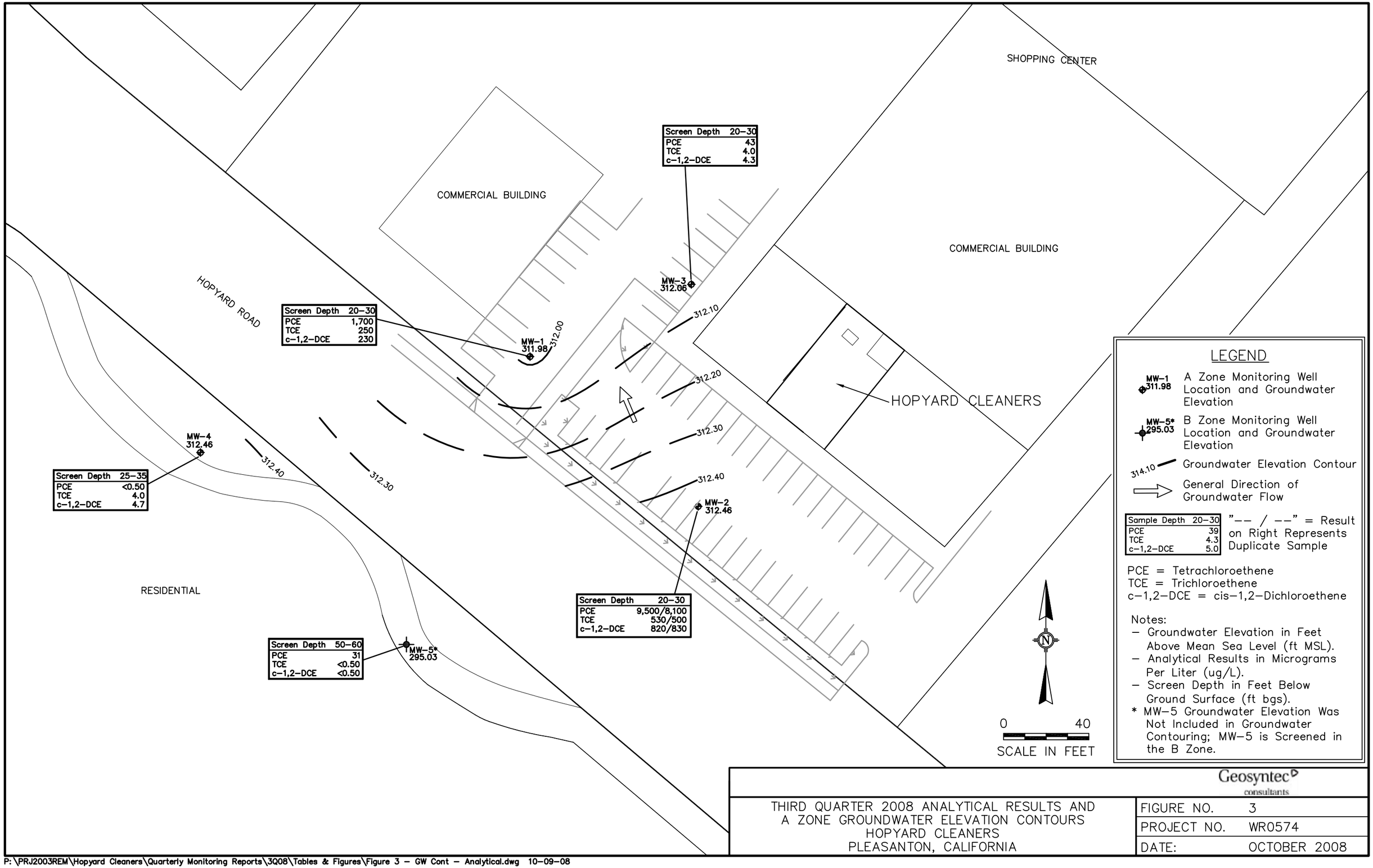
SITE LAYOUT AND VICINITY MAP

HOPYARD CLEANERS
PLEASANTON, CALIFORNIA

FIGURE NO.	2
PROJECT NO.	WR0574
DATE:	OCTOBER 2008

P:\PRJ2003REM\Hopyard Cleaners\Quarterly Monitoring Reports\3Q08\Tables & Figures\Figure 2 – Site Layout.dwg 10-09-08



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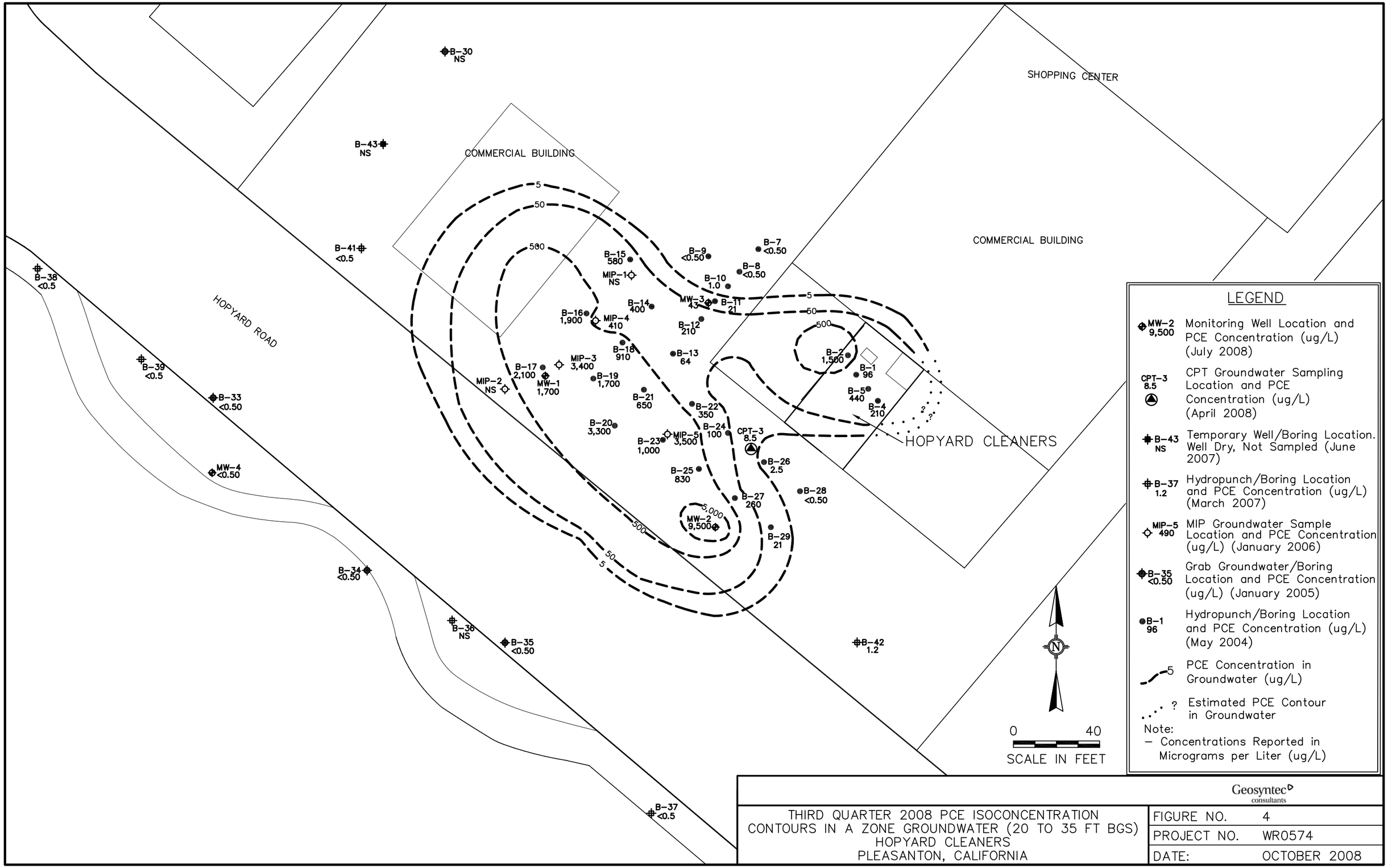
THIRD QUARTER 2008 ANALYTICAL RESULTS AND A ZONE GROUNDWATER ELEVATION CONTOURS
HOPYARD CLEANERS
PLEASANTON, CALIFORNIA

FIGURE NO.	3
PROJECT NO.	WR0574
DATE:	OCTOBER 2008

P:\PRJ2003REM\Hopyard Cleaners\Quarterly Monitoring Reports\3Q08\Tables & Figures\Figure 3 – GW Cont – Analytical.dwg 10–09–08



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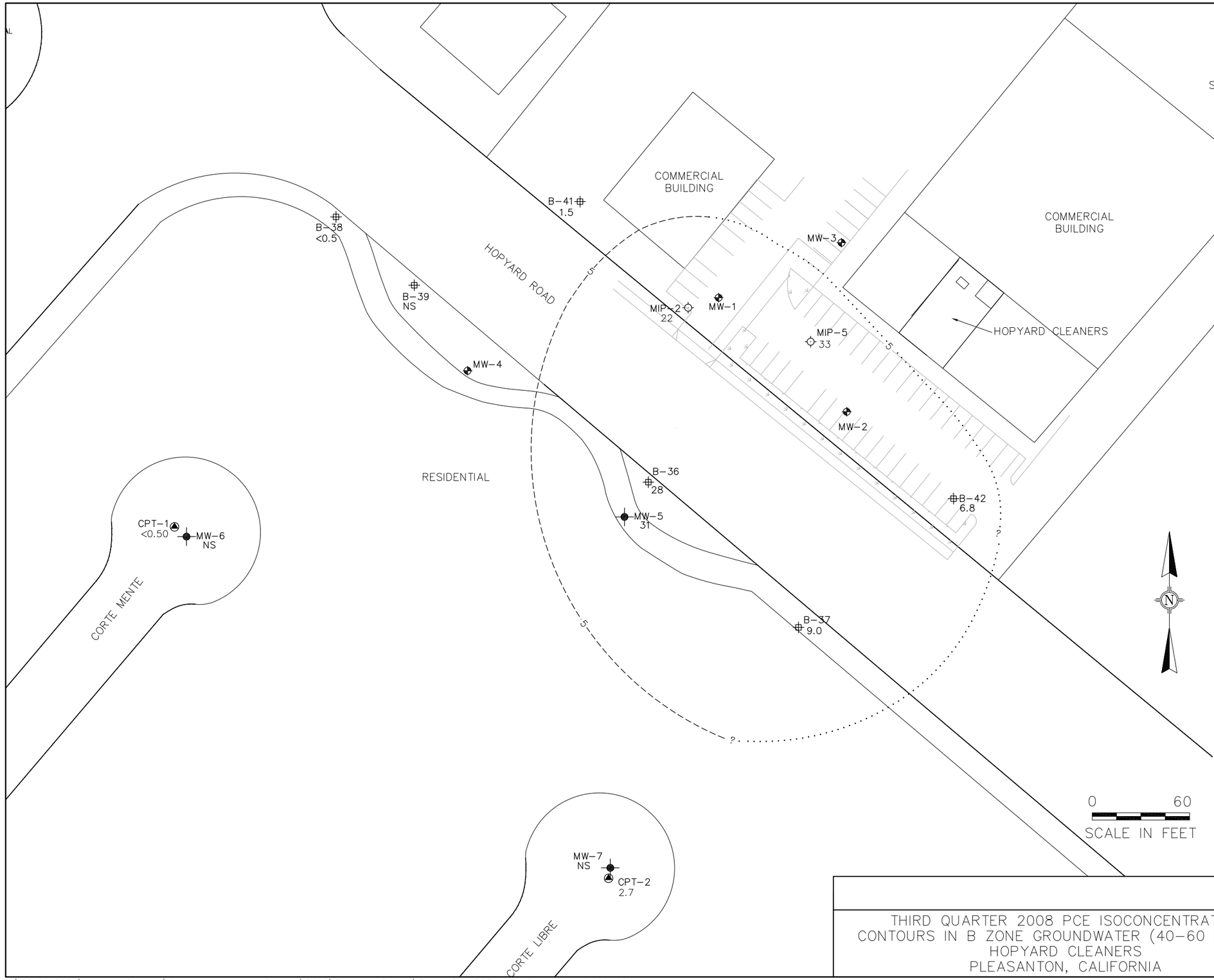
THIRD QUARTER 2008 PCE ISOCONCENTRATION CONTOURS IN A ZONE GROUNDWATER (20 TO 35 FT BGS)
HOPYARD CLEANERS
PLEASANTON, CALIFORNIA

FIGURE NO.	4
PROJECT NO.	WR0574
DATE:	OCTOBER 2008

P:\PRJ2003REM\Hopyard Cleaners\Quarterly Monitoring Reports\3Q08\Tables & Figures\Figure 4 – PCE in GW–Shallow.dwg 10–09–08



LEGEND

- MW-5 / 24 — B Zone Monitoring Well Location and PCE Concentration (ug/L) (July 2008)
- MW-1 — A Zone Monitoring Well Location
- CPT-1 / <0.50 — CPT Groundwater Sampling Location and PCE Concentration (ug/L) (April 2008)
- B-37 / 9.0 — Hydropunch/Boring Location and PCE Concentration (ug/L) (March 2007)
- MIP-5 / 33 — MIP Groundwater Sample Location and PCE Concentration (ug/L) (January 2006)
- 5 — PCE Concentration Contour in Groundwater (ug/L)
- ? — Estimated PCE Concentration Contour in Groundwater (ug/L)

Note:
- Concentrations Reported in Micrograms per Liter (ug/L)
- NS = Not Sampled
- Monitoring of MW-6 and MW-7 will begin in the fourth quarter 2008.

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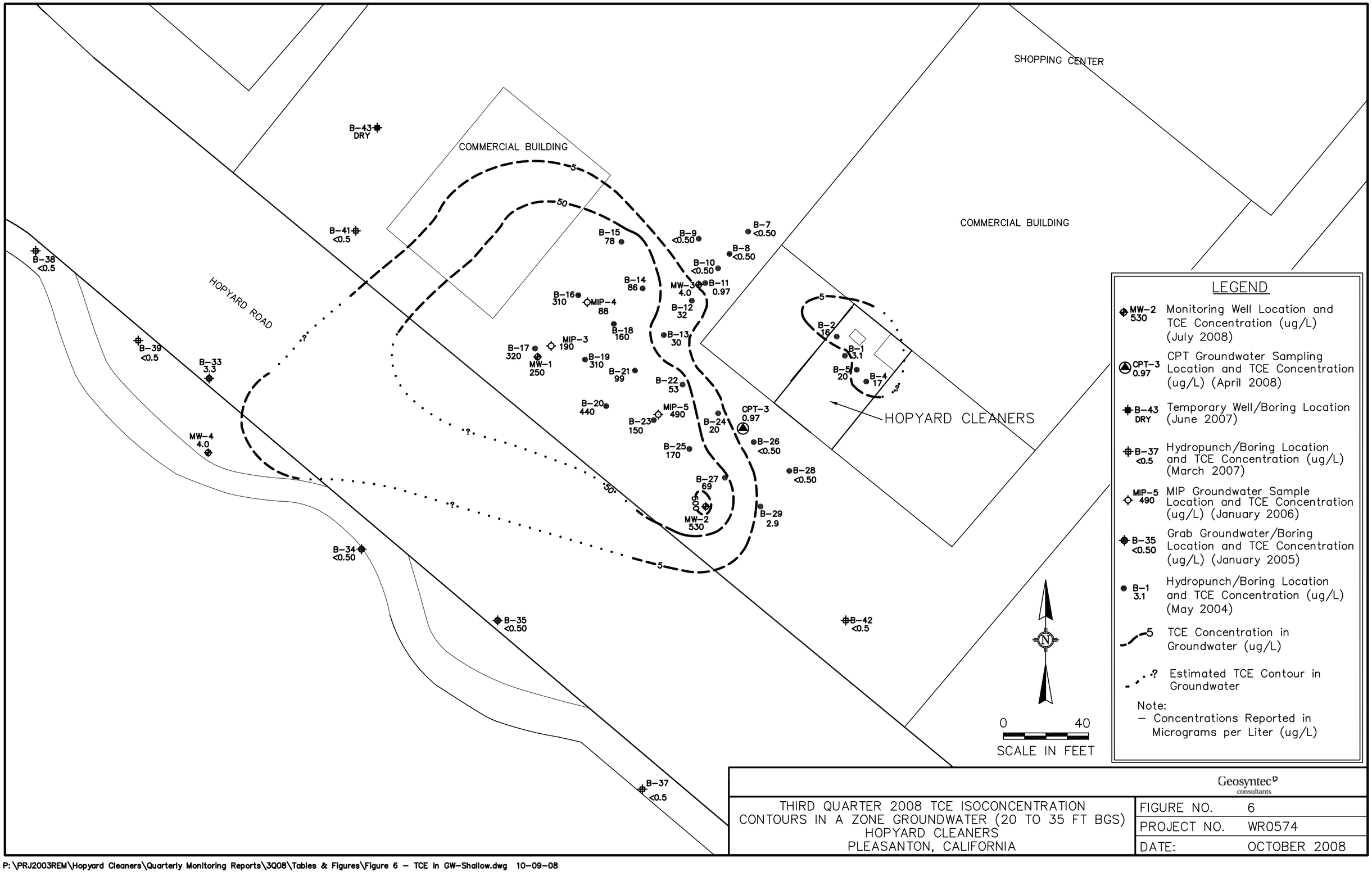
THIRD QUARTER 2008 PCE ISOCONCENTRATION CONTOURS IN B ZONE GROUNDWATER (40-60 FT BGS)
HOPYARD CLEANERS
PLEASANTON, CALIFORNIA

FIGURE NO.	5
PROJECT NO.	WR0574
DATE:	OCTOBER 2008

P:\PRJ2003REM\Hopyard Cleaners\Quarterly Monitoring Reports\3Q08\Tables & Figures\Figure 5 - PCE in GW Deep.dwg 10-09-08

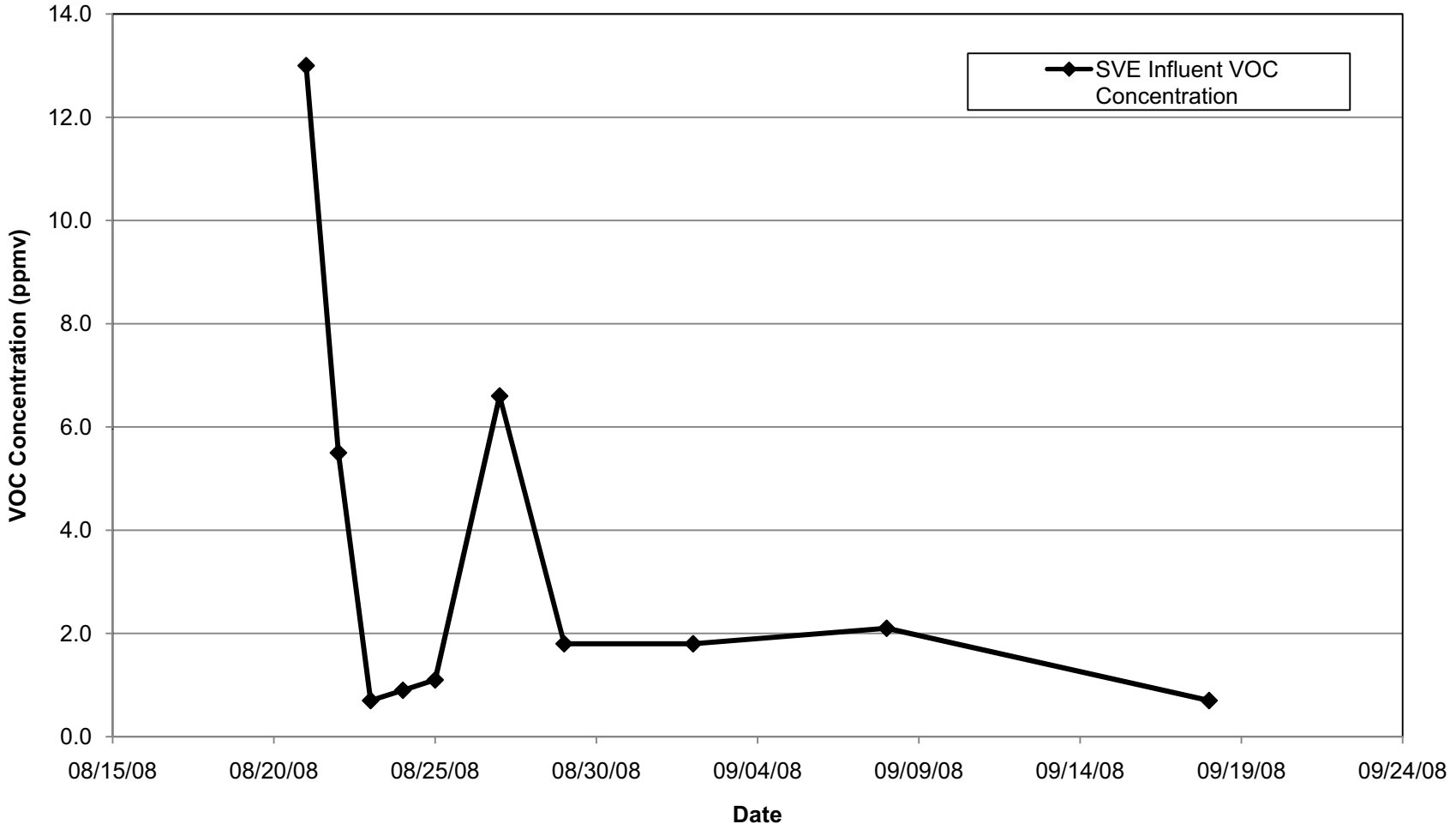


Geosyntec consultants

THIRD QUARTER 2008 TCE ISOCONCENTRATION CONTOURS IN A ZONE GROUNDWATER (20 TO 35 FT BGS)
HOPYARD CLEANERS
PLEASANTON, CALIFORNIA

FIGURE NO.	6
PROJECT NO.	WR0574
DATE:	OCTOBER 2008

P:\PRJ2003REM\Hopyard Cleaners\Quarterly Monitoring Reports\3Q08\Tables & Figures\Figure 6 – TCE in GW–Shallow.dwg 10–09–08

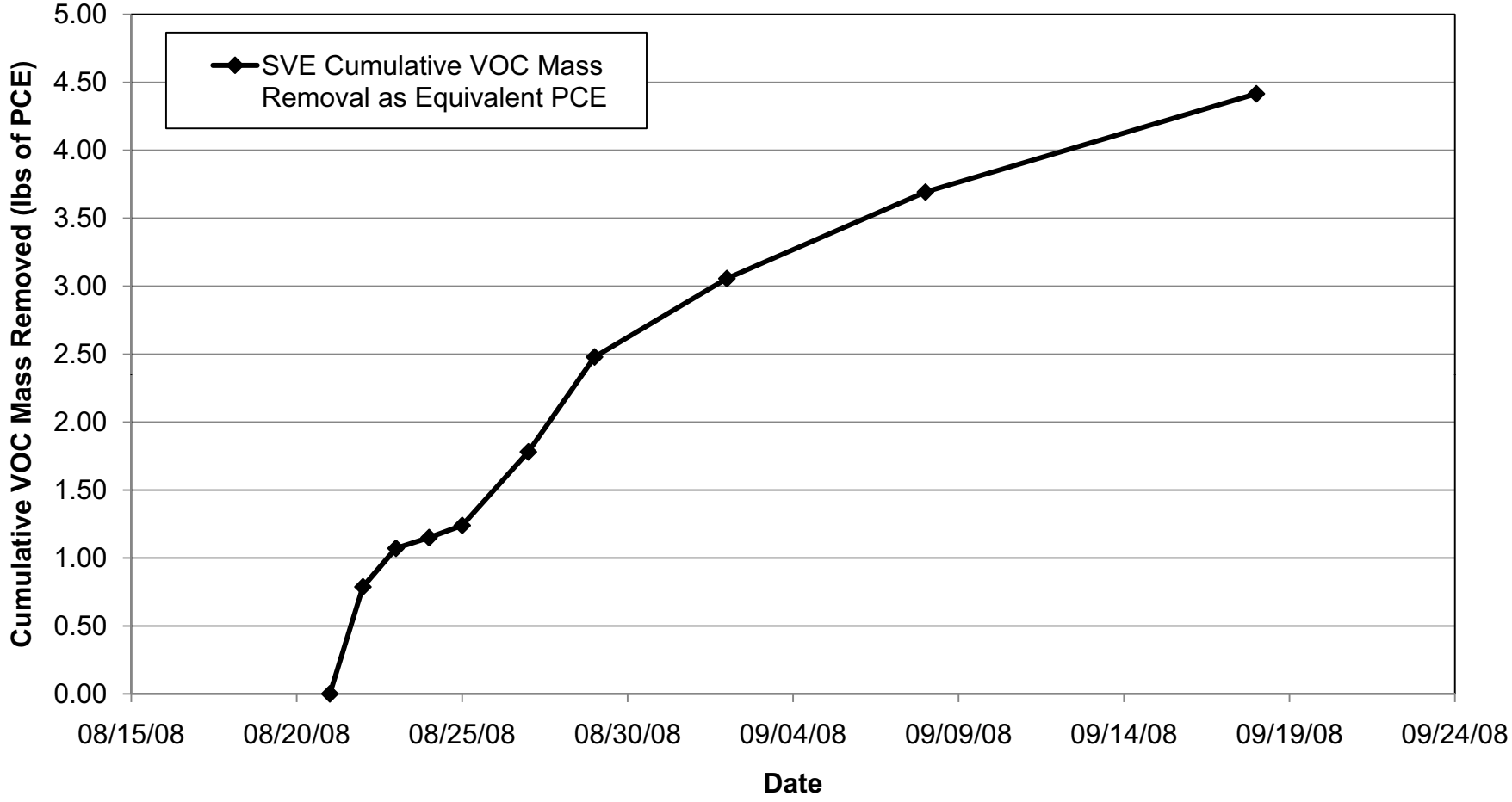


SVE Influent Concentrations Over Time
Hopyard Cleaners, Pleasanton, California

October 2008	Figure: **7**	Geosyntec consultants

ppmv = parts per million by volume

SVE System Influent VOC Concentration Over Time

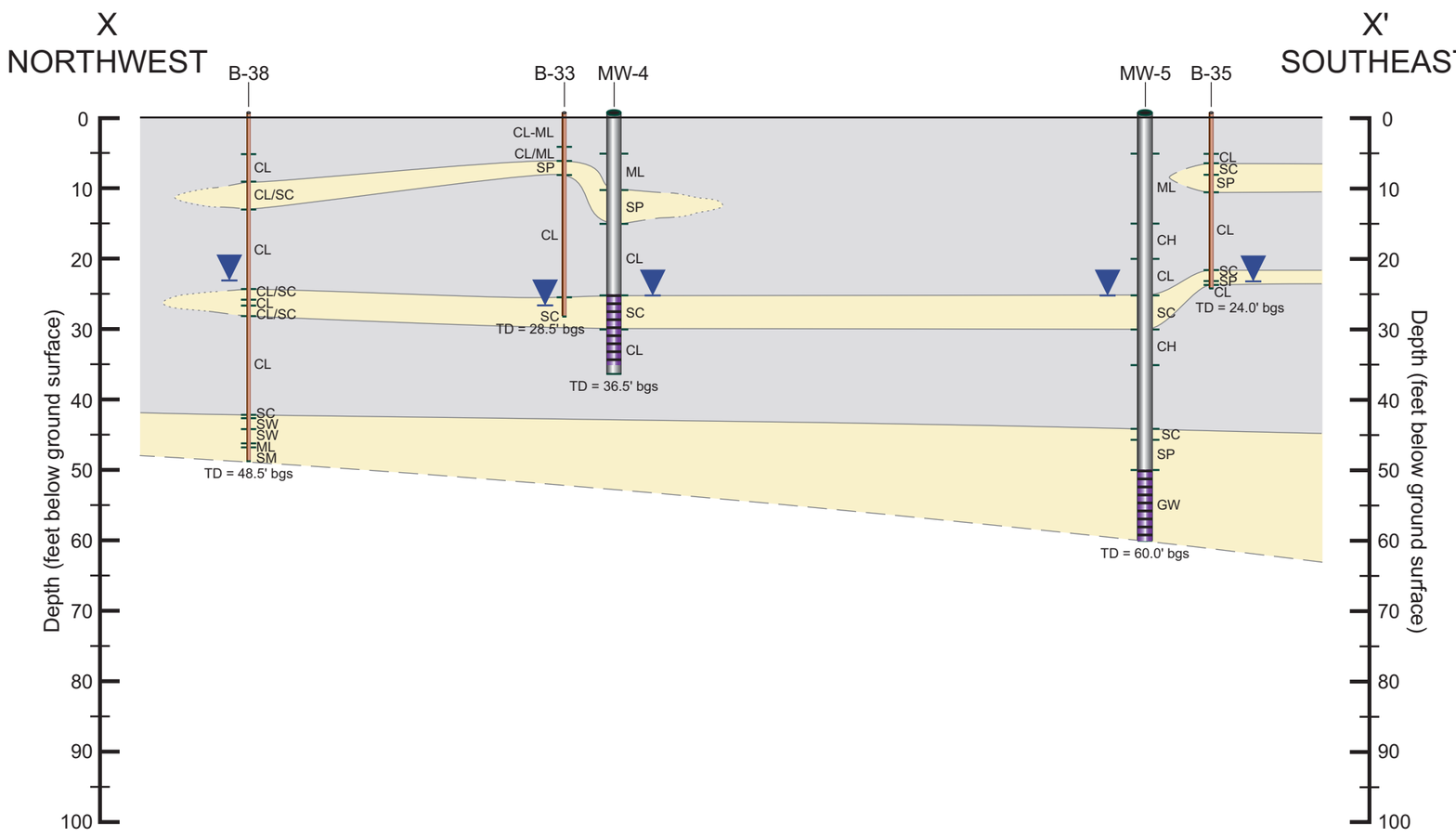


lbs = pounds

SVE Cumulative Mass Removal
Hopyard Cleaners, Pleasanton, California

October 2008	Figure: **8**	Geosyntec consultants

ATTACHMENT 1
REVISED CROSS-SECTIONS



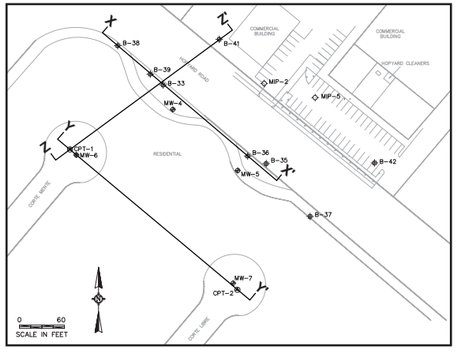
LEGEND

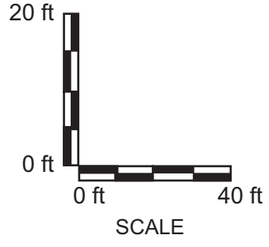
- COARSE-GRAINED DEPOSITS (SW, SP, SC)
- FINE-GRAINED DEPOSITS (CL, ML)
- CONTACT - DASHED WHERE INFERRED; DOTTED WHERE ESTIMATED
- WATER LEVEL AFTER DRILLING (DEPTH BELOW GROUND SURFACE [BGS])

TOPOGRAPHY ASSUMED NEARLY FLAT

MW-5 — WELL RISER / WELL SCREEN

B-33 — SOIL BORING





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Project No:	WR0574
Document No:	
Date:	September 2008

Figure 1

Geologic Cross-Section X-X'
Hopyard Cleaners
Pleasanton, California

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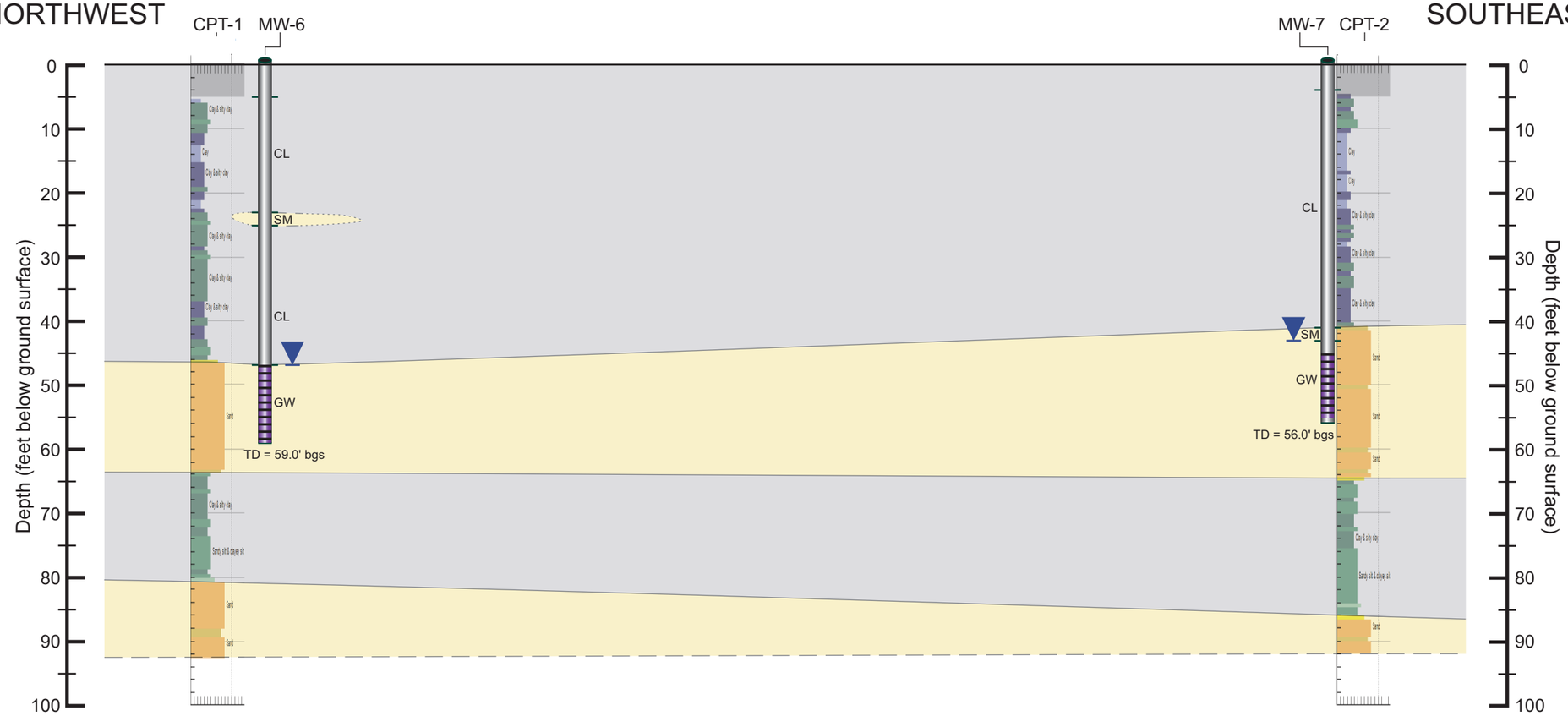
Y
NORTHWEST

Y'
SOUTHEAST



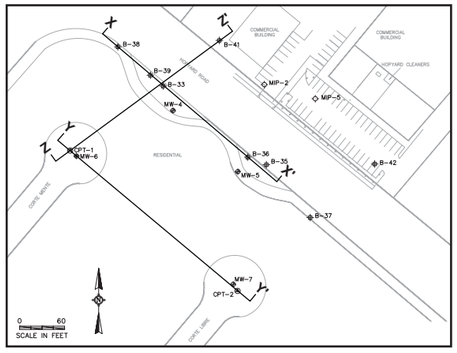
LEGEND

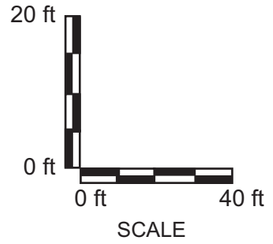
- COARSE-GRAINED DEPOSITS (SW, SP, SC)
- FINE-GRAINED DEPOSITS (CL, ML)
- CONTACT - DASHED WHERE INFERRED; DOTTED WHERE ESTIMATED
- WATER LEVEL AFTER DRILLING (DEPTH BELOW GROUND SURFACE [BGS])

TOPOGRAPHY ASSUMED NEARLY FLAT

MW-6
- WELL RISER
- WELL SCREEN

CPT-1
- CPT LOG (SOIL BEHAVIOR TYPE)





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Project No:	WR0574
Document No:	
Date:	September 2008

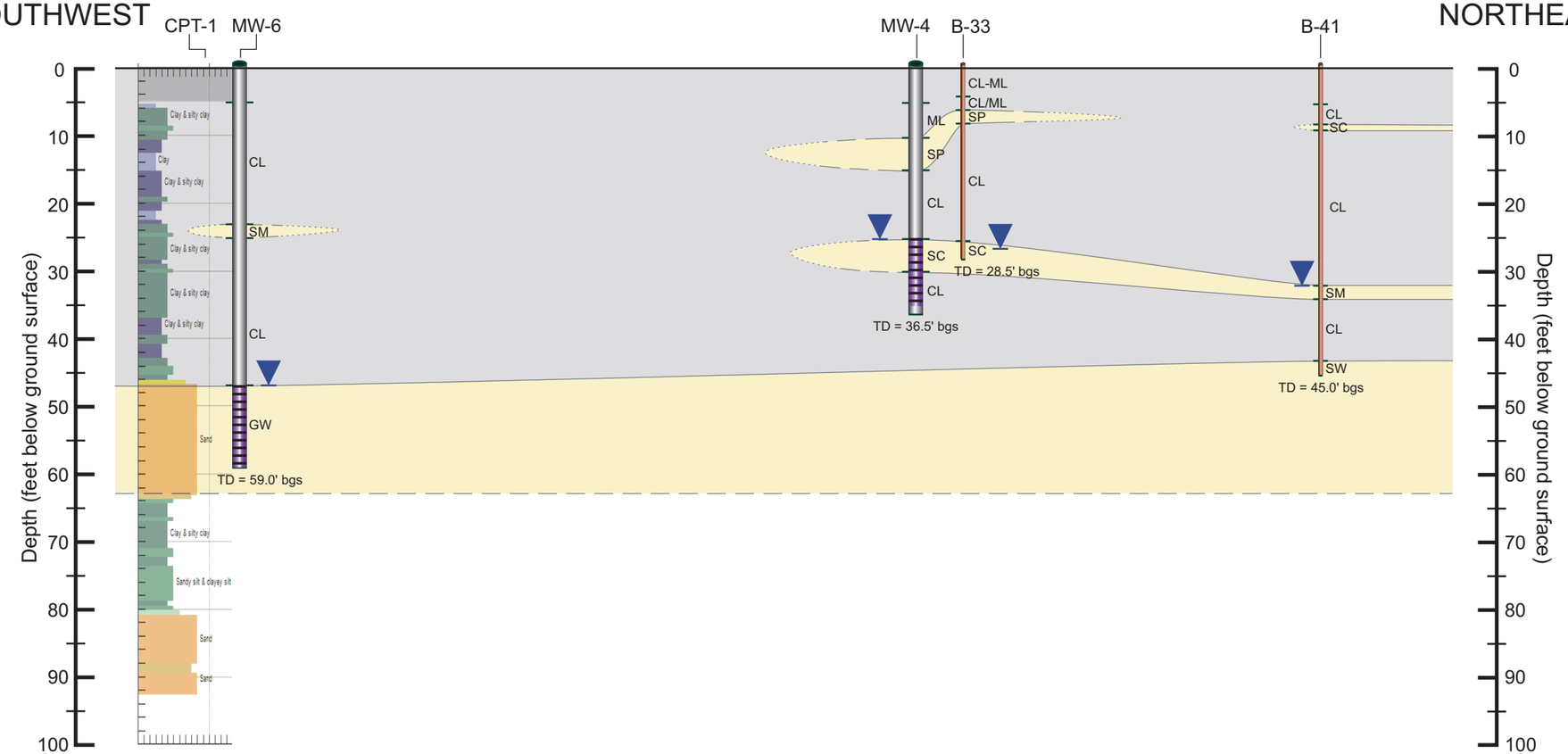
Figure 2

Geologic Cross-Section Y-Y'
Hopyard Cleaners
Pleasanton, California

P:\GIS\Hopyard\ai\2008Sep\CrossSections_Y-Y'.ai

Z
SOUTHWEST

Z'
NORTHEAST



LEGEND

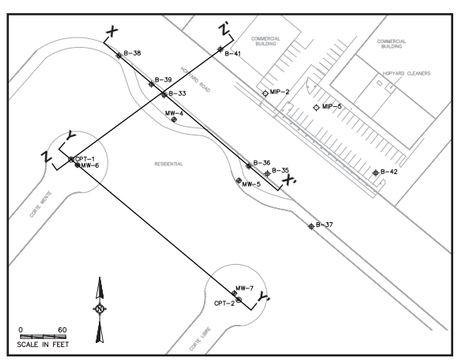
- COARSE-GRAINED DEPOSITS (SW, SP, SC)
- FINE-GRAINED DEPOSITS (CL, ML)
- CONTACT - DASHED WHERE INFERRED; DOTTED WHERE ESTIMATED
- WATER LEVEL AFTER DRILLING (DEPTH BELOW GROUND SURFACE [BGS])

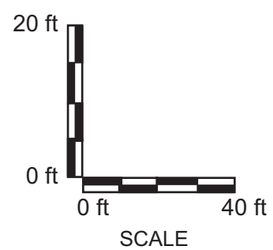
TOPOGRAPHY ASSUMED NEARLY FLAT

MW-6
- WELL RISER
- WELL SCREEN

B-41
- SOIL BORING

CPT-1
- CPT LOG (SOIL BEHAVIOR TYPE)





Geosyntec consultants

Project No:	WR0574
Document No:	
Date:	September 2008

Figure 3

Geologic Cross-Section Z-Z'
Hopyard Cleaners
Pleasanton, California

P:\GIS\Hopyard\ai\2008Sep\CrossSections_Z-Z'.ai

ATTACHMENT 2
ESS FIELD REPORT

Environmental Sampling Services

July 16, 2008

Ms. Melissa Asher
Senior Staff Engineer
GeoSyntec Consultants
475-14th Street, Suite 450
Oakland, California 94612

SUBJECT: July 2008 Quarterly Groundwater Monitoring Event for Hopyard Cleaners, Pleasanton, California

Dear Ms. Asher,

Please find enclosed the Field Activity Report for the quarterly groundwater monitoring event at 2771 Hopyard Road that occurred July 14, 2008.

If you have any questions or concerns regarding this Field Activity Report, please do not hesitate to call me.

Sincerely,
Environmental Sampling Services, LLC

Jacqueline Lee
Manager

Enclosure

6680 Alhambra Ave., #102 • Martinez, CA 94553-6105 • (925) 372-8108 • Fax: (925) 372-6705
www.envsampling.com

FIELD ACTIVITY REPORT
FOR

JULY 2008
QUARTER GROUNDWATER
MONITORING EVENT

HOPYARD CLEANERS
2771 HOPYARD ROAD
PLEASANTON, CALIFORNIA

Prepared for: GeoSyntec Consultants
475-14th Street, Suite 450
Oakland, California 94612

Date Prepared: July 15, 2008

Environmental
Sampling Services

FIELD ACTIVITY REPORT
FOR

JULY 2008
QUARTERLY GROUNDWATER
MONITORING EVENT

HOPYARD CLEANERS
2771 HOPYARD ROAD
PLEASANTON, CALIFORNIA

Task: Quarterly Groundwater Sampling Event
ESS Personnel: Jacqueline Lee
Date of Activities: July 14, 2008

Decontamination Procedures

All downhole equipment was cleaned with Liqui-Nox® laboratory-grade soap, potable water, and rinsed with distilled water prior to use and between each monitoring well.

Groundwater Level Measurements

Depth to groundwater for five monitoring wells were measured and recorded following atmospheric equilibration of approximately thirty minutes. All readings were performed with a Slope® Water Level Meter, Serial Number 25742, and referenced to the surveyor's mark or north rim at the top of PVC well casing (Table 1). Three successive readings that agreed to within one-hundredth of a foot determined depth to groundwater.

Organic vapor readings were not required.

Field Equipment and Calibration

pH, Specific Conductance, Temperature, Dissolved Oxygen, and Oxidation Reduction Potential (ORP) were monitored with a YSI® Multi-parameter meter equipped with an in-line flow through cell. Turbidity readings were measured with a HF Scientific® Turbidity meter.

Equipment calibration was performed in accordance with the instrument's calibration and operating procedures. Calibration was performed prior to any monitoring activities (see Daily Equipment Calibration Sheet).

Solution standards: pH 4, 7, and 10, Specific Conductance @ 1,000 uS/cm, and Zobell for ORP were used for calibration purposes. Dissolved Oxygen was calibrated to air. Turbidity was checked against a 0.02 NTU standard. All equipment calibrated and functioned properly during the July 2008 monitoring event.

Environmental
Sampling Services

Passive Diffusion Bag Sampling

After completion of groundwater level measurements, groundwater samples for Volatile Organic analyses were obtained from each Passive Diffusion Bag Sampler (PDBS). Volatile Organic samples were contained in 40-ml, clear glass, VOAs preserved with hydrochloric acid. Following completion of sampling effort, a new PDBS was installed in each monitoring well.

Low-Flow Well Purging & Sampling Procedures

A peristaltic pump with new pump tubing was used to purge and sample MW-2 for Chloride and Title 22 Metals. The monitoring well was purged at a rate no greater than 500-ml per minute until water quality parameters stabilized for three consecutive readings.

During low-flow purging activities, pH, Specific Conductance (uS), Temperature (Celsius), Dissolved Oxygen (mg/L), Oxidation/Reduction Potential (mV), and physical characteristics such as pumping water level, color, and odor (see Water Quality Sample Log Sheets) were monitored and recorded (see Water Quality Log Sheets).

EPA stabilization guidelines for low-flow sampling were used: ± 0.1 for pH, ± 3 % for Specific Conductivity, ± 10% for Dissolved Oxygen, ± 10 mV for ORP, and ± 10% NTUs for Turbidity, if more than 10 NTUs.

Groundwater samples for Chloride and Title 22 Metals were collected immediately following stabilization of water quality parameters by disconnecting the tubing from the flow through chamber. Groundwater sample for Chloride was pumped directly into the appropriate sample container. A 0.45-micron filter was attached to the pump tubing for the collection of metals sample.

All sample labels were completed with waterproof ink and affixed to sample containers. All sample containers were wiped dry, sealed in Ziploc® bags, and placed a chilled cooler for storage and shipment to the laboratory.

Following completion of low-flow groundwater sampling, a new Passive Diffusion Bag was installed.

Laboratory

TestAmerica of Pleasanton, California provided Trip Blank, sample containers with appropriate preservative, and conducted all laboratory analyses.

All wells were sampled for Volatile Organic Compounds (VOC) by EPA Method 8260B. Additional samples were collected from MW-2 for Chloride and Title 22 Metals (Dissolved) by EPA 6010B.

Sample Containers /Sample Handling

Each VOC sample set was contained in two or three, 40-ml VOA clear glass containers preserved with hydrochloric acid.

Each Chloride sample was contained in a non-preserved, 500-ml plastic container.

Each Title 22 Metals sample was field filtered and contained in a 500-ml plastic container preserved with nitric acid.

All samples were placed in the cooler containing the Trip Blank for storage and transportation.

Quality Assurance /Quality Control Samples

All QA/QC samples were submitted to TestAmerica for analysis.

Environmental
Sampling Services

Trip Blank
One Trip Blank set, labeled Trip Blank, was stored in a chilled cooler throughout the sampling event and submitted for analysis.

Equipment Blank
One equipment blank set for Chloride and Title 22 metals was collected prior to purging MW-2. The equipment blank was collected at well location MW-2 and labeled "EB-1 @ 11:15". Distilled water and short section of downhole pump and silicon tubing were used. Distilled water was pumped directly into the Chloride sample container. Approximately 50-ml of distilled water was flushed through a new 0.45-micron filter prior to containment of metals sample collection.

Duplicate
One blind duplicate set was collected from MW-2 and labeled "MW-DUP @ 11:40". Primary and duplicate sets of VOCs for MW-2 were obtained by collecting two 40-ml VOA containers from the PDB for each set. Chloride and metals duplicate samples were collected using low-flow sampling and the peristaltic pump. The filter used for the equipment blank was re-used for sample collection. Approximately 100 ml of groundwater was flushed through the filter prior to sample collection.

No other QA/QC samples were requested.

Chain of Custody (COC) Form

Standard chain of custody procedures were used to documentation purposes. The COC included: sampler's name and signature, sample identification, sample date and time, and analysis request section. Electronic Data Format (EDF) and standard turnaround time was requested.

Shipment of Samples

All groundwater samples were relinquished directly to TestAmerica July 14, 2008.

Storage of Investigative Derived Wastewater (IDW)

Approximately 10 gallons of purged groundwater and decontamination water generated from this sampling event were stored a new, labeled 55-gallon drum. The drum is stored along the southeast corner of the property.

Comments

Sample collection time for MW-2 at 12:00 was used for documentation purposes, the actual sample time of the primary and duplicate VOCs samples was 10:59 (see "Comments" in MW-2's Water Quality Sample Log Sheet)

All work was performed in accordance with Geosyntec's directive for Hopyard Cleaners, dated June 11, 2008 and subsequent directives.

Environmental Sampling Services, LLC
Jacqueline Lee
Manager

Attachments:
Table 1: Summary of Groundwater Monitoring Event
Water Sample Log Sheets
Equipment Calibration Sheet
Chain of Custody

Environmental Sampling Services

Table 1: Summary of July 2008 Quarterly Groundwater Sampling Event
Project Name: Hopyard Cleaners
Project Location: 2771 Hopyard Road, Pleasanton, California

Passive Diffusion Bags:

Well/Sample Identification	Date of Measurement	Time of Measurement	Depth to Groundwater (Ft., below TOC)	PDB Sample Date	PDB Sample Time
MW-1	7/14/2008	9:13	13.79	7/14/2008	9:38
MW-2	7/14/2008	9:07	13.23	7/14/2008	10:59
MW-3	7/14/2008	9:09	14.21	7/14/2008	9:50
MW-4	7/14/2008	9:20	13.81	7/14/2008	10:10
MW-5	7/14/2008	9:16	32.16	7/14/2008	10:27

Low-Flow Sampling:

Well/Sample Identification	Date of Measurement	Sample Time	QA/QC Type (QA/QC Sample Identification
MW-2	7/14/2008	12:00	Equipment Blank (EB-1) & Duplicate (MW-DUP)

Legend:

TOC = Top of Well Casing

NA = Not Applicable

Environmental Sampling Services

WATER QUALITY SAMPLE LOG SHEET	WELL IDENTIFICATION: MW-1 DATE: 7/14/08

Project Name: Hopyard Cleaners Pleasanton, CA Project Task: Quarterly Monitoring Project/Task No. WR0574
Project Manager: Melissa Asher - Geosyntec Cons. Lab: TestAmerica Weather Conditions: Sunny, humid
Well Description: (2") 3.5" 4" 5" 6" Other:____ Well Type: (PVC) Stainless Steel Other: _____
Is Well Secured? (Yes) No Bolt Size: 9/16" Type of lock / Lock number: Master P288
Observations / Comments: _____ Screen Interval: 20' to 30'
Purge Method: (NA) Teflon / PE Disposable Bailer Centrifugal Pump Peristaltic Pump Other: _____
Pump Lines: (NA) New / Cleaned / Dedicated Bailer Line: (NA) New / Cleaned / Dedicated
Method of Cleaning Pump: (NA) Alconox Liqui-nox Tap Water DI Rinse Other: _____
Method of Cleaning Bailer: (NA)
Sampling Method: (Passive Disposable Sampler Bag)
YSI Muti-Parameter Meter/Probe Serial No.: 556 MPS - 05F1258AH / 600XL 319340R - 00C1522
Equipment Calibration: See Daily Equipment Calibration Sheet
Method to Measure Water Level: Slope/Solinst Indicator Serial No.: 21758 (25742) P.I.D. Reading: NA ppm
Water Level at Start (DTW): 13.79 @ 9:13 NR (BTOC) Water Level Prior To / After Sampling: NA (BTOC)
TD = 30.27' - 13.79 (DTW) = 16.48 (ft.of water) x "K" = NA (Gals./CV) x NA (No. of CV) = NA (Gals.)
"K"= 0.163 (2" well) "K" = 0.50 (3.5" well) "K" = .653 (4" well) "K" = 1.02 (5" well) "k" = 1.46 (6" well)

FIELD WATER QUALITY PARAMETERS

Date	Time	Discharge (Liters)	pH +/- 0.1	Temp. (°C)	Specific Conductance µS +/- 3%	Turbidity (NTU's) +/- 10	Redox (mV) +/- 10	Dissolved Oxygen (mg/L) +/- 10%	Water Level (BTOC)	Color
		Initial								
		0.5								
		1.0								
		1.5								
		2.0								
		2.5		NA						
		3.0								
		3.5								
		4.0								

Total Discharge: 0 Liters Casing Volumes Removed: NA
Method of disposal of discharged water: (55 Gallon Drum(s)) Poly Tank Treatment System Other: _____
Date/Time Sampled: 7/14/08 @ 9:38 Analysis: VOCs (8260B) - 3 VOAs w/HCl
QA/QC: None @ — Duplicate MS/MSD Equipment Rinseate Field Blank Lab Split
Comments: NR= North Rim

Recorded by: Stephen Penman / (Jacki Lee) Signature: _____ Page 1 of 1

6680 Alhambra Ave., #102 • Martinez, CA 94553-6105 • (925) 372-8108 • Fax: (925) 372-6705
www.envsampling.com

Environmental Sampling Services

WATER QUALITY SAMPLE LOG SHEET	WELL IDENTIFICATION: MW-2 DATE: 7/14/08

Project Name: Hopyard Cleaners Pleasanton, CA Project Task: Quarterly Monitoring Project/Task No. WR0574
Project Manager: Melissa Asher - Geosyntec Cons. Lab: TestAmerica Weather Conditions: humid, warm
Well Description: (2") 3.5" 4" 5" 6" Other:_____ Well Type: (PVC) Stainless Steel Other: _____
Is Well Secured? (Yes) No Bolt Size: 9/16" Type of lock / Lock number: Master
Observations / Comments: set pump intake @ 25 ft.(BTOC) Screen Interval: 20' to 30'
Purge Method: Teflon / PE Disposable Bailer Centrifugal Pump (Peristaltic Pump) Other: _____
Pump Lines: NA (New) / Cleaned / Dedicated Bailer Line: (NA) New / Cleaned / Dedicated
Method of Cleaning Pump: (NA) Alconox Liqui-nox Tap Water DI Rinse Other: _____
Method of Cleaning Bailer: (NA) Alconox Liqui-nox Tap Water DI Rinse Other: _____
Sampling Method: Disp. Teflon Bailer Disp. PE Bailer (Peristaltic Pump) Other: PDSBs (for VOCs only)
YSI Muti-Parameter Meter/Probe Serial No.: 556 MPS - 05F1258AH / (600XL 319340R - 00C1522)
Equipment Calibration: See Daily Equipment Calibration Sheet
Method to Measure Water Level: Slope/Solinst Indicator Serial No.: 21758 (25742) P.I.D. Reading: NA ppm
Water Level at Start (DTW): 13.23@ 9:07 SM (BTOC) Water Level Prior To Sampling: 13.38 (BTOC)
TD = 30.31' - 13.23 (DTW) = 17.08 (ft.of water) x "K" = 2.78 (Gals./CV) x NA (No. of CV) = NA (Gals.)
("K"= 0.163 (2" well)) "K" = 0.50 (3.5" well) "K" = .653 (4" well) "K" = 1.02 (5" well) "K" = 1.46 (6" well)

FIELD WATER QUALITY PARAMETERS

Date	Time	Discharge (Liters)	pH +/- 0.1	Temp. (°C)	Specific Conductance µS +/- 3%	Turbidity (NTU's) +/- 10	Redox (mV) +/- 10	Dissolved Oxygen (mg/L) +/- 10%	Water Level (BTOC)	Color
7/14/08	11:24	Initial	7.25	21.14	2009	36	190.3	3.97	13.22 at 10:59 see 13.37	clear
	11:27	0.5	6.59	21.32	1990	33	188.5	2.48	13.36	"
	11:29	1.0	6.45	21.14	1977	29	187.3	1.88	13.36	"
	11:31	1.5	6.43	21.29	1970	24	186.4	1.60	13.36	"
	11:34	2.0	6.43	21.24	1966	21	186.3	1.52	13.36	"
	11:37	2.5	6.42	21.20	1960	17	186.2	1.39	13.36	"
	11:40	3.0	6.42	21.18	1951	15	186.5	1.25	13.37	"
	11:43	3.5	6.43	21.18	1954	13	186.5	1.11	13.38	"
	11:45	4.0	6.43	21.12	1950	11	187.0	1.02	13.38	"

Total Discharge: 6.2 Liters Casing Volumes Removed: NA
Method of disposal of discharged water: 55 Gallon Drum(s) Poly Tank Treatment System Other: _____
Date/Time Sampled: 7/14/08 @ 12:00 Analysis/Containers: VOCs (8260B) / 3 VOAs w/HCl; Title 22
Metals (6010B) / (1-250 ml Poly w/HNO3) & Chloride (300.0) (1-250 ml Poly N/P)
Preservatives Used: HCl HNO3 None
QA/QC: MW-DUP & EB-1 @ 11:15/11:40 (2) (1) (1) (2) Duplicate (2) MS/MSD (Equipment Blank (1)) Field Blank Lab Split
Comments: Metals sample field filtered with 0.45 micron filter. Actual Sample Time of VOCs = 10:59
Recorded by: Stephen Penman (Jacqueline Lee) Signature _____ Page 1 of 2

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WATER QUALITY SAMPLE LOG SHEET	WELL IDENTIFICATION: MW-2	Page 2

Project Name: Hopyard Cleaners, Pleasanton, CA

FIELD WATER QUALITY PARAMETERS CONTINUED FROM PAGE 1

Date	Time	Discharge (Liters)	pH (± 0.1)	Temp. (°C)	Specific Conductance mS (uS) (± 3%)	Turbidity (NTU's) (±10%)	Redox (mV) (±10)	Dissolved Oxygen (mg/L) (±10%)	Water Level (BTOC)	Color
7/14/08	11:47	4.5	6.43	20.81	1944	10	187.8	1.02	13.38	clear
↓	11:50	5.0	6.44	21.03	1944	6.8	188.9	0.98	13.38	"
	11:53	5.5	6.43	20.95	1943	6.1	188.5	0.93	13.38	"
↓	11:55	6.0	6.44	21.05	1939	5.8	189.3	0.91	13.38	"
		6.5								
		7.0								
		7.5								
		8.0								
		8.5								
		9.0								
		9.5								
		10.0								
		10.5								
		11.0								
		11.5								
		12.0								
		12.5								
		13.0								
		13.5								
		14.0								

Total Discharge: 6.2 Liters Casing Volumes Removed: NA

Comments: SM= Surveyor's mark

Recorded by: Jacqueline Lee / Stephen Penman Signature:

Environmental Sampling Services

WATER QUALITY SAMPLE LOG SHEET	WELL IDENTIFICATION: MW-3 DATE: 7/14/08

Project Name: Hopyard Cleaners Pleasanton, CA Project Task: Quarterly Monitoring Project/Task No. WR0574
Project Manager: Melissa Asher - Geosyntec Cons. Lab: TestAmerica Weather Conditions: Humid, 70°F
Well Description: (2") 3.5" 4" 5" 6" Other:____ Well Type: (PVC) Stainless Steel Other: _____
Is Well Secured? (Yes) No Bolt Size: 9/16" Type of lock / Lock number: Master P288
Observations / Comments: _____ Screen Interval: 20' to 30'
Purge Method: (NA) Teflon / PE Disposable Bailer Centrifugal Pump Peristaltic Pump Other: _____
Pump Lines: (NA) New / Cleaned / Dedicated Bailer Line: (NA) New / Cleaned / Dedicated
Method of Cleaning Pump: (NA) Alconox Liqui-nox Tap Water DI Rinse Other: _____
Method of Cleaning Bailer: NA
Sampling Method: (Passive Disposable Sampler Bag)
YSI Muti-Parameter Meter/Probe Serial No.: 556 MPS - 05F1258AH / 600XL 319340R - 00C1522
Equipment Calibration: See Daily Equipment Calibration Sheet
Method to Measure Water Level: Slope/Solinst Indicator Serial No.: 21758 (25742) P.I.D. Reading: NA ppm
Water Level at Start (DTW): 14.21 @ 9:09 SM (BTOC) Water Level Prior To / After Sampling: NA (BTOC)
TD = 30.29' - 14.21 (DTW) = 16.08 (ft.of water) x "K" = NA (Gals./CV) x NA (No. of CV) = NA (Gals.)
"K"= 0.163 (2" well) "K" = 0.50 (3.5" well) "K" = .653 (4" well) "K" = 1.02 (5" well) "k" = 1.46 (6" well)

FIELD WATER QUALITY PARAMETERS

Date	Time	Discharge (Liters)	pH +/- 0.1	Temp. (°C)	Specific Conductance µS +/- 3%	Turbidity (NTU's) +/- 10	Redox (mV) +/- 10	Dissolved Oxygen (mg/L) +/- 10%	Water Level (BTOC)	Color
		Initial								
		0.5								
		1.0								
		1.5		NA						
		2.0								
		2.5								
		3.0								
		3.5								
		4.0								

Total Discharge: 0 Liters Casing Volumes Removed: NA
Method of disposal of discharged water: (55 Gallon Drum(s)) Poly Tank Treatment System Other: _____
Date/Time Sampled: 7/14/08 @ 9:50 Analysis: VOCs (8260B) - 3 VOAs w/HCl
QA/QC: None @ — Duplicate MS/MSD Equipment Rinseate Field Blank Lab Split
Comments: SM= surveyor's mark

Recorded by: Stephen Penman / (Jacki Lee) Signature: _____ Page 1 of 1

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WATER QUALITY SAMPLE LOG SHEET	WELL IDENTIFICATION: MW-4 DATE: 7/14/08

Project Name: Hopyard Cleaners Pleasanton, CA Project Task: Quarterly Monitoring Project/Task No. WR0574
Project Manager: Melissa Asher - Geosyntec Cons. Lab: TestAmerica Weather Conditions: Warm (70's°F); humid
Well Description: (2") 3.5" 4" 5" 6" Other:____ Well Type: (PVC) Stainless Steel Other: _____
Is Well Secured? (Yes) No Bolt Size: 9/16" Type of lock / Lock number: Master P288
Observations / Comments: _____ Screen Interval: 20' to 30'
Purge Method: (NA) Teflon / PE Disposable Bailer Centrifugal Pump Peristaltic Pump Other: _____
Pump Lines: (NA) New / Cleaned / Dedicated Bailer Line: (NA) New / Cleaned / Dedicated
Method of Cleaning Pump: (NA) Alconox Liqui-nox Tap Water DI Rinse Other: _____
Method of Cleaning Bailer: (NA)
Sampling Method: (Passive Disposable Sampler Bag)
YSI Muti-Parameter Meter/Probe Serial No.: 556 MPS - 05F1258AH / 600XL 319340R - 00C1522
Equipment Calibration: See Daily Equipment Calibration Sheet
Method to Measure Water Level: Slope/Solinst Indicator Serial No.: (21758) (25742) P.I.D. Reading: NA ppm
Water Level at Start (DTW): 13.81 @ 9:20 (BTOC) Water Level Prior To / After Sampling: NA (BTOC)
TD = 34.56' - 13.81 (DTW) = 20.75 (ft.of water) x "K" = NA (Gals./CV) x NA (No. of CV) = NA (Gals.)
"K"= 0.163 (2" well) "K" = 0.50 (3.5" well) "K" = .653 (4" well) "K" = 1.02 (5" well) "k" = 1.46 (6" well)

FIELD WATER QUALITY PARAMETERS

Date	Time	Discharge (Liters)	pH +/- 0.1	Temp. (°C)	Specific Conductance µS +/- 3%	Turbidity (NTU's) +/- 10	Redox (mV) +/- 10	Dissolved Oxygen (mg/L) +/- 10%	Water Level (BTOC)	Color
		Initial								
		0.5								
		1.0								
		1.5								
		2.0			NA					
		2.5								
		3.0								
		3.5								
		4.0								

Total Discharge: 0 Liters Casing Volumes Removed: NA
Method of disposal of discharged water: (55 Gallon Drum(s)) Poly Tank Treatment System Other: _____
Date/Time Sampled: 7/14/08 @ 10:10 Analysis: VOCs (8260B) - 3 VOAs w/HCl
QA/QC: None @ — Duplicate MS/MSD Equipment Rinseate Field Blank Lab Split
Comments: Spot surveyor's mark

Recorded by: Stephen Penman / (Jacqueline Lee) Signature: JL

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WATER QUALITY SAMPLE LOG SHEET	WELL IDENTIFICATION: MW-5 DATE: 7/14/08

Project Name: Hopyard Cleaners Pleasanton, CA Project Task: Quarterly Monitoring Project/Task No. WR0574
Project Manager: Melissa Asher - Geosyntec Cons. Lab: TestAmerica Weather Conditions: Humid, warm
Well Description: 2" 3.5" 4" 5" 6" Other:____ Well Type: (PVC) Stainless Steel Other: _____
Is Well Secured? (Yes) / No Bolt Size: 15/16" Type of lock / Lock number: Master P288
Observations / Comments: _____ Screen Interval: 50' to 60'
Purge Method: (NA) Teflon / PE Disposable Bailer Centrifugal Pump Peristaltic Pump Other: _____
Pump Lines: (NA) New / Cleaned / Dedicated Bailer Line: (NA) New / Cleaned / Dedicated
Method of Cleaning Pump: (NA) Alconox Liqui-nox Tap Water DI Rinse Other: _____
Method of Cleaning Bailer: (NA)
Sampling Method: (Passive Disposable Sampler Bag)
YSI Muti-Parameter Meter/Probe Serial No.: 556 MPS - 05F1258AH / 600XL 319340R - 00C1522
Equipment Calibration: See Daily Equipment Calibration Sheet
Method to Measure Water Level: Slope/Solinst Indicator Serial No.: 21758 / (25742) P.I.D. Reading: NA ppm
Water Level at Start (DTW): 32.16 @ 9:16 (BTOC) Water Level Prior To / After Sampling: NA (BTOC)
TD = 59.96' - 32.16 (DTW) = 27.80 (ft.of water) x "K" = NA (Gals./CV) x NA (No. of CV) = NA (Gals.)
"K"= 0.163 (2" well) "K" = 0.50 (3.5" well) "K" = .653 (4" well) "K" = 1.02 (5" well) "k" = 1.46 (6" well)

FIELD WATER QUALITY PARAMETERS

Date	Time	Discharge (Liters)	pH +/- 0.1	Temp. (°C)	Specific Conductance µS +/- 3%	Turbidity (NTU's) +/- 10	Redox (mV) +/- 10	Dissolved Oxygen (mg/L) +/- 10%	Water Level (BTOC)	Color
		Initial								
		0.5								
		1.0								
		1.5								
		2.0		NA						
		2.5								
		3.0								
		3.5								
		4.0								

Total Discharge: 0 Liters Casing Volumes Removed: NA
Method of disposal of discharged water: 55 Gallon Drum(s) Poly Tank Treatment System Other: _____
Date/Time Sampled: 7/14/08 @ 10:27 Analysis: VOCs (8260B) - 3 VOAs w/HCl
QA/QC: None @ — Duplicate MS/MSD Equipment Rinseate Field Blank Lab Split
Comments: SM= Surveyor's mark

Recorded by: Stephen Penman / Jacqueline Lee Signature: _____ Page 1 of 1

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SITE NAME: Hopyard Cleaners
SITE LOCATION: Pleasanton, CA
TASK: July 2008 Quarterly Groundwater Monitoring Event

DAILY EQUIPMENT CALIBRATION SHEET

DATE	TIME	Instrument Serial Number	Probe Serial Number	Dissolved Oxygen (%)	pH 4	pH 7	pH 10	Specific Conductance 1,000 uS/cm	ORP mV	TURBIDITY NTU's
7/14/08	10:45	319340R	00C1522	100.1	3.98	6.98	10.00	1,001	237.0	0.02

CHAIN OF CUSTODY RECORD

Environmental Sampling Services

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TURN AROUND TIME ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ STD. _____

Reporting Format: EDF ☑ EDD ☐ PDF ☐

GeoTracker Site Identification: _____

FedEx ☐ **UPS** ☐ ESS ☑ **Tracking Number:** _____

Laboratory: Test America **Lab Code:** STCL

Send Report To: Melissa Asher **Bill To:** SAME
Company: GeoSyntec Consultants **Company:**
Address: 475 14th Street, Suite 450 **Address:**
Oakland, CA 94612
E-Mail: masher@geosyntec.com
Tel: (510) 285-2782 **Fax:** ( )
Fax: (510) 836-3036
Project Name: Hopyard Cleaners **Project Number:** WR0574
Sampler's Name: Jacqueline Lee ☑ Stephen Penman ☐

SAMPLE ID	Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	Container Type*	MATRIX CODE WG	SO	GS	Water	METHOD PRESERVED Ice	HCl	HNO_3	H_2SO_4	Analysis Request: VOCs (EPA 8260B)	Chloride (EPA 300.0)	Field Filtered: Title 22 Metals (EPA 6010B)	Comments
Trip Blank	QCTB1	7/14/08	8:30	2	1				X	X	X			X			
MW-1	MW-1	7/14/08	9:38	3	1	X				X	X			X			
MW-3	MW-3	7/14/08	9:50	3	1	X				X	X			X			
MW-4	MW-4	7/14/08	10:10	3	1	X				X	X			X			
MW-5	MW-5	7/14/08	10:27	3	1	X				X	X			X			
EB-1	QCEB	7/14/08	11:15	3	1	X				X	X	X		X	X	X	
MW-DUP	DUP1	7/14/08	11:40	4	1,3	X				X	X	X		X	X	X	
MW-2	MW-2	7/14/08	12:00	4	1,3	X				X	X	X		X	X	X	

Relinquished By:	Date:	Time:	Received By:
[signature]	7/14/08	14.10	[signature]
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/°C 2.0 **HEAD SPACE ABSENT:** Yes No
Received in Good Condition: Yes No
Metals sample(s) Field Filtered: Yes No NA
Questions regarding COC: Call ESS
COMMENTS :

FIELD POINT: MW=Monitoring Well QCFD=Field Duplicate QCFB=Field Blank
CONTAINER TYPES:
1=VOAs 2=Glass 3=Poly 4=Liner 5=Air Canister 6=Tedlar Bag

MATRIX CODE: WG=Grdwtr. SO=Soil GS=Soil Gas

ATTACHMENT 3
LABORATORY ANALYTICAL REPORT

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 720-15168-1

Job Description: Hopyard Cleaners

For:
GeoSyntec Consultants
475 14th Street, Suite 450
Oakland, CA 94612

Attention: Ms. Melissa Asher

Melissa Brewer
Project Manager I
melissa.brewer@testamericainc.com
07/18/2008

cc: Ms. Angela Liang

TestAmerica Laboratories, Inc.
TestAmerica San Francisco 1220 Quarry Lane, Pleasanton, CA 94566
Tel (925) 484-1919 Fax (925) 600-3002 www.testamericainc.com

Job Narrative
720-J15168-1

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
No analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

General Chemistry
No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: GeoSyntec Consultants Job Number: 720-15168-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-15168-2	**MW-1**				
cis-1,2-Dichloroethene		230	20	ug/L	8260B
Tetrachloroethene		1700	20	ug/L	8260B
Trichloroethene		250	20	ug/L	8260B
720-15168-3	**MW-3**				
cis-1,2-Dichloroethene		4.3	0.50	ug/L	8260B
Tetrachloroethene		43	0.50	ug/L	8260B
Trichloroethene		4.0	0.50	ug/L	8260B
720-15168-4	**MW-4**				
cis-1,2-Dichloroethene		4.7	0.50	ug/L	8260B
Trichloroethene		4.0	0.50	ug/L	8260B
720-15168-5	**MW-5**				
Tetrachloroethene		31	0.50	ug/L	8260B
720-15168-6EB	**EB-1**				
Antimony		0.0089	0.0050	mg/L	6010B
Zinc		0.016	0.010	mg/L	6010B
720-15168-7FD	**MW-DUP**				
cis-1,2-Dichloroethene		830	50	ug/L	8260B
Tetrachloroethene		8100	50	ug/L	8260B
Trichloroethene		500	50	ug/L	8260B
Antimony		0.0061	0.0050	mg/L	6010B
Barium		0.13	0.0050	mg/L	6010B
Molybdenum		0.0056	0.0050	mg/L	6010B
Nickel		0.010	0.0050	mg/L	6010B
Chloride		110	10	mg/L	300.0

EXECUTIVE SUMMARY - Detections

Client: GeoSyntec Consultants Job Number: 720-15168-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-15168-8	**MW-2**				
cis-1,2-Dichloroethene		820	100	ug/L	8260B
Tetrachloroethene		9500	100	ug/L	8260B
Trichloroethene		530	100	ug/L	8260B
Barium		0.13	0.0050	mg/L	6010B
Molybdenum		0.0067	0.0050	mg/L	6010B
Nickel		0.010	0.0050	mg/L	6010B
Chloride		110	10	mg/L	300.0

METHOD SUMMARY

Client: GeoSyntec Consultants Job Number: 720-15168-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds by GC/MS (Low Level)	TAL SF	SW846 8260B	
Purge-and-Trap	TAL SF		SW846 5030B
Inductively Coupled Plasma - Atomic Emission Spectrometry	TAL SF	SW846 6010B	
Acid Digestion of Aqueous Samples and Extracts for	TAL SF		SW846 3010A
Mercury in Liquid Waste (Manual Cold Vapor Technique)	TAL SF	SW846 7470A	
Mercury in Liquid Waste (Manual Cold Vapor	TAL SF		SW846 7470A
Anions by Ion Chromatography	TAL SF	MCAWW 300.0	

Lab References:

TAL SF = TestAmerica San Francisco

Method References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

SAMPLE SUMMARY

Client: GeoSyntec Consultants Job Number: 720-15168-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-15168-1TB	TRIP BLANK	Water	07/14/2008 0830	07/14/2008 1410
720-15168-2	MW-1	Water	07/14/2008 0938	07/14/2008 1410
720-15168-3	MW-3	Water	07/14/2008 0950	07/14/2008 1410
720-15168-4	MW-4	Water	07/14/2008 1010	07/14/2008 1410
720-15168-5	MW-5	Water	07/14/2008 1027	07/14/2008 1410
720-15168-6EB	EB-1	Water	07/14/2008 1115	07/14/2008 1410
720-15168-7FD	MW-DUP	Water	07/14/2008 1140	07/14/2008 1410
720-15168-8	MW-2	Water	07/14/2008 1200	07/14/2008 1410

Client: GeoSyntec Consultants | Job Number: 720-15168-1

Client Sample ID: **TRIP BLANK**

Lab Sample ID: 720-15168-1TB | Date Sampled: 07/14/2008 0830
Client Matrix: Water | Date Received: 07/14/2008 1410

8260B Volatile Organic Compounds by GC/MS (Low Level)

Method: 8260B | Analysis Batch: 720-38208 | Instrument ID: Agilent75MSD
Preparation: 5030B | Lab File ID: 071508013.D
Dilution: 1.0 | Initial Weight/Volume: 40 mL
Date Analyzed: 07/15/2008 1339 | Final Weight/Volume: 40 mL
Date Prepared: 07/15/2008 1339

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		5.0
Acetone	ND		50
Benzene	ND		0.50
Dichlorobromomethane	ND		0.50
Bromobenzene	ND		1.0
Chlorobromomethane	ND		1.0
Bromoform	ND		1.0
Bromomethane	ND		1.0
2-Butanone (MEK)	ND		50
n-Butylbenzene	ND		1.0
sec-Butylbenzene	ND		1.0
tert-Butylbenzene	ND		1.0
Carbon disulfide	ND		5.0
Carbon tetrachloride	ND		0.50
Chlorobenzene	ND		0.50
Chloroethane	ND		1.0
Chloroform	ND		1.0
Chloromethane	ND		1.0
2-Chlorotoluene	ND		0.50
4-Chlorotoluene	ND		0.50
Chlorodibromomethane	ND		0.50
1,2-Dichlorobenzene	ND		0.50
1,3-Dichlorobenzene	ND		0.50
1,4-Dichlorobenzene	ND		0.50
1,3-Dichloropropane	ND		1.0
1,1-Dichloropropene	ND		0.50
1,2-Dibromo-3-Chloropropane	ND		1.0
Ethylene Dibromide	ND		0.50
Dibromomethane	ND		0.50
Dichlorodifluoromethane	ND		0.50
1,1-Dichloroethane	ND		0.50
1,2-Dichloroethane	ND		0.50
1,1-Dichloroethene	ND		0.50
cis-1,2-Dichloroethene	ND		0.50
trans-1,2-Dichloroethene	ND		0.50
1,2-Dichloropropane	ND		0.50
cis-1,3-Dichloropropene	ND		0.50
trans-1,3-Dichloropropene	ND		0.50
Ethylbenzene	ND		0.50
Hexachlorobutadiene	ND		1.0
2-Hexanone	ND		50
Isopropylbenzene	ND		0.50
4-Isopropyltoluene	ND		1.0
Methylene Chloride	ND		5.0

Client: GeoSyntec Consultants | Job Number: 720-15168-1

Client Sample ID: **TRIP BLANK**

Lab Sample ID: 720-15168-1TB | Date Sampled: 07/14/2008 0830
Client Matrix: Water | Date Received: 07/14/2008 1410

8260B Volatile Organic Compounds by GC/MS (Low Level)

Method: 8260B | Analysis Batch: 720-38208 | Instrument ID: Agilent75MSD
Preparation: 5030B | Lab File ID: 071508013.D
Dilution: 1.0 | Initial Weight/Volume: 40 mL
Date Analyzed: 07/15/2008 1339 | Final Weight/Volume: 40 mL
Date Prepared: 07/15/2008 1339

Analyte	Result (ug/L)	Qualifier	RL
4-Methyl-2-pentanone (MIBK)	ND		50
Naphthalene	ND		1.0
N-Propylbenzene	ND		1.0
Styrene	ND		0.50
1,1,1,2-Tetrachloroethane	ND		0.50
1,1,2,2-Tetrachloroethane	ND		0.50
Tetrachloroethene	ND		0.50
Toluene	ND		0.50
1,2,3-Trichlorobenzene	ND		1.0
1,2,4-Trichlorobenzene	ND		1.0
1,1,1-Trichloroethane	ND		0.50
1,1,2-Trichloroethane	ND		0.50
Trichloroethene	ND		0.50
Trichlorofluoromethane	ND		1.0
1,2,3-Trichloropropane	ND		0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50
1,2,4-Trimethylbenzene	ND		0.50
1,3,5-Trimethylbenzene	ND		0.50
Vinyl acetate	ND		50
Vinyl chloride	ND		0.50
Xylenes, Total	ND		1.0
2,2-Dichloropropane	ND		0.50

Surrogate	%Rec	Acceptance Limits
4-Bromofluorobenzene	110	74 - 131
1,2-Dichloroethane-d4 (Surr)	109	88 - 119
Toluene-d8 (Surr)	111	82 - 120

Client: GeoSyntec Consultants Job Number: 720-15168-1

Client Sample ID: MW-1

Lab Sample ID: 720-15168-2 Date Sampled: 07/14/2008 0938
Client Matrix: Water Date Received: 07/14/2008 1410

8260B Volatile Organic Compounds by GC/MS (Low Level)

Method: 8260B Analysis Batch: 720-38203 Instrument ID: Varian 3900G
Preparation: 5030B Lab File ID: c:\saturnws\data\200807\07
Dilution: 40 Initial Weight/Volume: 40 mL
Date Analyzed: 07/15/2008 1553 Final Weight/Volume: 40 mL
Date Prepared: 07/15/2008 1553

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		200
Acetone	ND		2000
Benzene	ND		20
Dichlorobromomethane	ND		20
Bromobenzene	ND		40
Chlorobromomethane	ND		40
Bromoform	ND		40
Bromomethane	ND		40
2-Butanone (MEK)	ND		2000
n-Butylbenzene	ND		40
sec-Butylbenzene	ND		40
tert-Butylbenzene	ND		40
Carbon disulfide	ND		200
Carbon tetrachloride	ND		20
Chlorobenzene	ND		20
Chloroethane	ND		40
Chloroform	ND		40
Chloromethane	ND		40
2-Chlorotoluene	ND		20
4-Chlorotoluene	ND		20
Chlorodibromomethane	ND		20
1,2-Dichlorobenzene	ND		20
1,3-Dichlorobenzene	ND		20
1,4-Dichlorobenzene	ND		20
1,3-Dichloropropane	ND		40
1,1-Dichloropropene	ND		20
1,2-Dibromo-3-Chloropropane	ND		40
Ethylene Dibromide	ND		20
Dibromomethane	ND		20
Dichlorodifluoromethane	ND		20
1,1-Dichloroethane	ND		20
1,2-Dichloroethane	ND		20
1,1-Dichloroethene	ND		20
cis-1,2-Dichloroethene	230		20
trans-1,2-Dichloroethene	ND		20
1,2-Dichloropropane	ND		20
cis-1,3-Dichloropropene	ND		20
trans-1,3-Dichloropropene	ND		20
Ethylbenzene	ND		20
Hexachlorobutadiene	ND		40
2-Hexanone	ND		2000
Isopropylbenzene	ND		20
4-Isopropyltoluene	ND		40
Methylene Chloride	ND		200

Client: GeoSyntec Consultants | Job Number: 720-15168-1

Client Sample ID: **MW-1**

Lab Sample ID: 720-15168-2 | Date Sampled: 07/14/2008 0938
Client Matrix: Water | Date Received: 07/14/2008 1410

8260B Volatile Organic Compounds by GC/MS (Low Level)

Method: 8260B | Analysis Batch: 720-38203 | Instrument ID: Varian 3900G
Preparation: 5030B | Lab File ID: c:\saturnws\data\200807\07
Dilution: 40 | Initial Weight/Volume: 40 mL
Date Analyzed: 07/15/2008 1553 | Final Weight/Volume: 40 mL
Date Prepared: 07/15/2008 1553

Analyte	Result (ug/L)	Qualifier	RL
4-Methyl-2-pentanone (MIBK)	ND		2000
Naphthalene	ND		40
N-Propylbenzene	ND		40
Styrene	ND		20
1,1,1,2-Tetrachloroethane	ND		20
1,1,2,2-Tetrachloroethane	ND		20
Tetrachloroethene	1700		20
Toluene	ND		20
1,2,3-Trichlorobenzene	ND		40
1,2,4-Trichlorobenzene	ND		40
1,1,1-Trichloroethane	ND		20
1,1,2-Trichloroethane	ND		20
Trichloroethene	250		20
Trichlorofluoromethane	ND		40
1,2,3-Trichloropropane	ND		20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20
1,2,4-Trimethylbenzene	ND		20
1,3,5-Trimethylbenzene	ND		20
Vinyl acetate	ND		2000
Vinyl chloride	ND		20
Xylenes, Total	ND		40
2,2-Dichloropropane	ND		20

Surrogate	%Rec	Acceptance Limits
4-Bromofluorobenzene	113	74 - 131
1,2-Dichloroethane-d4 (Surr)	104	88 - 119
Toluene-d8 (Surr)	99	82 - 120

Client: GeoSyntec Consultants | Job Number: 720-15168-1

Client Sample ID: **MW-3**

Lab Sample ID: 720-15168-3 | Date Sampled: 07/14/2008 0950
Client Matrix: Water | Date Received: 07/14/2008 1410

8260B Volatile Organic Compounds by GC/MS (Low Level)

Method: 8260B | Analysis Batch: 720-38203 | Instrument ID: Varian 3900G
Preparation: 5030B | Lab File ID: c:\saturnws\data\200807\07
Dilution: 1.0 | Initial Weight/Volume: 40 mL
Date Analyzed: 07/15/2008 1230 | Final Weight/Volume: 40 mL
Date Prepared: 07/15/2008 1230

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		5.0
Acetone	ND		50
Benzene	ND		0.50
Dichlorobromomethane	ND		0.50
Bromobenzene	ND		1.0
Chlorobromomethane	ND		1.0
Bromoform	ND		1.0
Bromomethane	ND		1.0
2-Butanone (MEK)	ND		50
n-Butylbenzene	ND		1.0
sec-Butylbenzene	ND		1.0
tert-Butylbenzene	ND		1.0
Carbon disulfide	ND		5.0
Carbon tetrachloride	ND		0.50
Chlorobenzene	ND		0.50
Chloroethane	ND		1.0
Chloroform	ND		1.0
Chloromethane	ND		1.0
2-Chlorotoluene	ND		0.50
4-Chlorotoluene	ND		0.50
Chlorodibromomethane	ND		0.50
1,2-Dichlorobenzene	ND		0.50
1,3-Dichlorobenzene	ND		0.50
1,4-Dichlorobenzene	ND		0.50
1,3-Dichloropropane	ND		1.0
1,1-Dichloropropene	ND		0.50
1,2-Dibromo-3-Chloropropane	ND		1.0
Ethylene Dibromide	ND		0.50
Dibromomethane	ND		0.50
Dichlorodifluoromethane	ND		0.50
1,1-Dichloroethane	ND		0.50
1,2-Dichloroethane	ND		0.50
1,1-Dichloroethene	ND		0.50
cis-1,2-Dichloroethene	4.3		0.50
trans-1,2-Dichloroethene	ND		0.50
1,2-Dichloropropane	ND		0.50
cis-1,3-Dichloropropene	ND		0.50
trans-1,3-Dichloropropene	ND		0.50
Ethylbenzene	ND		0.50
Hexachlorobutadiene	ND		1.0
2-Hexanone	ND		50
Isopropylbenzene	ND		0.50
4-Isopropyltoluene	ND		1.0
Methylene Chloride	ND		5.0

Client: GeoSyntec Consultants | Job Number: 720-15168-1

Client Sample ID: **MW-3**

Lab Sample ID: 720-15168-3 | Date Sampled: 07/14/2008 0950
Client Matrix: Water | Date Received: 07/14/2008 1410

8260B Volatile Organic Compounds by GC/MS (Low Level)

Method: 8260B | Analysis Batch: 720-38203 | Instrument ID: Varian 3900G
Preparation: 5030B | Lab File ID: c:\saturnws\data\200807\07
Dilution: 1.0 | Initial Weight/Volume: 40 mL
Date Analyzed: 07/15/2008 1230 | Final Weight/Volume: 40 mL
Date Prepared: 07/15/2008 1230

Analyte	Result (ug/L)	Qualifier	RL
4-Methyl-2-pentanone (MIBK)	ND		50
Naphthalene	ND		1.0
N-Propylbenzene	ND		1.0
Styrene	ND		0.50
1,1,1,2-Tetrachloroethane	ND		0.50
1,1,2,2-Tetrachloroethane	ND		0.50
Tetrachloroethene	43		0.50
Toluene	ND		0.50
1,2,3-Trichlorobenzene	ND		1.0
1,2,4-Trichlorobenzene	ND		1.0
1,1,1-Trichloroethane	ND		0.50
1,1,2-Trichloroethane	ND		0.50
Trichloroethene	4.0		0.50
Trichlorofluoromethane	ND		1.0
1,2,3-Trichloropropane	ND		0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50
1,2,4-Trimethylbenzene	ND		0.50
1,3,5-Trimethylbenzene	ND		0.50
Vinyl acetate	ND		50
Vinyl chloride	ND		0.50
Xylenes, Total	ND		1.0
2,2-Dichloropropane	ND		0.50

Surrogate	%Rec	Acceptance Limits
4-Bromofluorobenzene	116	74 - 131
1,2-Dichloroethane-d4 (Surr)	104	88 - 119
Toluene-d8 (Surr)	101	82 - 120

Client: GeoSyntec Consultants | Job Number: 720-15168-1

Client Sample ID: **MW-4**

Lab Sample ID: 720-15168-4 | Date Sampled: 07/14/2008 1010
Client Matrix: Water | Date Received: 07/14/2008 1410

8260B Volatile Organic Compounds by GC/MS (Low Level)

Method: 8260B | Analysis Batch: 720-38203 | Instrument ID: Varian 3900G
Preparation: 5030B | Lab File ID: c:\saturnws\data\200807\07
Dilution: 1.0 | Initial Weight/Volume: 40 mL
Date Analyzed: 07/15/2008 1304 | Final Weight/Volume: 40 mL
Date Prepared: 07/15/2008 1304

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		5.0
Acetone	ND		50
Benzene	ND		0.50
Dichlorobromomethane	ND		0.50
Bromobenzene	ND		1.0
Chlorobromomethane	ND		1.0
Bromoform	ND		1.0
Bromomethane	ND		1.0
2-Butanone (MEK)	ND		50
n-Butylbenzene	ND		1.0
sec-Butylbenzene	ND		1.0
tert-Butylbenzene	ND		1.0
Carbon disulfide	ND		5.0
Carbon tetrachloride	ND		0.50
Chlorobenzene	ND		0.50
Chloroethane	ND		1.0
Chloroform	ND		1.0
Chloromethane	ND		1.0
2-Chlorotoluene	ND		0.50
4-Chlorotoluene	ND		0.50
Chlorodibromomethane	ND		0.50
1,2-Dichlorobenzene	ND		0.50
1,3-Dichlorobenzene	ND		0.50
1,4-Dichlorobenzene	ND		0.50
1,3-Dichloropropane	ND		1.0
1,1-Dichloropropene	ND		0.50
1,2-Dibromo-3-Chloropropane	ND		1.0
Ethylene Dibromide	ND		0.50
Dibromomethane	ND		0.50
Dichlorodifluoromethane	ND		0.50
1,1-Dichloroethane	ND		0.50
1,2-Dichloroethane	ND		0.50
1,1-Dichloroethene	ND		0.50
cis-1,2-Dichloroethene	4.7		0.50
trans-1,2-Dichloroethene	ND		0.50
1,2-Dichloropropane	ND		0.50
cis-1,3-Dichloropropene	ND		0.50
trans-1,3-Dichloropropene	ND		0.50
Ethylbenzene	ND		0.50
Hexachlorobutadiene	ND		1.0
2-Hexanone	ND		50
Isopropylbenzene	ND		0.50
4-Isopropyltoluene	ND		1.0
Methylene Chloride	ND		5.0

Client: GeoSyntec Consultants | Job Number: 720-15168-1

Client Sample ID: MW-4

Lab Sample ID: 720-15168-4 | Date Sampled: 07/14/2008 1010
Client Matrix: Water | Date Received: 07/14/2008 1410

8260B Volatile Organic Compounds by GC/MS (Low Level)

Method: 8260B | Analysis Batch: 720-38203 | Instrument ID: Varian 3900G
Preparation: 5030B | Lab File ID: c:\saturnws\data\200807\07
Dilution: 1.0 | Initial Weight/Volume: 40 mL
Date Analyzed: 07/15/2008 1304 | Final Weight/Volume: 40 mL
Date Prepared: 07/15/2008 1304

Analyte	Result (ug/L)	Qualifier	RL
4-Methyl-2-pentanone (MIBK)	ND		50
Naphthalene	ND		1.0
N-Propylbenzene	ND		1.0
Styrene	ND		0.50
1,1,1,2-Tetrachloroethane	ND		0.50
1,1,2,2-Tetrachloroethane	ND		0.50
Tetrachloroethene	ND		0.50
Toluene	ND		0.50
1,2,3-Trichlorobenzene	ND		1.0
1,2,4-Trichlorobenzene	ND		1.0
1,1,1-Trichloroethane	ND		0.50
1,1,2-Trichloroethane	ND		0.50
Trichloroethene	4.0		0.50
Trichlorofluoromethane	ND		1.0
1,2,3-Trichloropropane	ND		0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50
1,2,4-Trimethylbenzene	ND		0.50
1,3,5-Trimethylbenzene	ND		0.50
Vinyl acetate	ND		50
Vinyl chloride	ND		0.50
Xylenes, Total	ND		1.0
2,2-Dichloropropane	ND		0.50

Surrogate	%Rec	Acceptance Limits
4-Bromofluorobenzene	109	74 - 131
1,2-Dichloroethane-d4 (Surr)	101	88 - 119
Toluene-d8 (Surr)	100	82 - 120

Client: GeoSyntec Consultants | Job Number: 720-15168-1

Client Sample ID: **MW-5**

Lab Sample ID: 720-15168-5 | Date Sampled: 07/14/2008 1027
Client Matrix: Water | Date Received: 07/14/2008 1410

8260B Volatile Organic Compounds by GC/MS (Low Level)

Method: 8260B | Analysis Batch: 720-38203 | Instrument ID: Varian 3900G
Preparation: 5030B | Lab File ID: c:\saturnws\data\200807\07
Dilution: 1.0 | Initial Weight/Volume: 40 mL
Date Analyzed: 07/15/2008 1338 | Final Weight/Volume: 40 mL
Date Prepared: 07/15/2008 1338

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		5.0
Acetone	ND		50
Benzene	ND		0.50
Dichlorobromomethane	ND		0.50
Bromobenzene	ND		1.0
Chlorobromomethane	ND		1.0
Bromoform	ND		1.0
Bromomethane	ND		1.0
2-Butanone (MEK)	ND		50
n-Butylbenzene	ND		1.0
sec-Butylbenzene	ND		1.0
tert-Butylbenzene	ND		1.0
Carbon disulfide	ND		5.0
Carbon tetrachloride	ND		0.50
Chlorobenzene	ND		0.50
Chloroethane	ND		1.0
Chloroform	ND		1.0
Chloromethane	ND		1.0
2-Chlorotoluene	ND		0.50
4-Chlorotoluene	ND		0.50
Chlorodibromomethane	ND		0.50
1,2-Dichlorobenzene	ND		0.50
1,3-Dichlorobenzene	ND		0.50
1,4-Dichlorobenzene	ND		0.50
1,3-Dichloropropane	ND		1.0
1,1-Dichloropropene	ND		0.50
1,2-Dibromo-3-Chloropropane	ND		1.0
Ethylene Dibromide	ND		0.50
Dibromomethane	ND		0.50
Dichlorodifluoromethane	ND		0.50
1,1-Dichloroethane	ND		0.50
1,2-Dichloroethane	ND		0.50
1,1-Dichloroethene	ND		0.50
cis-1,2-Dichloroethene	ND		0.50
trans-1,2-Dichloroethene	ND		0.50
1,2-Dichloropropane	ND		0.50
cis-1,3-Dichloropropene	ND		0.50
trans-1,3-Dichloropropene	ND		0.50
Ethylbenzene	ND		0.50
Hexachlorobutadiene	ND		1.0
2-Hexanone	ND		50
Isopropylbenzene	ND		0.50
4-Isopropyltoluene	ND		1.0
Methylene Chloride	ND		5.0

Client: GeoSyntec Consultants | Job Number: 720-15168-1

Client Sample ID: **MW-5**

Lab Sample ID: 720-15168-5 | Date Sampled: 07/14/2008 1027
Client Matrix: Water | Date Received: 07/14/2008 1410

8260B Volatile Organic Compounds by GC/MS (Low Level)

Method: 8260B | Analysis Batch: 720-38203 | Instrument ID: Varian 3900G
Preparation: 5030B | Lab File ID: c:\saturnws\data\200807\07
Dilution: 1.0 | Initial Weight/Volume: 40 mL
Date Analyzed: 07/15/2008 1338 | Final Weight/Volume: 40 mL
Date Prepared: 07/15/2008 1338

Analyte	Result (ug/L)	Qualifier	RL
4-Methyl-2-pentanone (MIBK)	ND		50
Naphthalene	ND		1.0
N-Propylbenzene	ND		1.0
Styrene	ND		0.50
1,1,1,2-Tetrachloroethane	ND		0.50
1,1,2,2-Tetrachloroethane	ND		0.50
Tetrachloroethene	31		0.50
Toluene	ND		0.50
1,2,3-Trichlorobenzene	ND		1.0
1,2,4-Trichlorobenzene	ND		1.0
1,1,1-Trichloroethane	ND		0.50
1,1,2-Trichloroethane	ND		0.50
Trichloroethene	ND		0.50
Trichlorofluoromethane	ND		1.0
1,2,3-Trichloropropane	ND		0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50
1,2,4-Trimethylbenzene	ND		0.50
1,3,5-Trimethylbenzene	ND		0.50
Vinyl acetate	ND		50
Vinyl chloride	ND		0.50
Xylenes, Total	ND		1.0
2,2-Dichloropropane	ND		0.50

Surrogate	%Rec	Acceptance Limits
4-Bromofluorobenzene	105	74 - 131
1,2-Dichloroethane-d4 (Surr)	103	88 - 119
Toluene-d8 (Surr)	96	82 - 120

Client: GeoSyntec Consultants | Job Number: 720-15168-1

Client Sample ID: **MW-DUP**

Lab Sample ID: 720-15168-7FD | Date Sampled: 07/14/2008 1140
Client Matrix: Water | Date Received: 07/14/2008 1410

8260B Volatile Organic Compounds by GC/MS (Low Level)

Method: 8260B | Analysis Batch: 720-38203 | Instrument ID: Varian 3900G
Preparation: 5030B | Lab File ID: c:\saturnws\data\200807\07
Dilution: 100 | Initial Weight/Volume: 40 mL
Date Analyzed: 07/15/2008 1626 | Final Weight/Volume: 40 mL
Date Prepared: 07/15/2008 1626

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		500
Acetone	ND		5000
Benzene	ND		50
Dichlorobromomethane	ND		50
Bromobenzene	ND		100
Chlorobromomethane	ND		100
Bromoform	ND		100
Bromomethane	ND		100
2-Butanone (MEK)	ND		5000
n-Butylbenzene	ND		100
sec-Butylbenzene	ND		100
tert-Butylbenzene	ND		100
Carbon disulfide	ND		500
Carbon tetrachloride	ND		50
Chlorobenzene	ND		50
Chloroethane	ND		100
Chloroform	ND		100
Chloromethane	ND		100
2-Chlorotoluene	ND		50
4-Chlorotoluene	ND		50
Chlorodibromomethane	ND		50
1,2-Dichlorobenzene	ND		50
1,3-Dichlorobenzene	ND		50
1,4-Dichlorobenzene	ND		50
1,3-Dichloropropane	ND		100
1,1-Dichloropropene	ND		50
1,2-Dibromo-3-Chloropropane	ND		100
Ethylene Dibromide	ND		50
Dibromomethane	ND		50
Dichlorodifluoromethane	ND		50
1,1-Dichloroethane	ND		50
1,2-Dichloroethane	ND		50
1,1-Dichloroethene	ND		50
cis-1,2-Dichloroethene	830		50
trans-1,2-Dichloroethene	ND		50
1,2-Dichloropropane	ND		50
cis-1,3-Dichloropropene	ND		50
trans-1,3-Dichloropropene	ND		50
Ethylbenzene	ND		50
Hexachlorobutadiene	ND		100
2-Hexanone	ND		5000
Isopropylbenzene	ND		50
4-Isopropyltoluene	ND		100
Methylene Chloride	ND		500

Client: GeoSyntec Consultants | Job Number: 720-15168-1

Client Sample ID: MW-DUP

Lab Sample ID: 720-15168-7FD | Date Sampled: 07/14/2008 1140
Client Matrix: Water | Date Received: 07/14/2008 1410

8260B Volatile Organic Compounds by GC/MS (Low Level)

Method: 8260B | Analysis Batch: 720-38203 | Instrument ID: Varian 3900G
Preparation: 5030B | Lab File ID: c:\saturnws\data\200807\07
Dilution: 100 | Initial Weight/Volume: 40 mL
Date Analyzed: 07/15/2008 1626 | Final Weight/Volume: 40 mL
Date Prepared: 07/15/2008 1626

Analyte	Result (ug/L)	Qualifier	RL
4-Methyl-2-pentanone (MIBK)	ND		5000
Naphthalene	ND		100
N-Propylbenzene	ND		100
Styrene	ND		50
1,1,1,2-Tetrachloroethane	ND		50
1,1,2,2-Tetrachloroethane	ND		50
Tetrachloroethene	8100		50
Toluene	ND		50
1,2,3-Trichlorobenzene	ND		100
1,2,4-Trichlorobenzene	ND		100
1,1,1-Trichloroethane	ND		50
1,1,2-Trichloroethane	ND		50
Trichloroethene	500		50
Trichlorofluoromethane	ND		100
1,2,3-Trichloropropane	ND		50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50
1,2,4-Trimethylbenzene	ND		50
1,3,5-Trimethylbenzene	ND		50
Vinyl acetate	ND		5000
Vinyl chloride	ND		50
Xylenes, Total	ND		100
2,2-Dichloropropane	ND		50

Surrogate	%Rec	Acceptance Limits
4-Bromofluorobenzene	104	74 - 131
1,2-Dichloroethane-d4 (Surr)	105	88 - 119
Toluene-d8 (Surr)	97	82 - 120

Client: GeoSyntec Consultants | Job Number: 720-15168-1

Client Sample ID: **MW-2**

Lab Sample ID: 720-15168-8 | Date Sampled: 07/14/2008 1200
Client Matrix: Water | Date Received: 07/14/2008 1410

8260B Volatile Organic Compounds by GC/MS (Low Level)

Method: 8260B | Analysis Batch: 720-38332 | Instrument ID: Varian 3900G
Preparation: 5030B | Lab File ID: c:\saturnws\data\200807\07
Dilution: 200 | Initial Weight/Volume: 40 mL
Date Analyzed: 07/16/2008 1447 | Final Weight/Volume: 40 mL
Date Prepared: 07/16/2008 1447

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		1000
Acetone	ND		10000
Benzene	ND		100
Dichlorobromomethane	ND		100
Bromobenzene	ND		200
Chlorobromomethane	ND		200
Bromoform	ND		200
Bromomethane	ND		200
2-Butanone (MEK)	ND		10000
n-Butylbenzene	ND		200
sec-Butylbenzene	ND		200
tert-Butylbenzene	ND		200
Carbon disulfide	ND		1000
Carbon tetrachloride	ND		100
Chlorobenzene	ND		100
Chloroethane	ND		200
Chloroform	ND		200
Chloromethane	ND		200
2-Chlorotoluene	ND		100
4-Chlorotoluene	ND		100
Chlorodibromomethane	ND		100
1,2-Dichlorobenzene	ND		100
1,3-Dichlorobenzene	ND		100
1,4-Dichlorobenzene	ND		100
1,3-Dichloropropane	ND		200
1,1-Dichloropropene	ND		100
1,2-Dibromo-3-Chloropropane	ND		200
Ethylene Dibromide	ND		100
Dibromomethane	ND		100
Dichlorodifluoromethane	ND		100
1,1-Dichloroethane	ND		100
1,2-Dichloroethane	ND		100
1,1-Dichloroethene	ND		100
cis-1,2-Dichloroethene	820		100
trans-1,2-Dichloroethene	ND		100
1,2-Dichloropropane	ND		100
cis-1,3-Dichloropropene	ND		100
trans-1,3-Dichloropropene	ND		100
Ethylbenzene	ND		100
Hexachlorobutadiene	ND		200
2-Hexanone	ND		10000
Isopropylbenzene	ND		100
4-Isopropyltoluene	ND		200
Methylene Chloride	ND		1000

Client: GeoSyntec Consultants | Job Number: 720-15168-1

Client Sample ID: MW-2

Lab Sample ID: 720-15168-8 | Date Sampled: 07/14/2008 1200
Client Matrix: Water | Date Received: 07/14/2008 1410

8260B Volatile Organic Compounds by GC/MS (Low Level)

Method: 8260B | Analysis Batch: 720-38332 | Instrument ID: Varian 3900G
Preparation: 5030B | Lab File ID: c:\saturnws\data\200807\07
Dilution: 200 | Initial Weight/Volume: 40 mL
Date Analyzed: 07/16/2008 1447 | Final Weight/Volume: 40 mL
Date Prepared: 07/16/2008 1447

Analyte	Result (ug/L)	Qualifier	RL
4-Methyl-2-pentanone (MIBK)	ND		10000
Naphthalene	ND		200
N-Propylbenzene	ND		200
Styrene	ND		100
1,1,1,2-Tetrachloroethane	ND		100
1,1,2,2-Tetrachloroethane	ND		100
Tetrachloroethene	9500		100
Toluene	ND		100
1,2,3-Trichlorobenzene	ND		200
1,2,4-Trichlorobenzene	ND		200
1,1,1-Trichloroethane	ND		100
1,1,2-Trichloroethane	ND		100
Trichloroethene	530		100
Trichlorofluoromethane	ND		200
1,2,3-Trichloropropane	ND		100
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100
1,2,4-Trimethylbenzene	ND		100
1,3,5-Trimethylbenzene	ND		100
Vinyl acetate	ND		10000
Vinyl chloride	ND		100
Xylenes, Total	ND		200
2,2-Dichloropropane	ND		100

Surrogate	%Rec	Acceptance Limits
4-Bromofluorobenzene	108	74 - 131
1,2-Dichloroethane-d4 (Surr)	104	88 - 119
Toluene-d8 (Surr)	97	82 - 120

Client: GeoSyntec Consultants

Job Number: 720-15168-1

Client Sample ID: EB-1

Lab Sample ID: 720-15168-6EB
Client Matrix: Water

Date Sampled: 07/14/2008 1115
Date Received: 07/14/2008 1410

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B
Preparation: 3010A
Dilution: 1.0
Date Analyzed: 07/16/2008 1014
Date Prepared: 07/15/2008 1752

Analysis Batch: 720-38267
Prep Batch: 720-38248

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	RL
Antimony	0.0089		0.0050
Arsenic	ND		0.0050
Barium	ND		0.0050
Beryllium	ND		0.0050
Cadmium	ND		0.0020
Chromium	ND		0.0050
Cobalt	ND		0.0050
Copper	ND		0.0050
Lead	ND		0.0050
Molybdenum	ND		0.0050
Nickel	ND		0.0050
Selenium	ND		0.0050
Silver	ND		0.0050
Thallium	ND		0.0050
Vanadium	ND		0.0050
Zinc	0.016		0.010

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)

Method: 7470A
Preparation: 7470A
Dilution: 1.0
Date Analyzed: 07/15/2008 1030
Date Prepared: 07/15/2008 0600

Analysis Batch: 720-38169
Prep Batch: 720-38155

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 25 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	RL
Mercury	ND		0.00020

Client: GeoSyntec Consultants | Job Number: 720-15168-1

Client Sample ID: MW-DUP

Lab Sample ID:	720-15168-7FD	Date Sampled:	07/14/2008 1140
Client Matrix:	Water	Date Received:	07/14/2008 1410

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method:	6010B	Analysis Batch: 720-38267		Instrument ID:	Varian ICP
Preparation:	3010A	Prep Batch: 720-38248		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Date Analyzed:	07/16/2008 1017			Final Weight/Volume:	50 mL
Date Prepared:	07/15/2008 1752				

Analyte	Result (mg/L)	Qualifier	RL
Antimony	0.0061		0.0050
Arsenic	ND		0.0050
Barium	0.13		0.0050
Beryllium	ND		0.0050
Cadmium	ND		0.0020
Chromium	ND		0.0050
Cobalt	ND		0.0050
Copper	ND		0.0050
Lead	ND		0.0050
Molybdenum	0.0056		0.0050
Nickel	0.010		0.0050
Selenium	ND		0.0050
Silver	ND		0.0050
Thallium	ND		0.0050
Vanadium	ND		0.0050
Zinc	ND		0.010

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)

Method:	7470A	Analysis Batch: 720-38169		Instrument ID:	FIMS 100
Preparation:	7470A	Prep Batch: 720-38155		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	25 mL
Date Analyzed:	07/15/2008 1034			Final Weight/Volume:	50 mL
Date Prepared:	07/15/2008 0600				

Analyte	Result (mg/L)	Qualifier	RL
Mercury	ND		0.00020

Client: GeoSyntec Consultants Job Number: 720-15168-1

Client Sample ID: MW-2

Lab Sample ID: 720-15168-8 Date Sampled: 07/14/2008 1200
Client Matrix: Water Date Received: 07/14/2008 1410

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B Analysis Batch: 720-38267 Instrument ID: Varian ICP
Preparation: 3010A Prep Batch: 720-38248 Lab File ID: N/A
Dilution: 1.0 Initial Weight/Volume: 50 mL
Date Analyzed: 07/16/2008 1027 Final Weight/Volume: 50 mL
Date Prepared: 07/15/2008 1752

Analyte	Result (mg/L)	Qualifier	RL
Antimony	ND		0.0050
Arsenic	ND		0.0050
Barium	0.13		0.0050
Beryllium	ND		0.0050
Cadmium	ND		0.0020
Chromium	ND		0.0050
Cobalt	ND		0.0050
Copper	ND		0.0050
Lead	ND		0.0050
Molybdenum	0.0067		0.0050
Nickel	0.010		0.0050
Selenium	ND		0.0050
Silver	ND		0.0050
Thallium	ND		0.0050
Vanadium	ND		0.0050
Zinc	ND		0.010

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)

Method: 7470A Analysis Batch: 720-38169 Instrument ID: FIMS 100
Preparation: 7470A Prep Batch: 720-38155 Lab File ID: N/A
Dilution: 1.0 Initial Weight/Volume: 25 mL
Date Analyzed: 07/15/2008 1035 Final Weight/Volume: 50 mL
Date Prepared: 07/15/2008 0600

Analyte	Result (mg/L)	Qualifier	RL
Mercury	ND		0.00020

General Chemistry

Client Sample ID: EB-1

Lab Sample ID: 720-15168-6EB
Client Matrix: Water

Date Sampled: 07/14/2008 1115
Date Received: 07/14/2008 1410

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	ND		mg/L	1.0	1.0	300.0
	Anly Batch: 720-38418		Date Analyzed 07/17/2008 2044			

Client Sample ID: MW-DUP

Lab Sample ID: 720-15168-7FD
Client Matrix: Water

Date Sampled: 07/14/2008 1140
Date Received: 07/14/2008 1410

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	110		mg/L	10	10	300.0
	Anly Batch: 720-38418		Date Analyzed 07/17/2008 2118			

Client Sample ID: MW-2

Lab Sample ID: 720-15168-8
Client Matrix: Water

Date Sampled: 07/14/2008 1200
Date Received: 07/14/2008 1410

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	110		mg/L	10	10	300.0
	Anly Batch: 720-38418		Date Analyzed 07/17/2008 2135			

DATA REPORTING QUALIFIERS

Lab Section	Qualifier	Description

Client: GeoSyntec Consultants Job Number: 720-15168-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:720-38203					
LCS 720-38203/2	Lab Control Spike	T	Water	8260B	
LCSD 720-38203/1	Lab Control Spike Duplicate	T	Water	8260B	
MB 720-38203/3	Method Blank	T	Water	8260B	
720-15168-2	MW-1	T	Water	8260B	
720-15168-3	MW-3	T	Water	8260B	
720-15168-3MS	Matrix Spike	T	Water	8260B	
720-15168-3MSD	Matrix Spike Duplicate	T	Water	8260B	
720-15168-4	MW-4	T	Water	8260B	
720-15168-5	MW-5	T	Water	8260B	
720-15168-7FD	MW-DUP	T	Water	8260B	
Analysis Batch:720-38208					
LCS 720-38208/1	Lab Control Spike	T	Water	8260B	
LCSD 720-38208/2	Lab Control Spike Duplicate	T	Water	8260B	
MB 720-38208/3	Method Blank	T	Water	8260B	
720-15168-1TB	TRIP BLANK	T	Water	8260B	
Analysis Batch:720-38332					
LCS 720-38332/2	Lab Control Spike	T	Water	8260B	
LCSD 720-38332/1	Lab Control Spike Duplicate	T	Water	8260B	
MB 720-38332/3	Method Blank	T	Water	8260B	
720-15168-8	MW-2	T	Water	8260B	

Report Basis
T = Total

Client: GeoSyntec Consultants Job Number: 720-15168-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 720-38155					
LCS 720-38155/2-A	Lab Control Spike	T	Water	7470A	
LCSD 720-38155/3-A	Lab Control Spike Duplicate	T	Water	7470A	
MB 720-38155/1-A	Method Blank	T	Water	7470A	
720-15168-6EB	EB-1	T	Water	7470A	
720-15168-7FD	MW-DUP	T	Water	7470A	
720-15168-8	MW-2	T	Water	7470A	
Analysis Batch:720-38169					
LCS 720-38155/2-A	Lab Control Spike	T	Water	7470A	720-38155
LCSD 720-38155/3-A	Lab Control Spike Duplicate	T	Water	7470A	720-38155
MB 720-38155/1-A	Method Blank	T	Water	7470A	720-38155
720-15168-6EB	EB-1	T	Water	7470A	720-38155
720-15168-7FD	MW-DUP	T	Water	7470A	720-38155
720-15168-8	MW-2	T	Water	7470A	720-38155
Prep Batch: 720-38248					
LCS 720-38248/2-A	Lab Control Spike	T	Water	3010A	
LCSD 720-38248/3-A	Lab Control Spike Duplicate	T	Water	3010A	
MB 720-38248/1-A	Method Blank	T	Water	3010A	
720-15168-6EB	EB-1	T	Water	3010A	
720-15168-7FD	MW-DUP	T	Water	3010A	
720-15168-8	MW-2	T	Water	3010A	
Analysis Batch:720-38267					
LCS 720-38248/2-A	Lab Control Spike	T	Water	6010B	720-38248
LCSD 720-38248/3-A	Lab Control Spike Duplicate	T	Water	6010B	720-38248
MB 720-38248/1-A	Method Blank	T	Water	6010B	720-38248
720-15168-6EB	EB-1	T	Water	6010B	720-38248
720-15168-7FD	MW-DUP	T	Water	6010B	720-38248
720-15168-8	MW-2	T	Water	6010B	720-38248

Report Basis
T = Total

Client: GeoSyntec Consultants Job Number: 720-15168-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:720-38418					
LCS 720-38418/2	Lab Control Spike	T	Water	300.0	
LCSD 720-38418/3	Lab Control Spike Duplicate	T	Water	300.0	
MB 720-38418/1	Method Blank	T	Water	300.0	
720-15168-6EB	EB-1	T	Water	300.0	
720-15168-7FD	MW-DUP	T	Water	300.0	
720-15168-8	MW-2	T	Water	300.0	

Report Basis
T = Total

Client: GeoSyntec Consultants

Job Number: 720-15168-1

Method Blank - Batch: 720-38203

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 720-38203/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/15/2008 1049
Date Prepared: 07/15/2008 1049

Analysis Batch: 720-38203
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900G
Lab File ID: c:\saturnws\data\200807\07
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 mL

Analyte	Result	Qual	RL
Methyl tert-butyl ether	ND		5.0
Acetone	ND		50
Benzene	ND		0.50
Dichlorobromomethane	ND		0.50
Bromobenzene	ND		1.0
Chlorobromomethane	ND		1.0
Bromoform	ND		1.0
Bromomethane	ND		1.0
2-Butanone (MEK)	ND		50
n-Butylbenzene	ND		1.0
sec-Butylbenzene	ND		1.0
tert-Butylbenzene	ND		1.0
Carbon disulfide	ND		5.0
Carbon tetrachloride	ND		0.50
Chlorobenzene	ND		0.50
Chloroethane	ND		1.0
Chloroform	ND		1.0
Chloromethane	ND		1.0
2-Chlorotoluene	ND		0.50
4-Chlorotoluene	ND		0.50
Chlorodibromomethane	ND		0.50
1,2-Dichlorobenzene	ND		0.50
1,3-Dichlorobenzene	ND		0.50
1,4-Dichlorobenzene	ND		0.50
1,3-Dichloropropane	ND		1.0
1,1-Dichloropropene	ND		0.50
1,2-Dibromo-3-Chloropropane	ND		1.0
Ethylene Dibromide	ND		0.50
Dibromomethane	ND		0.50
Dichlorodifluoromethane	ND		0.50
1,1-Dichloroethane	ND		0.50
1,2-Dichloroethane	ND		0.50
1,1-Dichloroethene	ND		0.50
cis-1,2-Dichloroethene	ND		0.50
trans-1,2-Dichloroethene	ND		0.50
1,2-Dichloropropane	ND		0.50
cis-1,3-Dichloropropene	ND		0.50
trans-1,3-Dichloropropene	ND		0.50
Ethylbenzene	ND		0.50
Hexachlorobutadiene	ND		1.0
2-Hexanone	ND		50

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: GeoSyntec Consultants

Job Number: 720-15168-1

Method Blank - Batch: 720-38203

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 720-38203/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/15/2008 1049
Date Prepared: 07/15/2008 1049

Analysis Batch: 720-38203
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900G
Lab File ID: c:\saturnws\data\200807\07
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 mL

Analyte	Result	Qual	RL
Isopropylbenzene	ND		0.50
4-Isopropyltoluene	ND		1.0
Methylene Chloride	ND		5.0
4-Methyl-2-pentanone (MIBK)	ND		50
Naphthalene	ND		1.0
N-Propylbenzene	ND		1.0
Styrene	ND		0.50
1,1,1,2-Tetrachloroethane	ND		0.50
1,1,2,2-Tetrachloroethane	ND		0.50
Tetrachloroethene	ND		0.50
Toluene	ND		0.50
1,2,3-Trichlorobenzene	ND		1.0
1,2,4-Trichlorobenzene	ND		1.0
1,1,1-Trichloroethane	ND		0.50
1,1,2-Trichloroethane	ND		0.50
Trichloroethene	ND		0.50
Trichlorofluoromethane	ND		1.0
1,2,3-Trichloropropane	ND		0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50
1,2,4-Trimethylbenzene	ND		0.50
1,3,5-Trimethylbenzene	ND		0.50
Vinyl acetate	ND		50
Vinyl chloride	ND		0.50
Xylenes, Total	ND		1.0
2,2-Dichloropropane	ND		0.50

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	108	74 - 131
1,2-Dichloroethane-d4 (Surr)	97	88 - 119
Toluene-d8 (Surr)	95	82 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: GeoSyntec Consultants Job Number: 720-15168-1

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-38203

Method: 8260B
Preparation: 5030B

LCS Lab Sample ID: LCS 720-38203/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/15/2008 0942
Date Prepared: 07/15/2008 0942

Analysis Batch: 720-38203
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900G
Lab File ID: c:\saturnws\data\200807\07
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 mL

LCSD Lab Sample ID: LCSD 720-38203/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/15/2008 1015
Date Prepared: 07/15/2008 1015

Analysis Batch: 720-38203
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900G
Lab File ID: c:\saturnws\data\200807\071
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	95	95	70 - 130	1	20		
Chlorobenzene	104	106	70 - 130	2	20		
1,1-Dichloroethene	85	84	70 - 130	1	20		
Toluene	85	85	70 - 130	0	20		
Trichloroethene	75	73	70 - 130	3	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	100	102	74 - 131
1,2-Dichloroethane-d4 (Surr)	92	97	88 - 119
Toluene-d8 (Surr)	90	90	82 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: GeoSyntec Consultants

Job Number: 720-15168-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-38203

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	720-15168-3	Analysis Batch: 720-38203	Instrument ID: Varian 3900G
Client Matrix:	Water	Prep Batch: N/A	Lab File ID: c:\saturnws\data\200807\(
Dilution:	1.0		Initial Weight/Volume: 40 mL
Date Analyzed:	07/15/2008 1412		Final Weight/Volume: 40 mL
Date Prepared:	07/15/2008 1412		

MSD Lab Sample ID:	720-15168-3	Analysis Batch: 720-38203	Instrument ID: Varian 3900G
Client Matrix:	Water	Prep Batch: N/A	Lab File ID: c:\saturnws\data\200807\07
Dilution:	1.0		Initial Weight/Volume: 40 mL
Date Analyzed:	07/15/2008 1445		Final Weight/Volume: 40 mL
Date Prepared:	07/15/2008 1445		

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzene	97	97	70 - 130	0	20		
Chlorobenzene	107	106	70 - 130	2	20		
1,1-Dichloroethene	88	89	70 - 130	2	20		
Toluene	88	91	70 - 130	3	20		
Trichloroethene	77	81	70 - 130	4	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
4-Bromofluorobenzene	108	109	74 - 131
1,2-Dichloroethane-d4 (Surr)	101	104	88 - 119
Toluene-d8 (Surr)	96	100	82 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: GeoSyntec Consultants

Job Number: 720-15168-1

Method Blank - Batch: 720-38208

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 720-38208/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/15/2008 1006
Date Prepared: 07/15/2008 1006

Analysis Batch: 720-38208
Prep Batch: N/A
Units: ug/L

Instrument ID: Agilent75MSD
Lab File ID: 071508005.D
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 mL

Analyte	Result	Qual	RL
Methyl tert-butyl ether	ND		5.0
Acetone	ND		50
Benzene	ND		0.50
Dichlorobromomethane	ND		0.50
Bromobenzene	ND		1.0
Chlorobromomethane	ND		1.0
Bromoform	ND		1.0
Bromomethane	ND		1.0
2-Butanone (MEK)	ND		50
n-Butylbenzene	ND		1.0
sec-Butylbenzene	ND		1.0
tert-Butylbenzene	ND		1.0
Carbon disulfide	ND		5.0
Carbon tetrachloride	ND		0.50
Chlorobenzene	ND		0.50
Chloroethane	ND		1.0
Chloroform	ND		1.0
Chloromethane	ND		1.0
2-Chlorotoluene	ND		0.50
4-Chlorotoluene	ND		0.50
Chlorodibromomethane	ND		0.50
1,2-Dichlorobenzene	ND		0.50
1,3-Dichlorobenzene	ND		0.50
1,4-Dichlorobenzene	ND		0.50
1,3-Dichloropropane	ND		1.0
1,1-Dichloropropene	ND		0.50
1,2-Dibromo-3-Chloropropane	ND		1.0
Ethylene Dibromide	ND		0.50
Dibromomethane	ND		0.50
Dichlorodifluoromethane	ND		0.50
1,1-Dichloroethane	ND		0.50
1,2-Dichloroethane	ND		0.50
1,1-Dichloroethene	ND		0.50
cis-1,2-Dichloroethene	ND		0.50
trans-1,2-Dichloroethene	ND		0.50
1,2-Dichloropropane	ND		0.50
cis-1,3-Dichloropropene	ND		0.50
trans-1,3-Dichloropropene	ND		0.50
Ethylbenzene	ND		0.50
Hexachlorobutadiene	ND		1.0
2-Hexanone	ND		50

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: GeoSyntec Consultants

Job Number: 720-15168-1

Method Blank - Batch: 720-38208

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 720-38208/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/15/2008 1006
Date Prepared: 07/15/2008 1006

Analysis Batch: 720-38208
Prep Batch: N/A
Units: ug/L

Instrument ID: Agilent75MSD
Lab File ID: 071508005.D
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 mL

Analyte	Result	Qual	RL
Isopropylbenzene	ND		0.50
4-Isopropyltoluene	ND		1.0
Methylene Chloride	ND		5.0
4-Methyl-2-pentanone (MIBK)	ND		50
Naphthalene	ND		1.0
N-Propylbenzene	ND		1.0
Styrene	ND		0.50
1,1,1,2-Tetrachloroethane	ND		0.50
1,1,2,2-Tetrachloroethane	ND		0.50
Tetrachloroethene	ND		0.50
Toluene	ND		0.50
1,2,3-Trichlorobenzene	ND		1.0
1,2,4-Trichlorobenzene	ND		1.0
1,1,1-Trichloroethane	ND		0.50
1,1,2-Trichloroethane	ND		0.50
Trichloroethene	ND		0.50
Trichlorofluoromethane	ND		1.0
1,2,3-Trichloropropane	ND		0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50
1,2,4-Trimethylbenzene	ND		0.50
1,3,5-Trimethylbenzene	ND		0.50
Vinyl acetate	ND		50
Vinyl chloride	ND		0.50
Xylenes, Total	ND		1.0
2,2-Dichloropropane	ND		0.50

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	105	74 - 131
1,2-Dichloroethane-d4 (Surr)	104	88 - 119
Toluene-d8 (Surr)	107	82 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: GeoSyntec Consultants

Job Number: 720-15168-1

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-38208

Method: 8260B
Preparation: 5030B

LCS Lab Sample ID: LCS 720-38208/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/15/2008 0916
Date Prepared: 07/15/2008 0916

Analysis Batch: 720-38208
Prep Batch: N/A
Units: ug/L

Instrument ID: Agilent75MSD
Lab File ID: 071508003.D
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 mL

LCSD Lab Sample ID: LCSD 720-38208/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/15/2008 0941
Date Prepared: 07/15/2008 0941

Analysis Batch: 720-38208
Prep Batch: N/A
Units: ug/L

Instrument ID: Agilent75MSD
Lab File ID: 071508004.D
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	94	95	70 - 130	1	20		
Chlorobenzene	91	94	70 - 130	2	20		
1,1-Dichloroethene	106	106	70 - 130	0	20		
Toluene	96	97	70 - 130	1	20		
Trichloroethene	92	93	70 - 130	2	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	103	104	74 - 131
1,2-Dichloroethane-d4 (Surr)	99	99	88 - 119
Toluene-d8 (Surr)	103	102	82 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: GeoSyntec Consultants

Job Number: 720-15168-1

Method Blank - Batch: 720-38332

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 720-38332/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/16/2008 1339
Date Prepared: 07/16/2008 1339

Analysis Batch: 720-38332
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900G
Lab File ID: c:\saturnws\data\200807\07
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 mL

Analyte	Result	Qual	RL
Methyl tert-butyl ether	ND		5.0
Acetone	ND		50
Benzene	ND		0.50
Dichlorobromomethane	ND		0.50
Bromobenzene	ND		1.0
Chlorobromomethane	ND		1.0
Bromoform	ND		1.0
Bromomethane	ND		1.0
2-Butanone (MEK)	ND		50
n-Butylbenzene	ND		1.0
sec-Butylbenzene	ND		1.0
tert-Butylbenzene	ND		1.0
Carbon disulfide	ND		5.0
Carbon tetrachloride	ND		0.50
Chlorobenzene	ND		0.50
Chloroethane	ND		1.0
Chloroform	ND		1.0
Chloromethane	ND		1.0
2-Chlorotoluene	ND		0.50
4-Chlorotoluene	ND		0.50
Chlorodibromomethane	ND		0.50
1,2-Dichlorobenzene	ND		0.50
1,3-Dichlorobenzene	ND		0.50
1,4-Dichlorobenzene	ND		0.50
1,3-Dichloropropane	ND		1.0
1,1-Dichloropropene	ND		0.50
1,2-Dibromo-3-Chloropropane	ND		1.0
Ethylene Dibromide	ND		0.50
Dibromomethane	ND		0.50
Dichlorodifluoromethane	ND		0.50
1,1-Dichloroethane	ND		0.50
1,2-Dichloroethane	ND		0.50
1,1-Dichloroethene	ND		0.50
cis-1,2-Dichloroethene	ND		0.50
trans-1,2-Dichloroethene	ND		0.50
1,2-Dichloropropane	ND		0.50
cis-1,3-Dichloropropene	ND		0.50
trans-1,3-Dichloropropene	ND		0.50
Ethylbenzene	ND		0.50
Hexachlorobutadiene	ND		1.0
2-Hexanone	ND		50

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: GeoSyntec Consultants

Job Number: 720-15168-1

Method Blank - Batch: 720-38332

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 720-38332/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/16/2008 1339
Date Prepared: 07/16/2008 1339

Analysis Batch: 720-38332
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900G
Lab File ID: c:\saturnws\data\200807\07
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 mL

Analyte	Result	Qual	RL
Isopropylbenzene	ND		0.50
4-Isopropyltoluene	ND		1.0
Methylene Chloride	ND		5.0
4-Methyl-2-pentanone (MIBK)	ND		50
Naphthalene	ND		1.0
N-Propylbenzene	ND		1.0
Styrene	ND		0.50
1,1,1,2-Tetrachloroethane	ND		0.50
1,1,2,2-Tetrachloroethane	ND		0.50
Tetrachloroethene	ND		0.50
Toluene	ND		0.50
1,2,3-Trichlorobenzene	ND		1.0
1,2,4-Trichlorobenzene	ND		1.0
1,1,1-Trichloroethane	ND		0.50
1,1,2-Trichloroethane	ND		0.50
Trichloroethene	ND		0.50
Trichlorofluoromethane	ND		1.0
1,2,3-Trichloropropane	ND		0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50
1,2,4-Trimethylbenzene	ND		0.50
1,3,5-Trimethylbenzene	ND		0.50
Vinyl acetate	ND		50
Vinyl chloride	ND		0.50
Xylenes, Total	ND		1.0
2,2-Dichloropropane	ND		0.50

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	110	74 - 131
1,2-Dichloroethane-d4 (Surr)	103	88 - 119
Toluene-d8 (Surr)	98	82 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: GeoSyntec Consultants Job Number: 720-15168-1

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-38332

Method: 8260B
Preparation: 5030B

LCS Lab Sample ID: LCS 720-38332/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/16/2008 1232
Date Prepared: 07/16/2008 1232

Analysis Batch: 720-38332
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900G
Lab File ID: c:\saturnws\data\200807\07
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 mL

LCSD Lab Sample ID: LCSD 720-38332/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/16/2008 1305
Date Prepared: 07/16/2008 1305

Analysis Batch: 720-38332
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900G
Lab File ID: c:\saturnws\data\200807\071
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	101	98	70 - 130	4	20		
Chlorobenzene	108	108	70 - 130	0	20		
1,1-Dichloroethene	89	85	70 - 130	4	20		
Toluene	94	90	70 - 130	4	20		
Trichloroethene	80	76	70 - 130	5	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	107	101	74 - 131
1,2-Dichloroethane-d4 (Surr)	103	96	88 - 119
Toluene-d8 (Surr)	100	90	82 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: GeoSyntec Consultants

Job Number: 720-15168-1

Method Blank - Batch: 720-38248

Method: 6010B
Preparation: 3010A

Lab Sample ID: MB 720-38248/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/16/2008 0946
Date Prepared: 07/15/2008 1752

Analysis Batch: 720-38267
Prep Batch: 720-38248
Units: mg/L

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Antimony	ND		0.0050
Arsenic	ND		0.0050
Barium	ND		0.0050
Beryllium	ND		0.0050
Cadmium	ND		0.0020
Chromium	ND		0.0050
Cobalt	ND		0.0050
Copper	ND		0.0050
Lead	ND		0.0050
Molybdenum	ND		0.0050
Nickel	ND		0.0050
Selenium	ND		0.0050
Silver	ND		0.0050
Thallium	ND		0.0050
Vanadium	ND		0.0050
Zinc	ND		0.010

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: GeoSyntec Consultants

Job Number: 720-15168-1

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-38248

Method: 6010B
Preparation: 3010A

LCS Lab Sample ID: LCS 720-38248/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/16/2008 0949
Date Prepared: 07/15/2008 1752

Analysis Batch: 720-38267
Prep Batch: 720-38248
Units: mg/L

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

LCSD Lab Sample ID: LCSD 720-38248/3-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/16/2008 0953
Date Prepared: 07/15/2008 1752

Analysis Batch: 720-38267
Prep Batch: 720-38248
Units: mg/L

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Antimony	97	96	80 - 120	2	20		
Arsenic	103	102	80 - 120	1	20		
Barium	108	107	80 - 120	1	20		
Beryllium	104	102	80 - 120	1	20		
Cadmium	104	102	80 - 120	1	20		
Chromium	107	105	80 - 120	2	20		
Cobalt	104	102	80 - 120	1	20		
Copper	105	103	80 - 120	2	20		
Lead	105	104	80 - 120	1	20		
Molybdenum	106	105	80 - 120	1	20		
Nickel	105	103	80 - 120	2	20		
Selenium	103	102	80 - 120	1	20		
Silver	97	96	80 - 120	0	20		
Thallium	106	105	80 - 120	1	20		
Vanadium	105	104	80 - 120	2	20		
Zinc	105	104	80 - 120	1	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: GeoSyntec Consultants

Job Number: 720-15168-1

Method Blank - Batch: 720-38155

Method: 7470A
Preparation: 7470A

Lab Sample ID: MB 720-38155/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/15/2008 1019
Date Prepared: 07/15/2008 0600

Analysis Batch: 720-38169
Prep Batch: 720-38155
Units: mg/L

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 25 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Mercury	ND		0.00020

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-38155

Method: 7470A
Preparation: 7470A

LCS Lab Sample ID: LCS 720-38155/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/15/2008 1021
Date Prepared: 07/15/2008 0600

Analysis Batch: 720-38169
Prep Batch: 720-38155
Units: mg/L

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 25 mL
Final Weight/Volume: 50 mL

LCSD Lab Sample ID: LCSD 720-38155/3-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/15/2008 1022
Date Prepared: 07/15/2008 0600

Analysis Batch: 720-38169
Prep Batch: 720-38155
Units: mg/L

Instrument ID: FIMS 100
Lab File ID: N/A
Initial Weight/Volume: 25 mL
Final Weight/Volume: 50 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Mercury	98	100	80 - 120	2	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: GeoSyntec Consultants

Job Number: 720-15168-1

Method Blank - Batch: 720-38418

Method: 300.0
Preparation: N/A

Lab Sample ID: MB 720-38418/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/17/2008 1643
Date Prepared: N/A

Analysis Batch: 720-38418
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Chloride	ND		1.0

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-38418

Method: 300.0
Preparation: N/A

LCS Lab Sample ID: LCS 720-38418/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/17/2008 1701
Date Prepared: N/A

Analysis Batch: 720-38418
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

LCSD Lab Sample ID: LCSD 720-38418/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/17/2008 1718
Date Prepared: N/A

Analysis Batch: 720-38418
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Chloride	100	102	90 - 110	2	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

720-15168

111590

CHAIN OF CUSTODY RECORD

Environmental Sampling Services

6680 Alhambra Avenue, #102 • Martinez, California 94553-6105
Telephone: (925) 372-8108 Fax: (925) 372-6705
www.envsampling.com Log Code: ESSM

TURN AROUND TIME ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ STD. ☐

Reporting Format: EDF ☑ EDD ☐ PDF ☐

GeoTracker Site Identification:

FedEx ☐ **UPS** ☐ ESS ☑ **Tracking Number:**

Laboratory: Test America **Lab Code:** STCL

Send Report To: Melissa Asher **Bill To:** SAME
Company: GeoSyntec Consultants **Company:**
Address: 475 14th Street, Suite 450 **Address:**
Oakland, CA 94612
E-Mail: masher@geosyntec.com
Tel: (510) 285-2782 **Fax:** ( )
Fax: (510) 836-3036
Project Name: Hopyard Cleaners **Project Number:** WR0574
Sampler's Name: Jacqueline Lee ☑ Stephen Penman ☐

SAMPLE ID	Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	Container Type*	MATRIX CODE WG	SO	GS	Water	METHOD PRESERVED Ice	HCl	HNO_3	H_2SO_4	Analysis Request: VOCs (EPA 8260B)	Chloride (EPA 300.0)	Title 22 Metals (EPA 6010B)	Field Filtered	Comments
Trip Blank	QCTB1	7/14/08	8:30	2	1				X	X	X			X				
MW-1	MW-1	7/14/08	9:38	3	1	X				X	X			X				
MW-3	MW-3	7/14/08	9:50	3	1	X				X	X			X				
MW-4	MW-4	7/14/08	10:10	3	1	X				X	X			X				
MW-5	MW-5	7/14/08	10:27	3	1	X				X	X			X				
EB-1	QCEB	7/14/08	11:15	3	1	X				X	X	X		X	X		X	
MW-DUP	DUP1	7/14/08	11:40	4	1,3	X				X	X	X		X	X		X	
MW-2	MW-2	7/14/08	12:00	4	1,3	X				X	X	X		X	X		X	

Relinquished By:	Date:	Time:	Received By:
	7/14/08	14.10	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/°C 2.0 **HEAD SPACE ABSENT:** Yes No
Received in Good Condition: Yes No
Metals sample(s) Field Filtered: Yes No NA
Questions regarding COC: Call ESS
COMMENTS :

FIELD POINT: MW=Monitoring Well QCFD=Field Duplicate QCFB=Field Blank
CONTAINER TYPES:
1=VOAs 2=Glass 3=Poly 4=Liner 5=Air Canister 6=Tedlar Bag

MATRIX CODE: WG=Grdwtr. SO=Soil GS=Soil Gas

Login Sample Receipt Check List

Client: GeoSyntec Consultants

Job Number: 720-15168-1

Login Number: 15168
List Source: TestAmerica San Francisco
Creator: Thomas, Bryan
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	