ENVIRONMENTAL ENGINEERING, INC
6620 Owens Drive, Suite A • Pleasanton, CA 94588-3334
TEL (925) 734-6400 • FAX (925) 734-6401

September 8, 2006

Mr. Don Hwang
Alameda County
Department of Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: Fuel Leak Case No. RO0000317-5725 Thornhill Drive, Oakland, CA

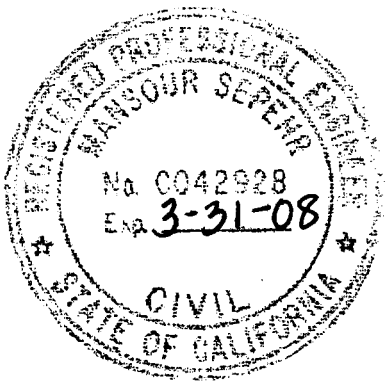
Dear Don:

SOMA's "Third Quarter 2006 Groundwater Monitoring Report" for the subject property has been uploaded to the State's GeoTracker database and Alameda County's FTP site for your review.

Thank you for your time in reviewing our report. If you have any questions or comments, please call me at (925) 734-6400.

Sincerely,

Mansour Sepehr, Ph.D.,PE
Principal Hydrogeologist



cc: Mr. Mo Mashhoon w/report enclosure

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Third Quarter 2006
Groundwater Monitoring Report

Mash Petroleum Inc.

5725 Thornhill Drive

Oakland, California

September 8, 2006

Project 2831

Prepared for

Mr. Mo Mashhoon

1721 Jefferson Street

Oakland, California 94612

Prepared by

SOMA Environmental Engineering, Inc.

6620 Owens Drive, Suite A

Pleasanton, California 94588

Certification

This report has been prepared by SOMA Environmental Engineering, Inc. on behalf of Mr. Mo Mashhoon, the property owner of 5725 Thornhill Drive, Oakland, California, to comply with the Alameda County Health Care Services and California Regional Water Quality Control Board's requirements for the Third Quarter 2006 groundwater monitoring event.

Mansour Sepehr, Ph.D., P.E.
Principal Hydrogeologist

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1.0 INTRODUCTION

This report has been prepared by SOMA Environmental Engineering, Inc. (SOMA) on behalf of Mr. Mo Mashhoon, the property owner of 5725 Thornhill Drive, Oakland, California ("the Site") as shown in Figure 1. The Site is currently an active ARCO station that is located in an area consisting primarily of commercial and residential land uses.

This report summarizes the results of the Third Quarter 2006 groundwater monitoring event conducted at the Site on August 3, 2006, and includes the field measurement results of the physical and chemical properties of the groundwater at the time of sampling, and the laboratory analytical results on the groundwater samples.

The groundwater monitoring activities for this quarter were performed in accordance with the general guidelines of the California Regional Water Quality Control Board (CRWQCB) and the Alameda County Health Care Services (ACHCS). Appendix A details the groundwater monitoring procedures used during this monitoring event.

1.1 Previous Activities

In November 1998, Penn Environmental (Penn) removed a 550-gallon steel underground waste oil tank (WOT) from the Site. Soil samples collected from the WOT excavation contained up to 1,100,000 μg/Kg of total petroleum hydrocarbons as gasoline (TPH-g), 2,700,000 μg/Kg of total petroleum hydrocarbons as diesel (TPH-d), and 4,200,000 μg/Kg of total petroleum hydrocarbons as motor oil (TPH-mo). On February 4, 1999, Penn Environmental over-excavated the contaminated soil surrounding the former WOT. Aqua Science Engineers, Inc. (ASE) collected confirmation soil samples from two sidewalls of the excavation. The only compound detected in one of these two soil samples was Methyl tertiary Butyl Ether (MtBE) at 40 μg/Kg.

In July 1999, ASE drilled borehole BH-A in the vicinity of the former WOT. On September 6, 2000, ASE drilled soil boreholes BH-B and BH-C. On October 23, 2000, ASE drilled soil boreholes BH-D and BH-E. ASE also collected water samples from Temescal Creek. No hydrocarbons were detected in the water sample collected from Temescal Creek. Figure 2 shows the locations of the borings.

On March 1 and 2, 2004, SOMA oversaw Gregg Drilling & Testing (Gregg) advance nine temporary well boreholes, HP-1 through HP-7, HP-9 and HP-10. Proposed hydropunch HP-8, located in the street, was not drilled due to traffic hazards. Three on-site wells were decommissioned in March 2004, and three additional wells (SOMA-1 to SOMA-3) were installed. The locations of the boreholes and wells are shown in Figure 2.

The results of the March 2004 investigation and details of the well installations are presented in SOMA's report entitled "Soil and Groundwater Investigation and Monitoring Well Installation Report at 5725 Thornhill Drive, Oakland, California," dated April 16, 2004.

On April 25, 2005, SOMA conducted a sensitive receptor survey to identify any water bodies or domestic, irrigation or water supply wells within a quarter mile radius of the Site. Based on the State Department of Water Resources and Alameda County Public Works Agency's records, no drinking water, domestic or irrigation wells were within a quarter-mile radius of the Site.

In May 2005, CPT/MIP boreholes (CPT-1 through CPT-5 and CPT-7 through CPT-11) were advanced under the supervision of SOMA. CPT-6 could not be drilled due to physical constraints and obstruction of local traffic. Ten boreholes, designated as GS-1 through GS-5 and GS-7 through GS-11 were advanced at their corresponding CPT borehole locations. Monitoring well SOMA-4 was also installed. Figure 2 shows the locations of the CPT boreholes and SOMA-4.

The results of the May 2005 site investigation and well installation are presented in SOMA's report entitled "Additional Soil and Groundwater Investigation and Monitoring Well Installation Report at 5725 Thornhill Drive, Oakland, California," dated June 13, 2005.

2.0 RESULTS

The following sections provide the results of the field measurements and laboratory analyses for the August 3, 2006 groundwater monitoring event.

2.1 Field Measurements

As shown in Table 1, the depth to groundwater ranged from 5.96 feet in SOMA-1 to 8.08 feet in SOMA-4. The corresponding groundwater elevations ranged from 564.57 feet in SOMA-4 to 570.51 feet in SOMA-1. The contour map of the groundwater elevations is presented in Figure 3. The groundwater flows southwesterly across the Site, with an average gradient of 0.032 feet/feet.

The field notes in Appendix B show the detailed measurements of the physical and chemical parameters of the groundwater for each well during this monitoring event.

2.2 Laboratory Analyses

Table 1 presents the results of the laboratory analyses for total petroleum hydrocarbons as gasoline (TPH-g), total petroleum hydrocarbons as diesel (TPH-d), total petroleum hydrocarbons as motor oil (TPH-mo), benzene, toluene,

ethylbenzene, total xylenes (BTEX), and Methyl tertiary Butyl Ether (MtBE). Table 2 presents the results of the gasoline oxygenates and lead scavengers analysis.

TPH-g was below the laboratory reporting limit in wells SOMA-1 and SOMA-3. Detectable TPH-g concentrations ranged from 3,580 ug/L in SOMA-2 to 4,340 ug/L in SOMA-4. Figure 4 displays a contour map of TPH-g concentrations in the groundwater. The most impacted TPH-g region appears to be in the vicinity of off-site well SOMA-4. The high TPH-g concentration in SOMA-4 can be attributed to the southwesterly groundwater flow direction across the Site. TPH-g has impacted the region around the pump islands, as observed by the high TPH-g concentration in well SOMA-2.

TPH-d was below the laboratory reporting limit in well SOMA-1. Detectable TPH-d concentrations ranged from 60 ug/L in SOMA-3 to 357 ug/L in SOMA-4. The TPH-d chromatographic pattern for both wells SOMA-2 and SOMA-3 did not match that of the standard diesel pattern. An unidentified hydrocarbon element was also present during analytical testing for well SOMA-2. The overall TPH-d result in well SOMA-3 may have been affected by the presence of heavier hydrocarbons. See the laboratory report in Appendix C for further clarification.

Figure 5 displays a contour map of TPH-d concentrations in the groundwater. Due to the southwesterly groundwater flow direction from the pump islands, TPH-d has migrated off-site to well SOMA-4. As observed by the low TPH-d concentrations, TPH-d has only minimally impacted the groundwater.

TPH-mo was below the laboratory reporting limit throughout the Site; therefore this analyte has not affected the groundwater beneath the Site.

The following BTEX analytes were observed during this monitoring event:

- All BTEX analytes were below the laboratory reporting limit in wells SOMA-1 and SOMA-3.
- In well SOMA-2, toluene was below the laboratory reporting limit; all other BTEX analytes were at low levels.
- In well SOMA-4, all BTEX analytes were below the laboratory reporting limit, with the exception of a trace concentration of total xylenes (0.52 ug/L).

MtBE was detected in all of the groundwater samples collected during this monitoring event. Detectable MtBE concentrations ranged from 4.52 ug/L in well SOMA-1 to 44.8 ug/L in well SOMA-2.

Figure 6 displays a contour map of MtBE concentrations in the groundwater, when using EPA Method 8260B. Figure 6 illustrates the overall influence of the southwesterly groundwater flow direction from the UST cavity and pump islands

to the off-site regions. However, MtBE has only minimally impacted the groundwater throughout the Site.

As shown in Table 2, all gasoline oxygenates and lead scavengers which include Isopropyl Ether (DIPE), Ethyl tertiary Butyl Ether (EtBE), Methyl tert-Amyl Ether (TAME), 1,2-Dichloroethane (1,2-DCA), 1,2-Dibromoethane (EDB), and ethanol were below the laboratory reporting limit throughout the Site. Tert-Butyl-Alcohol (TBA) was detected in wells SOMA-2 and SOMA-4 at 32.4 ug/L and 216 ug/L, respectively. Figure 7 displays the contour map of TBA concentrations in the groundwater.

Appendix C contains the laboratory report and chain-of-custody (COC) form from this monitoring event.

3.0 CONCLUSIONS & RECOMMENDATIONS

The findings of the Third Quarter 2006 groundwater monitoring event can be summarized as follows:

- The groundwater flow direction is southwesterly across the Site, at a gradient of approximately 0.032 feet/feet.

- Based on previous site investigations, and the results of the quarterly monitoring events, both the hydrocarbon and MtBE plumes have migrated southwesterly off-site with the flow of groundwater.

- In general, low levels of TPH-g, TPH-d, and MtBE were detected in well SOMA-4. As such, SOMA recommends the ACHCS adopt a no further action (NFA) status for this site.

4.0 REPORT LIMITATIONS

This report is the summary of work done by SOMA, including observations and descriptions of the Site's conditions. It includes the analytical results produced by Pacific Analytical Laboratory in Alameda, for the current groundwater monitoring event. The number and locations of the wells were selected to provide the required information, but may not be completely representative of the entire site's conditions. All conclusions and recommendations are based on the results of the laboratory analysis. Conclusions beyond those specifically stated in this document should not be inferred from this report.

SOMA warrants that the services provided were done in accordance with the generally accepted practices in the environmental engineering and consulting field at the time of this sampling.

Tables

Table 1
SOMA Historical Groundwater Elevation Data
& Analytical Results (Hydrocarbons, BTEX, & MtBE)
5725 Thornhill Drive, Oakland California

Monitoring Well	Date	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	TPH-d (µg/L)	TPH-mo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE* 8260B (µg/L)
SOMA-1	4/22/2004	576.47	5.75	570.72	63	<50	<300	<0.5	<0.5	<0.5	<0.5	7.7
	7/27/2004	576.47	6.21	570.26	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	9.1
	10/28/2004	576.47	5.76	570.71	<50	<1.0	<1.0	<0.5	<0.5	<0.5	<1.0	6.4
	1/11/2005	576.47	3.73	572.74	<50	200 HY	900	<0.5	<0.5	<0.5	<0.5	4.7
	4/12/2005	576.47	4.72	571.75	<200	<50	<300	<0.5	<0.5	<0.5	<1.0	7.49
	7/19/2005	576.47	5.87	570.60	<200	<50	<300	<0.5	<2.0	<0.5	<1.0	4.94
	10/18/2005	576.47	6.12	570.35	<50	<50	<300	<0.5	<2.0	<0.5	<1.0	5.33
	2/6/2006	576.47	5.10	571.37	<50	920LY	<300	<0.5	<2.0	<0.5	<1.0	2.74
	4/26/2006	576.47	4.71	571.76	<50	<50 [1]	<250 [1]	<0.5	<2.0	<0.5	<1.0	5.28
	8/3/2006	**576.47**	**5.96**	**570.51**	**<50**	**<50**	**<250**	**<0.5**	**<2.0**	**<0.5**	**<1.0**	**4.52**
SOMA-2	4/22/2004	575.50	7.40	568.10	1,900	690 LY	<300	<0.5	<0.5	5.2	9.9	1,900
	7/27/2004	575.50	7.92	567.58	1,500	710 LY	<300	8.9 C	<0.5	1.5 C	2.9 C	740
	10/28/2004	575.50	7.62	567.88	955	790 LY	<1.0	<2.5	<2.5	<2.5	< 5	785
	1/11/2005	575.50	5.70	569.80	3,700	2100 LY	380	3.7	<2.0	3.5	102	310
	4/12/2005	575.50	6.28	569.22	5,960	1200 LY	<300	1.19	<0.5	20.6	25	241
	7/19/2005	575.50	7.42	568.08	2,480	800 LY	<300	1.09	<2.0	2.65	0.73	162
	10/18/2005	575.50	7.70	567.80	2,710	1,100 LY	<300	1.41	<2.0	2.24	0.64	130
	2/6/2006	575.50	6.71	568.79	2,730	66Y	<300	0.68	<2.0	0.71	6.33	49
	4/26/2006	575.50	6.32	569.18	6,490	1,580 [1,2,3]	<250 [1]	<0.5	<2.0	15.3	8.49	38.5
	8/3/2006	**575.50**	**7.39**	**568.11**	**3,580**	**286 [1,3]**	**<250**	**0.8**	**0.7**	**2.65**	**0.7**	**44.8**

Table 1
SOMA Historical Groundwater Elevation Data
& Analytical Results (Hydrocarbons, BTEX, & MtBE)
5725 Thornhill Drive, Oakland California

Monitoring Well	Date	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	TPH-d (µg/L)	TPH-mo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE* 8260B (µg/L)
SOMA-3	4/22/2004	575.92	7.14	568.78	190	120 Y	<300	<0.5	<0.5	<0.5	<0.5	5.1
	7/27/2004	575.92	7.95	567.97	130	120 LY	<300	<0.5	<0.5	<0.5	<0.5	9.1
	10/28/2004	575.92	7.60	568.32	57	280 LY	<1.0	<0.5	<0.5	<0.5	<2	11.3
	1/11/2005	572.92	5.45	567.47	140	210 Y	<300	<0.5	<0.5	<0.5	<0.5	5.8
	4/12/2005	572.92	6.02	566.90	<200	<50	<300	<0.5	<0.5	<0.5	<1.0	4.53
	7/19/2005	572.92	7.49	565.43	<200	120 Y	<300	<0.5	<2.0	<0.5	<1.0	4.69
	10/18/2005	572.92	7.63	565.29	50.1	120 Y	<300	<0.5	<2.0	<0.5	<1.0	8.63
	2/6/2006	572.92	7.20	565.72	1,010	220Y	<300	<0.5	<2.0	<0.5	2.06	32
	4/26/2006	572.92	6.13	566.79	121	123 [1,2,3]	<250 [1]	<0.5	<2.0	<0.5	<1.0	5.49
	8/3/2006	**572.92**	**7.35**	**565.57**	**<50**	**60 [1,2]**	**<250**	**<0.5**	**<0.5**	**<0.5**	**<1.0**	**8.05**
SOMA-4	7/19/2005	572.65	8.10	564.55	3,350	1,200 LY	<300	<1.0	<4.0	<1.0	<2.0	455
	10/18/2005	572.65	8.15	564.50	1,580	1,200 LY	<300	<2.15	<8.6	<2.15	<4.3	425
	2/6/2006	572.65	7.68	564.97	1,940	830LY	<300	<2.15	<8.60	<2.15	<4.3	409
	4/26/2006	572.65	7.61	565.04	3,930	1,080 [1,2,3]	<250 [1]	<0.5	<2.0	<0.5	<1.0	231
	8/3/2006	**572.65**	**8.08**	**564.57**	**4,340**	**357 [1,3]**	**<250**	**<0.5**	**0.52**	**<0.5**	**0.52**	**34.2**

Notes:
<: not detected at or above laboratory reporting limits.
C: Presence confirmed, but RPD between columns exceeds 40%.
H: Heavier hydrocarbons contributed to the quantitation.
L: Lighter hydrocarbons contributed to the quantitation.
Y: Sample exhibits chromatographic pattern which did not resemble standard.

1 To reduce matrix interference , the sample extract has undergone silica-gel clean-up, method 3630, which is specific to polar compound contamination, diesel 2Q06.
2 The sample chromatographic pattern does not resemble fuel standard used for quantitation, diesel 2Q06.
3 Unidentified hydrocarbons C9-C16, diesel 2Q06..

The Second Quarter 2004 was the first time SOMA monitored the site. Wells SOMA-1 to SOMA-3 were monitored at that time.
Well SOMA-4 was installed on May 27, 2005. The Third Quarter 2005 was the first time SOMA monitored this well.

Table 2
Groundwater Analytical Results
Gasoline Oxygenates & Lead Scavengers
5725 Thornhill Drive,Oakland California

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Ethanol (µg/L)
SOMA-1	4/22/2004	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<1000
	7/27/2004	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<1000
	10/28/2004	<2.5	<0.5	<0.5	<2	<0.5	<0.5	<1.0
	1/11/2005	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
	4/12/2005	<2.5	<0.5	<0.5	<2.0	<0.5	<0.5	<1000
	7/19/2005	<10	<0.5	<0.5	<2.0	<0.5	<0.5	<1000
	10/18/2005	<10	<0.5	<0.5	<2.0	<0.5	<0.5	<1000
	2/1/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5	<1000
	4/26/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5	<1000
	8/3/2006	**<10**	**<0.5**	**<0.5**	**<2.0**	**<0.5**	**<0.5**	**<1000**
SOMA-2	4/22/2004	<100	<5.0	<5.0	19.0	<5.0	<5.0	<10000
	7/27/2004	<33	<1.7	<1.7	9.8	<1.7	<1.7	<3300
	10/28/2004	36.3	<2.5	<2.5	12.85	<0.5	<0.5	<1.0
	1/11/2005	67	<2.0	<2.0	6.7	<2.0	<2.0	<4,000
	4/12/2005	71	<0.5	<0.5	3.29	<0.5	<0.5	<1000
	7/19/2005	74.2	<0.5	<0.5	2.82	<0.5	<0.5	<1000
	10/18/2005	81.7	<0.5	<0.5	2.61	<0.5	<0.5	<1000
	2/1/2006	37.8	<0.5	<0.5	<2.0	<0.5	<0.5	<1000
	4/26/2006	36.1	<0.5	<0.5	<2.0	<0.5	<0.5	<1000
	8/3/2006	**32.4**	**<0.5**	**<0.5**	**<2.0**	**<0.5**	**<0.5**	**<1000**
SOMA-3	4/22/2004	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<1000
	7/27/2004	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<1000
	10/28/2004	<2.5	<0.5	<0.5	<2	<0.5	<0.5	<1.0
	1/11/2005	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
	4/12/2005	<2.5	<0.5	<0.5	<2.0	<0.5	<0.5	<1000
	7/19/2005	<10	<0.5	<0.5	<2.0	<0.5	<0.5	<1000
	10/18/2005	<10	<0.5	<0.5	<2.0	<0.5	<0.5	<1000
	2/1/2006	40.9	<0.5	<0.5	<2.0	<0.5	<0.5	<1000

Table 2
Groundwater Analytical Results
Gasoline Oxygenates & Lead Scavengers
5725 Thornhill Drive,Oakland California

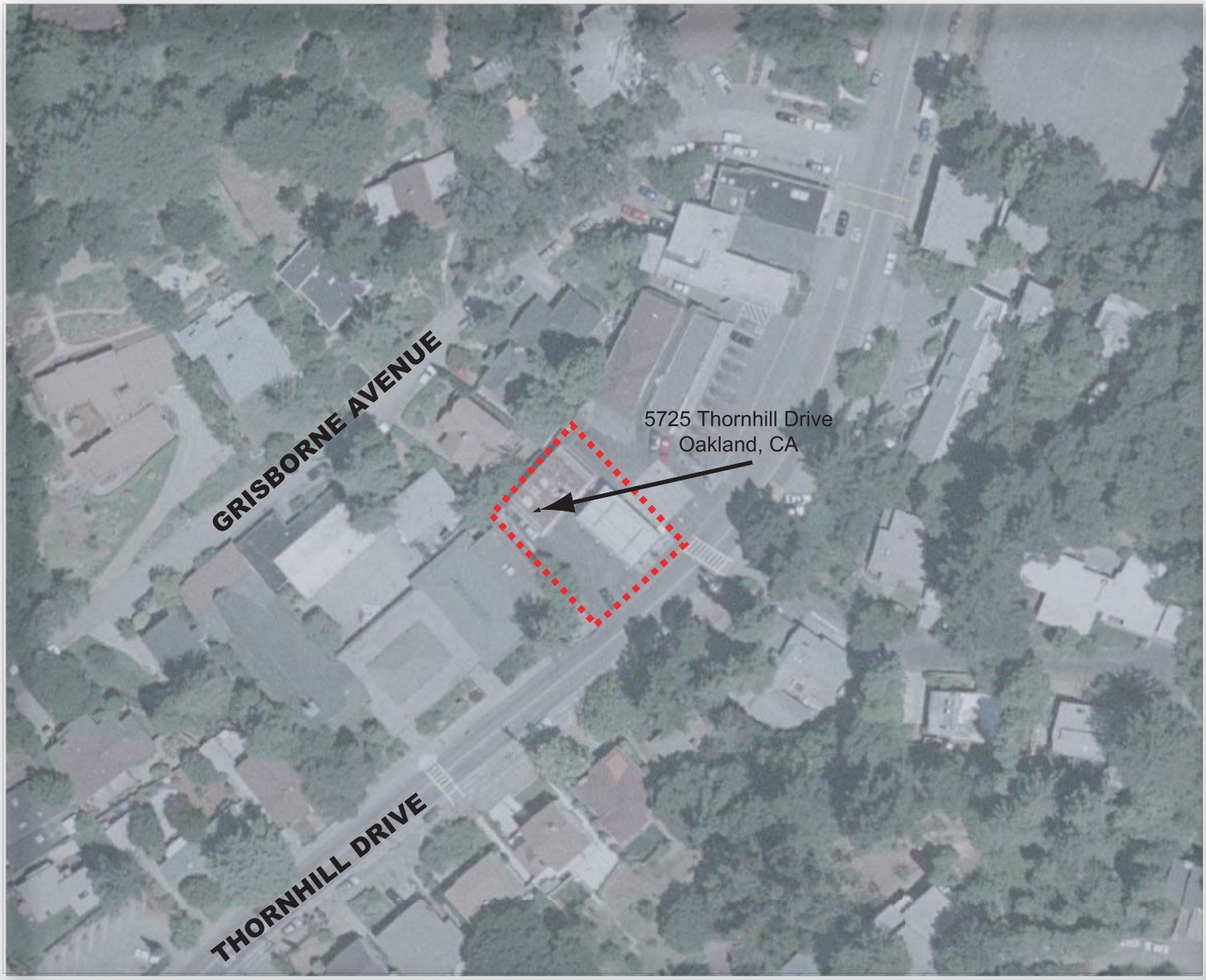
Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Ethanol (µg/L)
	4/26/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5	<1000
	8/3/2006	**<10**	**<0.5**	**<0.5**	**<2.0**	**<0.5**	**<0.5**	**<1000**
SOMA-4	7/19/2005	84.1	<1.0	<1.0	4.4	<1.0	<1.0	<1000
	10/18/2005	314	<2.15	<2.15	<8.6	<2.15	<2.15	<4300
	2/1/2006	417	<2.15	<2.15	<8.6	<2.15	<2.15	<4300
	4/26/2006	357	0.59	<0.5	2.1	<0.5	<0.5	<1000
	8/3/2006	**216**	**<0.5**	**<0.5**	**<2.0**	**<0.5**	**<0.5**	**<1000**

Notes:
<: Not detected above the laboratory reporting limit.
The Second Quarter 2004 was the first time SOMA monitored the site.
Wells SOMA-1 to SOMA-3 were monitored at that time.
Well SOMA-4 was installed on May 27, 2005. The Third Quarter 2005 was the first time SOMA monitored this well.

Gasoline Oxygenates:
TBA: tertiary butyl alcohol
DIPE: Di-Isopropyl ether
ETBE: Ethyl tertiary butyl ether
TAME: Methyl tertiary amyl ether
Ethanol

Lead Scavengers:
1,2-Dichloroethane
EDB: 1,2-Dibromoethane

Figures



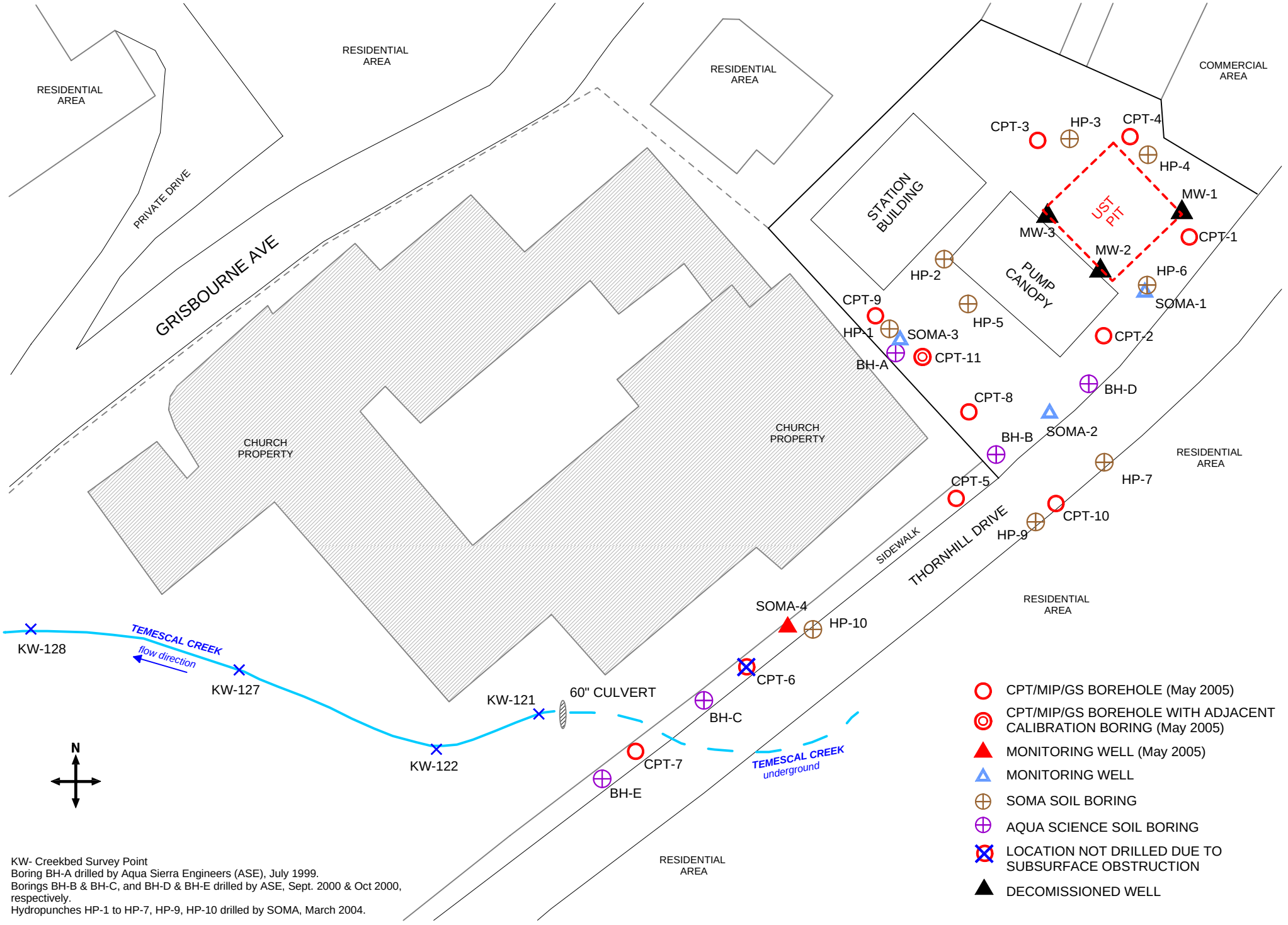
N

approximate scale in feet

0 100 200

Figure 1: Site vicinity map.

SOMA ENVIRONMENTAL ENGINEERING, INC.



KW- Creekbed Survey Point
Boring BH-A drilled by Aqua Sierra Engineers (ASE), July 1999.
Borings BH-B & BH-C, and BH-D & BH-E drilled by ASE, Sept. 2000 & Oct 2000, respectively.
Hydropunches HP-1 to HP-7, HP-9, HP-10 drilled by SOMA, March 2004.

approximate scale in feet
0 25 50

Figure 2: Site map showing locations of monitoring wells, soil borings, decomissioned wells, and CPT/MIP/GS boreholes.

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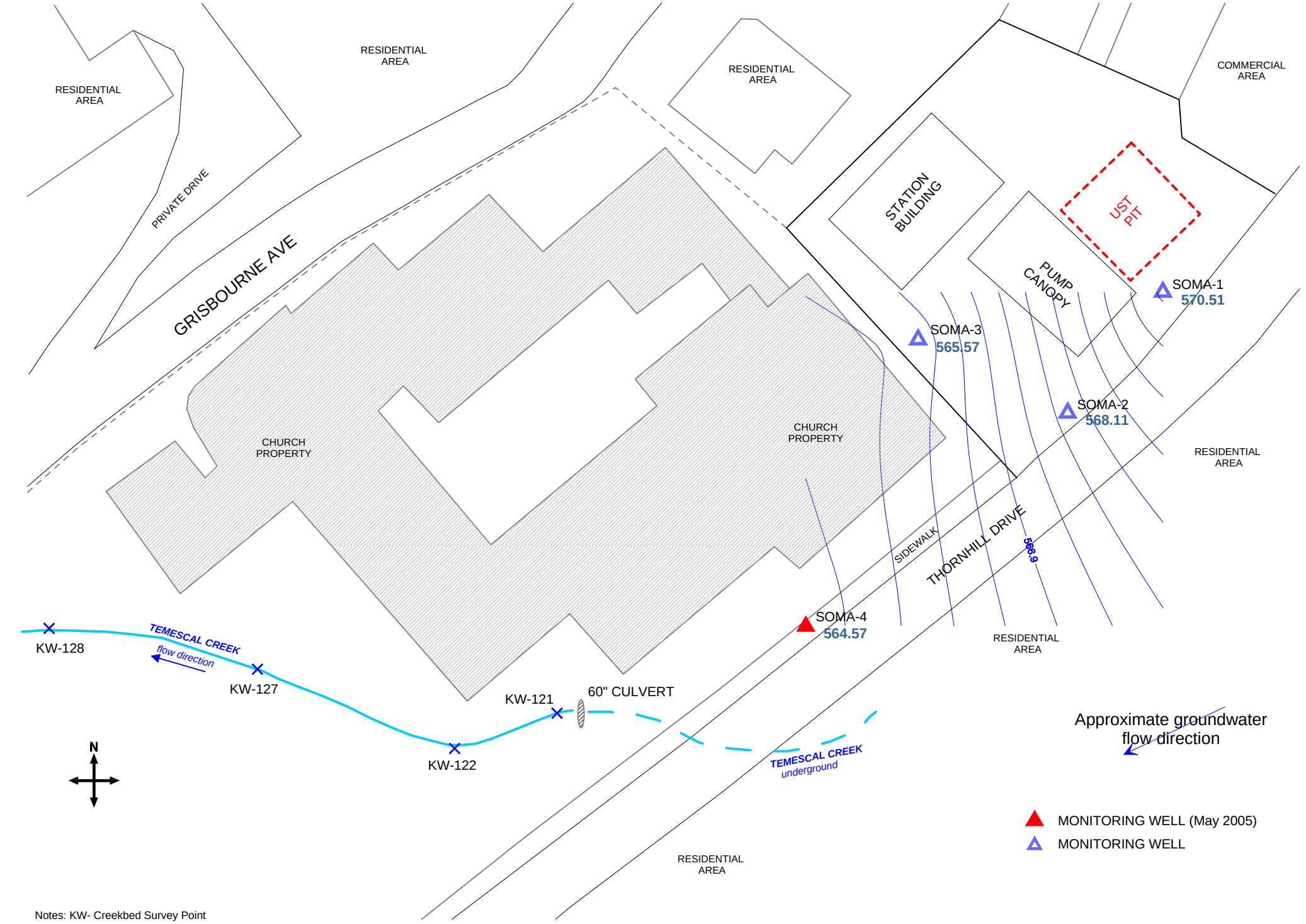

Figure 3: Groundwater elevation contour map in feet. August 3, 2006.

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Notes: KW- Creekbed Survey Point

approximate scale in feet

0 25 50

Figure 4: Contour map of TPH-g concentrations in groundwater. August 3, 2006.

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Notes: KW- Creekbed Survey Point

approximate scale in feet

0 25 50

Figure 5: Contour map of TPH-d concentrations in groundwater.
August 3, 2006.

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SAN RAMON CA (925) 244 6600

Notes: KW- Creekbed Survey Point

approximate scale in feet

0 25 50

Figure 6: Contour map of MtBE concentrations in groundwater.
(EPA Method 8260B). August 3, 2006.

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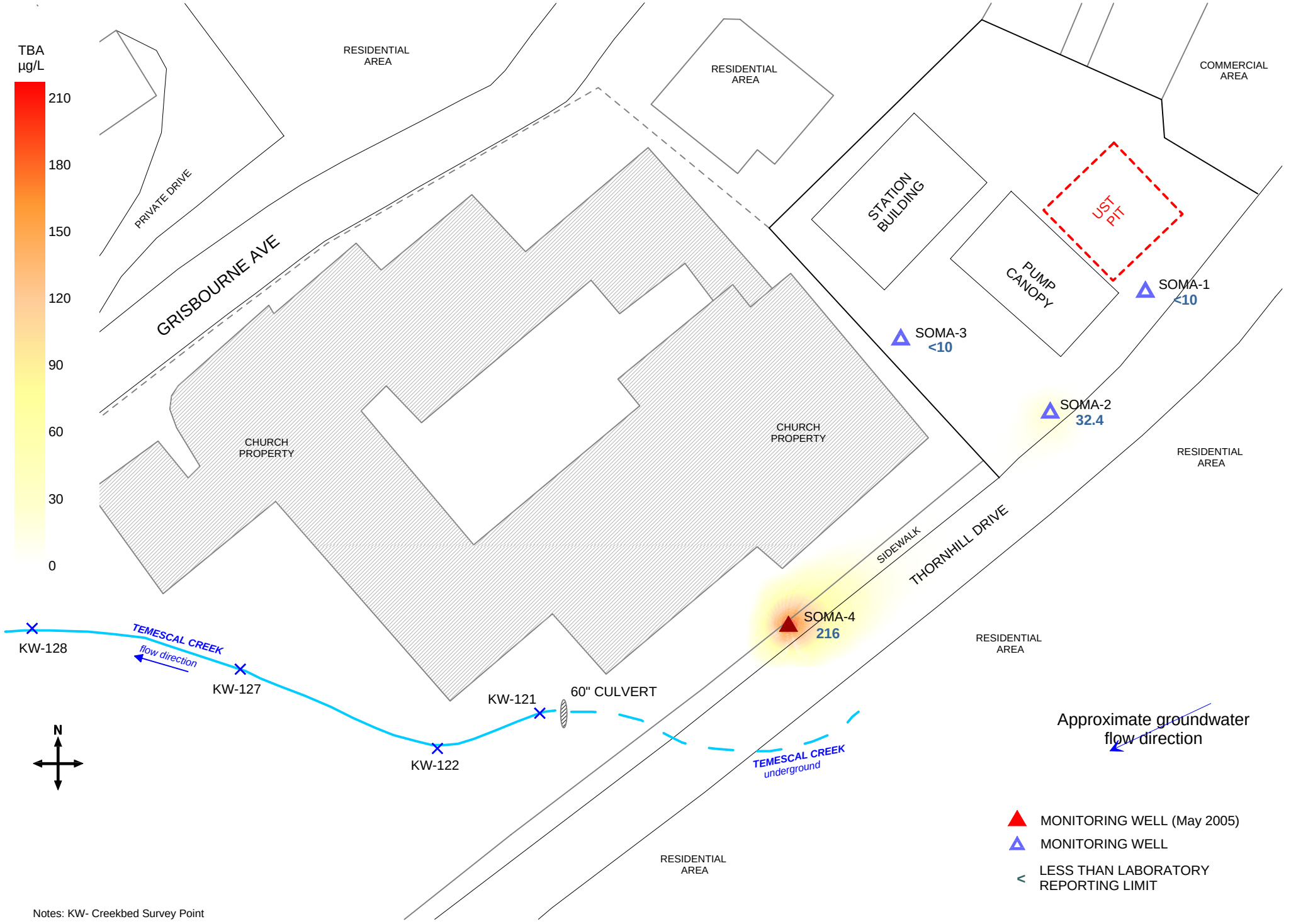
ENVIRONMENTAL ENGINEERING, INC.
SAN RAMON CA (925) 244 6600



Notes: KW- Creekbed Survey Point

approximate scale in feet

0 25 50

Figure 7: Contour map of TBA concentrations in groundwater.
August 3, 2006.

SOMA ENVIRONMENTAL ENGINEERING, INC.
SAN RAMON CA (925) 244 6600

APPENDIX A

SOMA's Groundwater Monitoring Procedures

Field Activities

On April 26, 2006, a total of three on-site monitoring wells (SOMA-1 to SOMA-3), and one off-site well SOMA-4 were measured for depth to groundwater. On April 26, 2006, additional field measurements and grab groundwater samples were collected from all of the monitoring wells. This monitoring event was conducted in accordance with the procedures and guidelines of the California Regional Water Quality Control Board and the Alameda County Health Care Services.

Prior to measuring the groundwater depth at each well, equalization with the surrounding aquifer was achieved. The well cap was removed each well, and the pressure in each well was then allowed to dissipate. This allowed for a more stable water table level within the well. After a few minutes, and once the water level in the well stabilized, the depth to groundwater in each monitoring well was measured from the top of the casing to the nearest 0.01 foot using an electric sounder.

The top of the casing elevation data and the depth to groundwater in each monitoring well were used to calculate the groundwater elevation. The top of casing elevation was based on an elevation datum of 37 feet NAVD88. Appendix B shows the survey datum.

Prior to the collection of samples, each well was purged using a battery operated 2-inch diameter pump (Model ES-60 DC). In order to ensure that the final samples were in equilibrium with (and representative of) the surrounding groundwater, during purging, several samples were taken for field measurements of pH, temperature and EC. The field parameters were measured using a Hanna pH, conductivity, and temperature meter. The equipment was calibrated at the Site using standard solutions and procedures provided by the manufacturer.

Appendix B details the field measurements taken during the monitoring event.

The purging of the wells continued until the parameters for pH, temperature and EC stabilized or three casing volumes were purged. A disposable polyethylene bailer was used to collect sufficient samples from each well for laboratory analyses. The groundwater sample was transferred to four 40-mL VOA vials and preserved with hydrochloric acid. The vials were then sealed to prevent the development of air bubbles within the headspace. The groundwater sample collected from each well was also transferred into one 1-liter amber non-preserved glass container.

After the groundwater samples were collected they were placed on ice in an ice chest and maintained at 4^0C. A chain of custody (COC) form was written for all

the samples. After the sampling was complete, on April 26, 2006, SOMA's field crew delivered the groundwater samples along with the COC form to Pacific Analytical Laboratory in Alameda, California.

Laboratory Analysis

Pacific Analytical Laboratory, a state certified laboratory, analyzed the groundwater samples for TPH-g, TPH-d, TPH-mo, BTEX, MtBE, gasoline oxygenates, and lead scavengers.

TPH-g, BTEX, MtBE, gasoline oxygenates, and lead scavengers measurements were prepared using EPA Method 5030B and analyzed using EPA Method 8260B. Samples for TPH-d and TPH-mo measurements were analyzed using EPA Method 8015B modified. To reduce matrix interference, during TPH-d and TPH-mo testing, the sample extract has undergone silica gel clean-up method 3630, which is specific to polar compound contamination.

Appendix B

Table of Elevations & Coordinates on Monitoring Wells

&

Field Measurements of the Physical and Chemical

Properties of the Groundwater Samples

Collected During the Second Quarter 2006

DATE: 4/28/04
JOB# A04549

TABLE OF ELEVATIONS & COORDINATES ON MONITORING WELLS

SOMA ENVIRONMENTAL, PROJECT # 2830
5725 THORNHILL DRIVE, OAKLAND

WELL ID #	NORTHING (FT.) / LATITUDE (D.M.S.)	EASTING (FT.) / LONGITUDE (D.M.S.)	ELEVATION (FT.)	DESCRIPTION
SOMA-1	2130799.64	6067141.82	576.47	TOP PIPE , BLACK MARK N. SIDE (FELT TIP) (LOCKED AND TIGHT)
	N 37°50'03.73174"	W 122°12'44.98565"	576.72	RIM
			576.70	CONC.
SOMA-2	2130764.55	6067114.08	575.50	TOP PIPE , BLACK MARK N. SIDE (FELT TIP) (LOCKED AND TIGHT)
	N 37°50'03.37985"	W 122°12'45.32339"	575.74	RIM
			575.75	CONC.
SOMA-3	2130785.85	6067071.01	575.92	TOP PIPE , BLACK MARK N. SIDE (FELT TIP) (LOCKED AND TIGHT)
	N 37°50'03.58261"	W 122°12'45.86506"	576.31	RIM
			576.30	CONC.

ADDITIONAL POINTS

PT#	NORTHING (FT.)	EASTING (FT.)	ELEVATION (FT.)	DESCRIPTION
108	2130820.55	6067045.27	N/A	BL<
109	2130800.14	6067066.40	N/A	BL<
110	2130830.97	6067096.14	N/A	BL<
104	2130818.02	6067033.92	N/A	BLOCK WALL 8" <PT
105	2130808.04	6067041.66	N/A	BLOCK WALL 8" END
106	2130821.74	6067037.78	N/A	BLOCK WALL 8" END
107	2130821.83	6067037.75	N/A	FNC-WD B-C CL
111	2130872.58	6067087.64	N/A	FNC-WD END CL
112	2130837.52	6067194.12	N/A	FOGL
113	2130793.20	6067156.45	N/A	FOGL
114	2130759.63	6067123.75	N/A	FOGL
115	2130740.79	6067101.26	N/A	FOGL END
117	2130628.30	6066947.69	N/A	TC
116	2130738.69	6067095.34	N/A	TC END
128	2130693.29	6066817.93	558.29	C/L CREEK +0.4' TO TOP OF WATER
127	2130685.30	6066880.75	559.78	C/L CREEK +0.4' TO TOP OF WATER
122	2130664.83	6066937.67	562.81	C/L CREEK +0.4' TO TOP OF WATER
121	2130676.03	6066966.79	563.15	C/L 60" CULVERT +0.5' TO TOP OF WATER

Kier & Wright Engineers Surveyors, Inc.
1233 Quarry Lane, Suite 145, Pleasanton, CA 94566
Phone (925) 249-6555,
Fax (925) 249-6563

PRINTED: 6/9/2005
11:27 AM

DATE: 4/28/04
JOB# A04549

TABLE OF ELEVATIONS & COORDINATES ON MONITORING WELLS

SOMA ENVIRONMENTAL, PROJECT # 2830
5725 THORNHILL DRIVE, OAKLAND

BENCH MARK: NGS Bench mark No.PID# HT2487
DESCRIPTION FROM NGS DATA SHEET:
DESCRIBED BY EAST BAY MUNICIPAL UTILITIES DISTRICT 1947 (SPH) THE AZIMUTH MARK IS AN EBMUD TRIANGULATION STATION DISC SET 1 FOOT BELOW THE SURFACE AND COVERED BY AN 8 INCH IRON CASTING WITH A REMOVABLE LID MARKED CITY MONUMENT. IT IS IN THE SIDEWALK IN FRONT OF A SAFEWAY STORE AT THE INTERSECTION OF GRAND AND WILDWOOD AVENUES. IT IS 1.5 FEET SOUTHEAST OF THE SOUTHEAST CURB OF WILDWOOD AVE., 6.2 FEET OF EAST CURB OF GRAND AVE. AND 10.4 FEET NORTHEAST OF POWERPOLE. THE MARK IS STAMPED LINDA AZIMUTH MARK 1947.

Elevation =37. FEET NAVD88 Datum
BY VERTCON

HORIZONTAL CONTROL:

PID - AA5496
NORTHING =1,988,577.07 , EASTING = 6,077,862.13 FEET; EPOCH DATE = 1991.35

PID - HT2541
NORTHING = 2,130,331.28 , EASTING = 6,062,624.49 FEET; EPOCH DATE = 1991.35

Coordinate values are based on the Califomia Coordinate System, Zone III NAD 83 Datum.

Kier & Wright Engineers Surveyors, Inc.
1233 Quarry Lane, Suite 145, Pleasanton, CA 94566
Phone (925) 249-6555,
Fax (925) 249-6563

DATE: 8/17/05
Job No. 205048

DATE OF SURVEY 8/12/05
INSTRUMENT LEICA TCA 1100L

TABLE OF ELEVATIONS & COORDINATES ON MONITORING WELLS

SOMA ENVIRONMENTAL, PROJECT # 2830
5725 THORNHILL DRIVE, OAKLAND

WELL ID #	NORTHING (FT.) / LATITUDE (D.M.S.)	EASTING (FT.) / LONGITUDE (D.M.S.)	ELEVATION (FT.)	DESCRIPTION
SOMA-4	2130703.437	6067044.632	572.65	TOP PIPE , BLACK MARK N. SIDE (FELT TIP)
	N 37°50'02.76318"	W 122°12'46.17502"	573.03	RIM
			573.03	CONC.
DECIMAL DEGREES	N 37°.83410088	W 121°.21282639"		
		LOCAL CONTROL		
SOMA-2	2130764.55	6067114.08	575.50	TOP PIPE
	N 37°50'03.37985"	W 122°12'45.32339"		
SOMA-3	2130785.85	6067071.01	575.92	TOP PIPE
	N 37°50'03.58261"	W 122°12'45.86506"		

BENCH MARK: NGS Bench mark No.PID# HT2487
DESCRIPTION FROM NGS DATA SHEET:
DESCRIBED BY EAST BAY MUNICIPAL UTILITIES DISTRICT 1947 (SPH) THE AZIMUTH MARK IS AN EBMUD TRIANGULATION STATION DISC SET 1 FOOT BELOW THE SURFACE AND COVERED BY AN 8 INCH IRON CASTING WITH A REMOVABLE LID MARKED CITY MONUMENT. IT IS IN THE SIDEWALK IN FRONT OF A SAFEWAY STORE AT THE INTERSECTION OF GRAND AND WILDWOOD AVENUES. IT IS 1.5 FEET SOUTHEAST OF THE SOUTHEAST CURB OF WILDWOOD AVE., 6.2 FEET OF EAST CURB OF GRAND AVE. AND 10.4 FEET NORTHEAST OF POWERPOLE. THE MARK IS STAMPED LINDA AZIMUTH MARK 1947.

Elevation =37. FEET NAVD88 Datum
BY VERTCON

ALIQUOT ASSOCIATES
1390 MAIN STREET STE 310
WALNUT CREEK, CA. 94596
925-476-2300

DATE: 8/17/05
Job No. 205048

DATE OF SURVEY 8/12/05
INSTRUMENT LEICA TCA 1100L

TABLE OF ELEVATIONS & COORDINATES ON MONITORING WELLS

SOMA ENVIRONMENTAL, PROJECT # 2830
5725 THORNHILL DRIVE, OAKLAND

HORIZONTAL CONTROL:

PID - **AA5496**
NORTHING =1,988,577.07 , EASTING = 6,077,862.13 FEET; EPOCH DATE = 1991.35

PID - **HT2541**
NORTHING = 2,130,331.28 , EASTING = 6,062,624.49 FEET; EPOCH DATE = 1991.35

Coordinate values are based on the California Coordinate System, Zone III NAD 83 Datum.

NOTE
THE VALUES FOR SOMA-4 ARE DERIVED FROM LOCAL CONTROL BASED UPON CONTROL VALUE USED FROM THE PREVIOUS SITE SURVEY AS PROVIDED BY KIER AND WRIGHT

ENVIRONMENTAL ENGINEERING, INC

Well No.:	SOMA 1	**Project No.:**	2831
Casing Diameter:	2 inches	**Address:**	5725 Thornhill Drive
Depth of Well:	27.85 feet		Oakland, CA
Top of Casing Elevation:	576.47 feet	**Date:**	August 3, 2006
Depth to Groundwater:	5.96 feet	**Sampler:**	John Lohman
Groundwater Elevation:	570.51 feet		
Water Column Height:	21.89 feet		
Purged Volume:	16 gallons		

Purging Method: Bailer ☐ Pump ☒

Sampling Method: Bailer ☒ Pump ☐

Color: No ☒ Yes ☐ **Describe:** _____

Sheen: No ☒ Yes ☐ **Describe:** _____

Odor: No ☒ Yes ☐ **Describe:** _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
12:21 PM	START PURGE			
12:24 PM	4	6.70	22.1	620
12:27 PM	8	6.59	20.3	548
12:30 PM	12	6.43	19.5	555
12:34 PM	16	6.43	18.8	558
12:36 PM	SAMPLES			

ENVIRONMENTAL ENGINEERING, INC

Well No.:	SOMA2	**Project No.:**	2831
Casing Diameter:	2 inches	**Address:**	5725 Thornhill Drive
Depth of Well:	24.00 feet		Oakland, CA
Top of Casing Elevation:	575.50 feet	**Date:**	August 3, 2006
Depth to Groundwater:	7.39 feet	**Sampler:**	John Lohman
Groundwater Elevation:	568.11 feet		
Water Column Height:	20.61 feet		
Purged Volume:	16 gallons		

Purging Method:	**Bailer** ☐	**Pump** ☒			
Sampling Method:	**Bailer** ☒	**Pump** ☐			
Color:	**No** ☒	**Yes** ☐	**Describe:**		
Sheen:	**No** ☒	**Yes** ☐	**Describe:**		
Odor:	**No** ☐	**Yes** ☒	**Describe:**	slight	

Field Measurements:

Time	Vol (gallons)	pH	Temp (^{0}C)	E.C. (µs/cm)
11:38 AM	START PURGE			
11:42 AM	4	6.59	19.4	731
11:46 AM	8	6.38	19.9	682
11:50 AM	12	6.35	19.8	681
11:54 AM	16	6.34	19.8	680
11:57 AM	SAMPLES			

ENVIRONMENTAL ENGINEERING, INC

Well No.:	SOMA3	**Project No.:**	2831
Casing Diameter:	2 inches	**Address:**	5725 Thornhill Drive
Depth of Well:	27.77 feet		Oakland, CA
Top of Casing Elevation:	572.92 feet	**Date:**	August 3, 2006
Depth to Groundwater:	7.35 feet	**Sampler:**	John Lohman
Groundwater Elevation:	565.57 feet		
Water Column Height:	20.42 feet		
Purged Volume:	16 gallons		

Purging Method: Bailer ☐ Pump ☒

Sampling Method: Bailer ☒ Pump ☐

Color: No ☒ Yes ☐ **Describe:** _____

Sheen: No ☒ Yes ☐ **Describe:** _____

Odor: No ☒ Yes ☐ **Describe:** _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
10:55 AM	START PURGE			
10:58 AM	4	6.73	19.5	892
11:01 PM	8	6.51	18.2	785
11:04 AM	12	6.42	17.9	756
11:06 AM	16	6.40	17.8	742
11:11 AM	SAMPLES			

ENVIRONMENTAL ENGINEERING, INC

Well No.:	SOMA4	**Project No.:**	2831
Casing Diameter:	2 inches	**Address:**	5725 Thornhill Drive
Depth of Well:	19.70 feet		Oakland, CA
Top of Casing Elevation:	572.65 feet	**Date:**	August 3, 2006
Depth to Groundwater:	8.08 feet	**Sampler:**	John Lohman
Groundwater Elevation:	564.57 feet		
Water Column Height:	11.62 feet		
Purged Volume:	6 gallons		

Purging Method: **Bailer** ☐ **Pump** ☒

Sampling Method: **Bailer** ☒ **Pump** ☐

Color: **No** ☒ **Yes** ☐ **Describe:** _____

Sheen: **No** ☒ **Yes** ☐ **Describe:** _____

Odor: **No** ☒ **Yes** ☐ **Describe:** _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
12:52 PM	START PURGE			
12:55 PM	4	6.78	21.9	702
12:59 PM	8	6.80	20.8	700
1:03 PM	SAMPLES			

Appendix C

Chain of Custody Form and Laboratory Report

for the

Second Quarter 2006 Monitoring Event

CHAIN OF CUSTODY FORM

PAL Pacific Analytical Laboratory
851 West Midway Ave., Suite 201B
Alameda, CA 94501
510-864-0364 Telephone
510-864-0365 Fax

PAL
Login# 6080004

Project No: 2831	Sampler: John Lohman	Analyses/Method
Project Name: 5725 Thornhill Drive Oakland, CA	Report To: Tony Perini	
	Company: SOMA Environmental Engineering, Inc.	
Turnaround Time: Standard	Tel: 925-734-6400 Fax: 925-734-6401	

		Sampling Date/Time		Matrix			# of Containers	Preservatives					TPHg, BTEX, MtBE 8260B	Gas Ox – Lead Scavenge	Ethanol	TPH-d, TPH-mo				
Lab No.	Sample ID	Date	Time	Soil	Water	Waste		HCL	H2SO4	NONE	ICE	Field Notes								
	SOMA-1	8/3/06	12:36pm		X		3 L Amber 6 VOAs	X		X	X	Grab Sample	X	X	X	X				
	SOMA-2		11:57Am		X		3 L Amber 6 VOAs	X		X	X	Grab Sample	X	X	X	X				
	SOMA-3		11:11Am		X		3 L Amber 6 VOAs	X		X	X	Grab Sample	X	X	X	X				
	SOMA-4		1:03pm		X		3 L Amber 6 VOAs	X		X	X	Grab Sample	X	X	X	X				

Sampler Remarks:	Relinquished by:	Date/Time:	Received by:	Date/Time:
EDF REQUIRED		8/3/06 2:55 PM		8/3/06 2:55 PM

PAL
Pacific Analytical Laboratory
851 West Midway Ave. Suite 201
Alameda, CA 94501
Phone (510) 864-0364

16 August 2006

Mansour Sepehr
SOMA Environmental Engineering Inc.
6620 Owens Drive, Suite A
Pleasanton, CA 94588

RE: Thornhill Dr., Oakland

Work Order Number: 6080004

This Laboratory report has been reviewed for technical correctness and completeness. This entire report was reviewed and approved by the Laboratory Director or the Director's designee, as verified by the following signature.

Sincerely,

Maiid Akhavan
Laboratorv Director

PAL

SOMA Environmental Engineering Inc.	Project: Thornhill Dr., Oakland	
6620 Owens Drive, Suite A	Project Number: 2831	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	16-Aug-06 13:23

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SOMA-1	6080004-01	Water	03-Aug-06 12:36	03-Aug-06 15:00
SOMA-2	6080004-02	Water	03-Aug-06 11:57	03-Aug-06 15:00
SOMA-3	6080004-03	Water	03-Aug-06 11:11	03-Aug-06 15:00
SOMA-4	6080004-04	Water	03-Aug-06 13:03	03-Aug-06 15:00

PAL

SOMA Environmental Engineering Inc.	Project: Thornhill Dr., Oakland	
6620 Owens Drive, Suite A	Project Number: 2831	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	16-Aug-06 13:23

Extractable Petroleum Hydrocarbons by 8015 DRO

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SOMA-1 (6080004-01) Water	**Sampled: 03-Aug-06 12:36**	**Received: 03-Aug-06 15:00**							
Diesel (C10-C24)	ND	50.0	ug/l	1	BH60702	03-Aug-06	08-Aug-06	EPA 8015M	
Motor Oil (C24-C36)	ND	250	"	"	"	"	"	"	
Surrogate: Pentacosane		*77.0 %*	*70-130*		"	"	"	"	
SOMA-2 (6080004-02) Water	**Sampled: 03-Aug-06 11:57**	**Received: 03-Aug-06 15:00**							
Diesel (C10-C24)	**286**	50.0	ug/l	1	BH60702	03-Aug-06	08-Aug-06	EPA 8015M	D-06, D-30
Motor Oil (C24-C36)	ND	250	"	"	"	"	"	"	
Surrogate: Pentacosane		*124 %*	*70-130*		"	"	"	"	
SOMA-3 (6080004-03) Water	**Sampled: 03-Aug-06 11:11**	**Received: 03-Aug-06 15:00**							
Diesel (C10-C24)	**60.0**	50.0	ug/l	1	BH60702	03-Aug-06	08-Aug-06	EPA 8015M	D-06, D-09
Motor Oil (C24-C36)	ND	250	"	"	"	"	"	"	
Surrogate: Pentacosane		*93.0 %*	*70-130*		"	"	"	"	
SOMA-4 (6080004-04) Water	**Sampled: 03-Aug-06 13:03**	**Received: 03-Aug-06 15:00**							
Diesel (C10-C24)	**357**	50.0	ug/l	1	BH60702	03-Aug-06	08-Aug-06	EPA 8015M	D-06, D-30
Motor Oil (C24-C36)	ND	250	"	"	"	"	"	"	
Surrogate: Pentacosane		*47.8 %*	*70-130*		"	"	"	"	*S-04*

PAL

SOMA Environmental Engineering Inc.	Project: Thornhill Dr., Oakland	
6620 Owens Drive, Suite A	Project Number: 2831	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	16-Aug-06 13:23

Volatile Organic Compounds by EPA Method 8260B

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SOMA-1 (6080004-01) Water Sampled: 03-Aug-06 12:36 Received: 03-Aug-06 15:00									
Gasoline (C6-C12)	ND	50.0	ug/l	1	BH60701	03-Aug-06	03-Aug-06	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	1.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	**4.52**	0.500	"	"	"	"	"	"	
DIPE	ND	0.500	"	"	"	"	"	"	
ETBE	ND	0.500	"	"	"	"	"	"	
TAME	ND	2.00	"	"	"	"	"	"	
TBA	ND	10.0	"	"	"	"	"	"	
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.500	"	"	"	"	"	"	
Ethanol	ND	1000	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*107 %*		*70-130*	"	"	"	"	
Surrogate: Dibromofluoromethane		*112 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*103 %*		*70-130*	"	"	"	"	
SOMA-2 (6080004-02) Water Sampled: 03-Aug-06 11:57 Received: 03-Aug-06 15:00									
Gasoline (C6-C12)	**3580**	50.0	ug/l	1	BH60701	03-Aug-06	03-Aug-06	EPA 8260B	
Benzene	**0.800**	0.500	"	"	"	"	"	"	
Ethylbenzene	**2.65**	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	1.00	"	"	"	"	"	"	
o-xylene	**0.700**	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	**44.8**	0.500	"	"	"	"	"	"	
DIPE	ND	0.500	"	"	"	"	"	"	
ETBE	ND	0.500	"	"	"	"	"	"	
TAME	ND	2.00	"	"	"	"	"	"	
TBA	**32.4**	10.0	"	"	"	"	"	"	
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.500	"	"	"	"	"	"	
Ethanol	ND	1000	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*131 %*		*70-130*	"	"	"	"	*S-GC*
Surrogate: Dibromofluoromethane		*101 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*106 %*		*70-130*	"	"	"	"	

PAL

SOMA Environmental Engineering Inc.	Project: Thornhill Dr., Oakland	
6620 Owens Drive, Suite A	Project Number: 2831	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	16-Aug-06 13:23

Volatile Organic Compounds by EPA Method 8260B

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SOMA-3 (6080004-03) Water Sampled: 03-Aug-06 11:11 Received: 03-Aug-06 15:00									
Gasoline (C6-C12)	ND	50.0	ug/l	1	BH60701	03-Aug-06	03-Aug-06	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	1.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	**8.05**	0.500	"	"	"	"	"	"	
DIPE	ND	0.500	"	"	"	"	"	"	
ETBE	ND	0.500	"	"	"	"	"	"	
TAME	ND	2.00	"	"	"	"	"	"	
TBA	ND	10.0	"	"	"	"	"	"	
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.500	"	"	"	"	"	"	
Ethanol	ND	1000	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*111 %*		*70-130*	"	"	"	"	
Surrogate: Dibromofluoromethane		*107 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*102 %*		*70-130*	"	"	"	"	
SOMA-4 (6080004-04) Water Sampled: 03-Aug-06 13:03 Received: 03-Aug-06 15:00									
Gasoline (C6-C12)	**4340**	50.0	ug/l	1	BH60701	03-Aug-06	03-Aug-06	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	1.00	"	"	"	"	"	"	
o-xylene	**0.520**	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	**34.2**	0.500	"	"	"	"	"	"	
DIPE	ND	0.500	"	"	"	"	"	"	
ETBE	ND	0.500	"	"	"	"	"	"	
TAME	ND	2.00	"	"	"	"	"	"	
TBA	**216**	10.0	"	"	"	"	"	"	
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.500	"	"	"	"	"	"	
Ethanol	ND	1000	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*133 %*		*70-130*	"	"	"	"	*S-GC*
Surrogate: Dibromofluoromethane		*99.8 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*108 %*		*70-130*	"	"	"	"	

Pacific Analytical Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SOMA Environmental Engineering Inc.	Project: Thornhill Dr., Oakland	
6620 Owens Drive, Suite A	Project Number: 2831	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	16-Aug-06 13:23

Extractable Petroleum Hydrocarbons by 8015 DRO - Quality Control

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BH60702 - EPA 3510B										
Blank (BH60702-BLK1)				Prepared & Analyzed: 07-Aug-06						
Surrogate: Pentacosane	*59.3*		*ug/l*	*50.0*		*119*	*70-130*			
Diesel (C10-C24)	ND	50.0	"							
Motor Oil (C24-C36)	ND	250	"							
LCS (BH60702-BS1)				Prepared & Analyzed: 07-Aug-06						
Surrogate: Pentacosane	*55.7*		*ug/l*	*50.0*		*111*	*70-130*			
Diesel (C10-C24)	716	50.0	"	1000		71.6	50-130			
LCS Dup (BH60702-BSD1)				Prepared & Analyzed: 07-Aug-06						
Surrogate: Pentacosane	*55.4*		*ug/l*	*50.0*		*111*	*70-130*			
Diesel (C10-C24)	795	50.0	"	1000		79.5	50-130	10.5	40	

SOMA Environmental Engineering Inc.	Project: Thornhill Dr., Oakland	
6620 Owens Drive, Suite A	Project Number: 2831	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	16-Aug-06 13:23

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BH60701 - EPA 5030 Water MS										
Blank (BH60701-BLK1)				Prepared & Analyzed: 07-Aug-06						
Surrogate: 4-Bromofluorobenzene	*53.8*		*ug/l*	*50.0*		*108*	*70-130*			
Surrogate: Dibromofluoromethane	*57.2*		*"*	*50.0*		*114*	*70-130*			
Surrogate: Perdeuterotoluene	*51.4*		*"*	*50.0*		*103*	*70-130*			
MTBE	ND	0.500	"							
DIPE	ND	0.500	"							
ETBE	ND	0.500	"							
TAME	ND	2.00	"							
TBA	ND	10.0	"							
Gasoline (C6-C12)	ND	50.0	"							
1,2-dichloroethane	ND	0.500	"							
1,2-Dibromoethane (EDB)	ND	0.500	"							
Ethanol	ND	1000	"							
Benzene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
m&p-Xylene	ND	1.00	"							
o-xylene	ND	0.500	"							
Toluene	ND	2.00	"							
LCS (BH60701-BS1)				Prepared & Analyzed: 07-Aug-06						
Surrogate: 4-Bromofluorobenzene	*60.4*		*ug/l*	*50.0*		*121*	*70-130*			
Surrogate: Dibromofluoromethane	*42.1*		*"*	*50.0*		*84.2*	*70-130*			
Surrogate: Perdeuterotoluene	*48.9*		*"*	*50.0*		*97.8*	*70-130*			
MTBE	104	0.500	"	100		104	70-130			
ETBE	95.3	0.500	"	100		95.3	70-130			
TAME	99.7	2.00	"	100		99.7	70-130			
TBA	510	10.0	"	500		102	70-130			
Gasoline (C6-C12)	1830	50.0	"	2000		91.5	70-130			
Benzene	114	0.500	"	100		114	70-130			
Toluene	113	2.00	"	100		113	70-130			

SOMA Environmental Engineering Inc.	Project: Thornhill Dr., Oakland	
6620 Owens Drive, Suite A	Project Number: 2831	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	16-Aug-06 13:23

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Pacific Analytical Laboratory

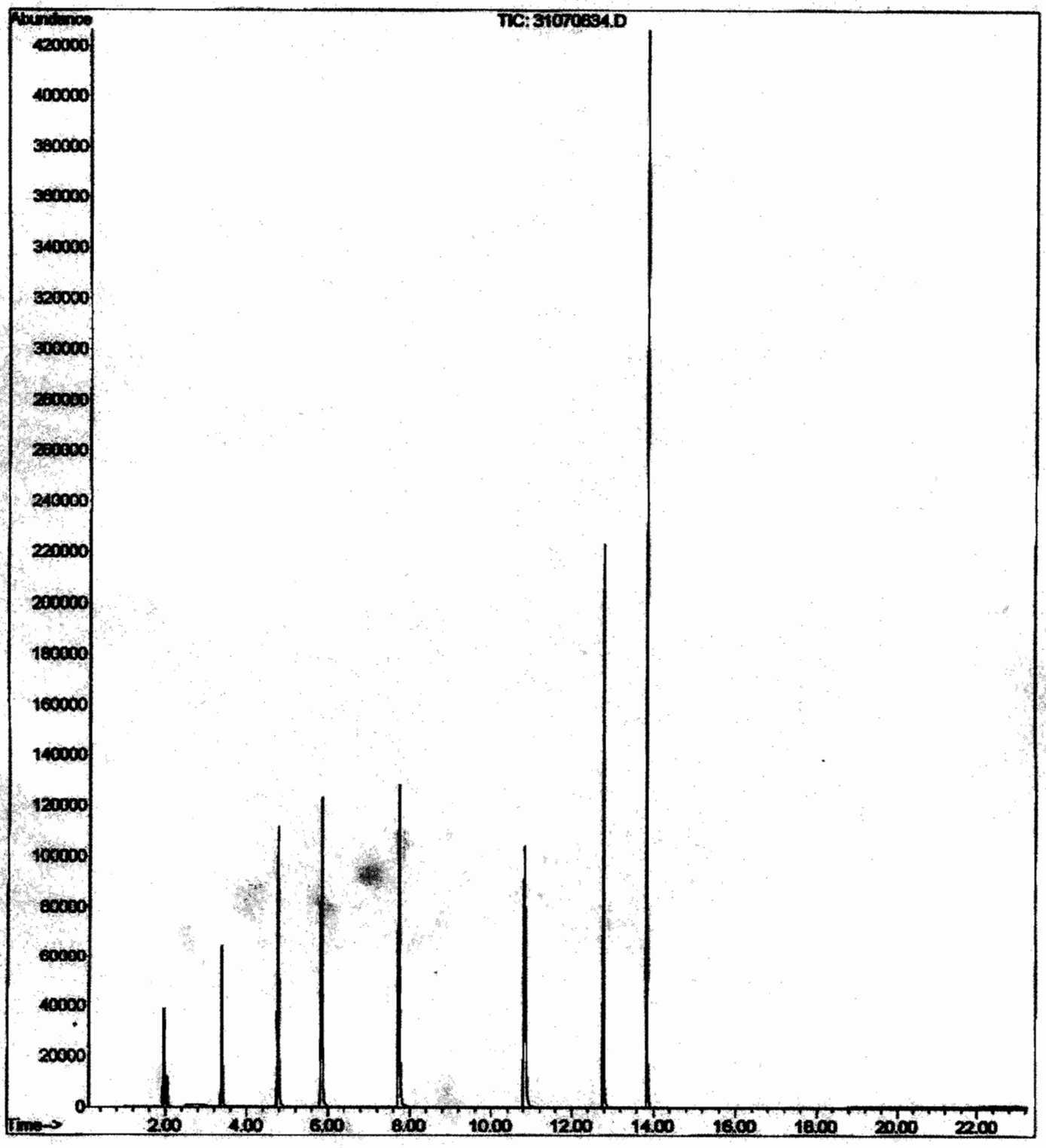
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BH60701 - EPA 5030 Water MS										
LCS Dup (BH60701-BSD1)				Prepared & Analyzed: 07-Aug-06						
Surrogate: 4-Bromofluorobenzene	*53.2*		*ug/l*	*50.0*		*106*	*70-130*			
Surrogate: Dibromofluoromethane	*49.1*		*"*	*50.0*		*98.2*	*70-130*			
Surrogate: Perdeuterotoluene	*48.8*		*"*	*50.0*		*97.6*	*70-130*			
MTBE	107	0.500	"	100		107	70-130	2.84	20	
ETBE	93.8	0.500	"	100		93.8	70-130	1.59	20	
TAME	96.3	2.00	"	100		96.3	70-130	3.47	20	
Gasoline (C6-C12)	1910	50.0	"	2000		95.5	70-130	4.28	20	
TBA	452	10.0	"	500		90.4	70-130	12.1	20	
Benzene	112	0.500	"	100		112	70-130	1.77	20	
Toluene	109	2.00	"	100		109	70-130	3.60	20	

SOMA Environmental Engineering Inc.	Project: Thornhill Dr., Oakland	
6620 Owens Drive, Suite A	Project Number: 2831	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	16-Aug-06 13:23

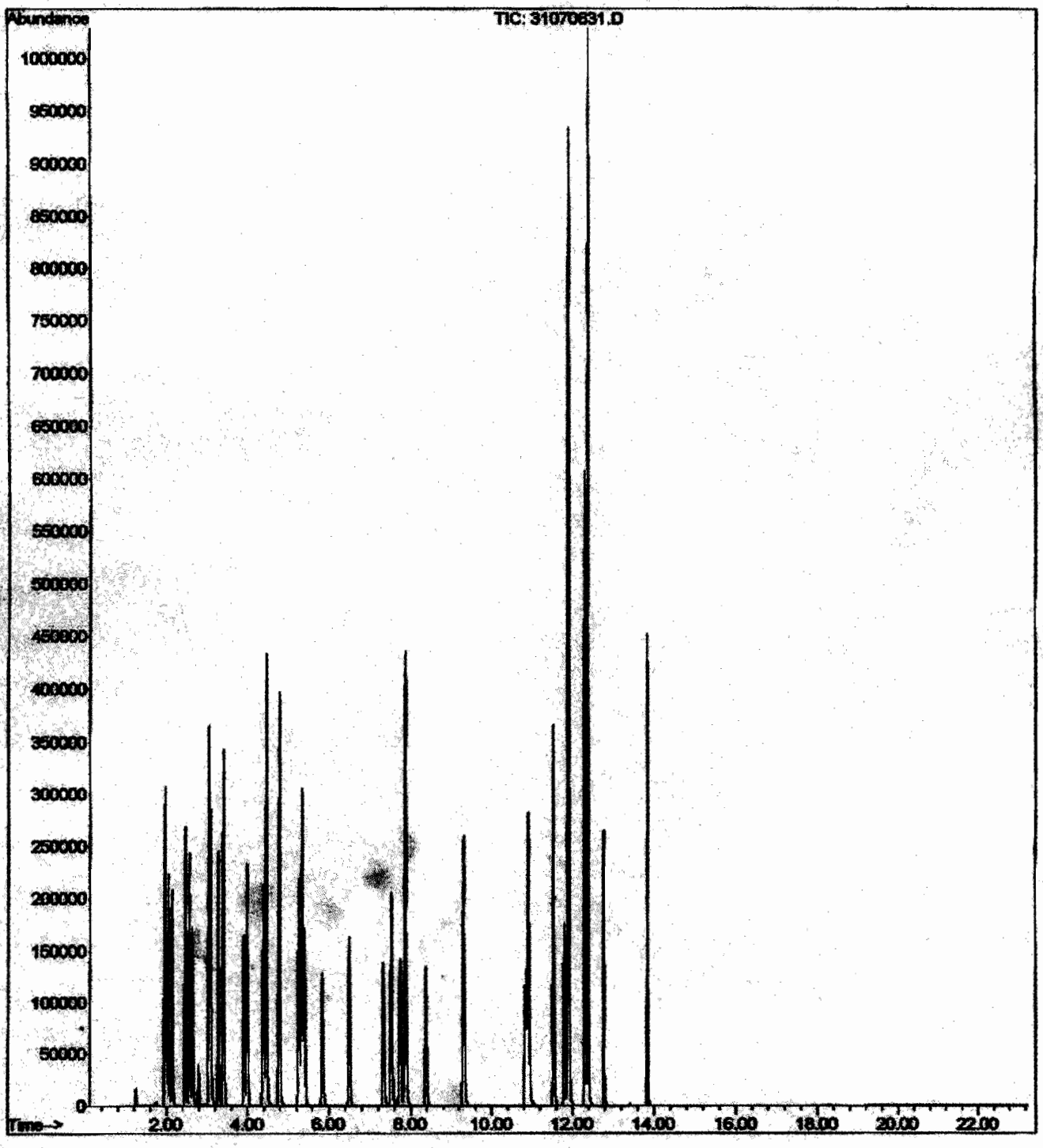
Notes and Definitions

S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
D-30	Unidentified hydrocarbons C9-C16.
D-09	Results in the diesel organics range are primarily due to overlap from a heavy oil range product.
D-06	The sample chromatographic pattern does not resemble the fuel standard used for quantitation.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

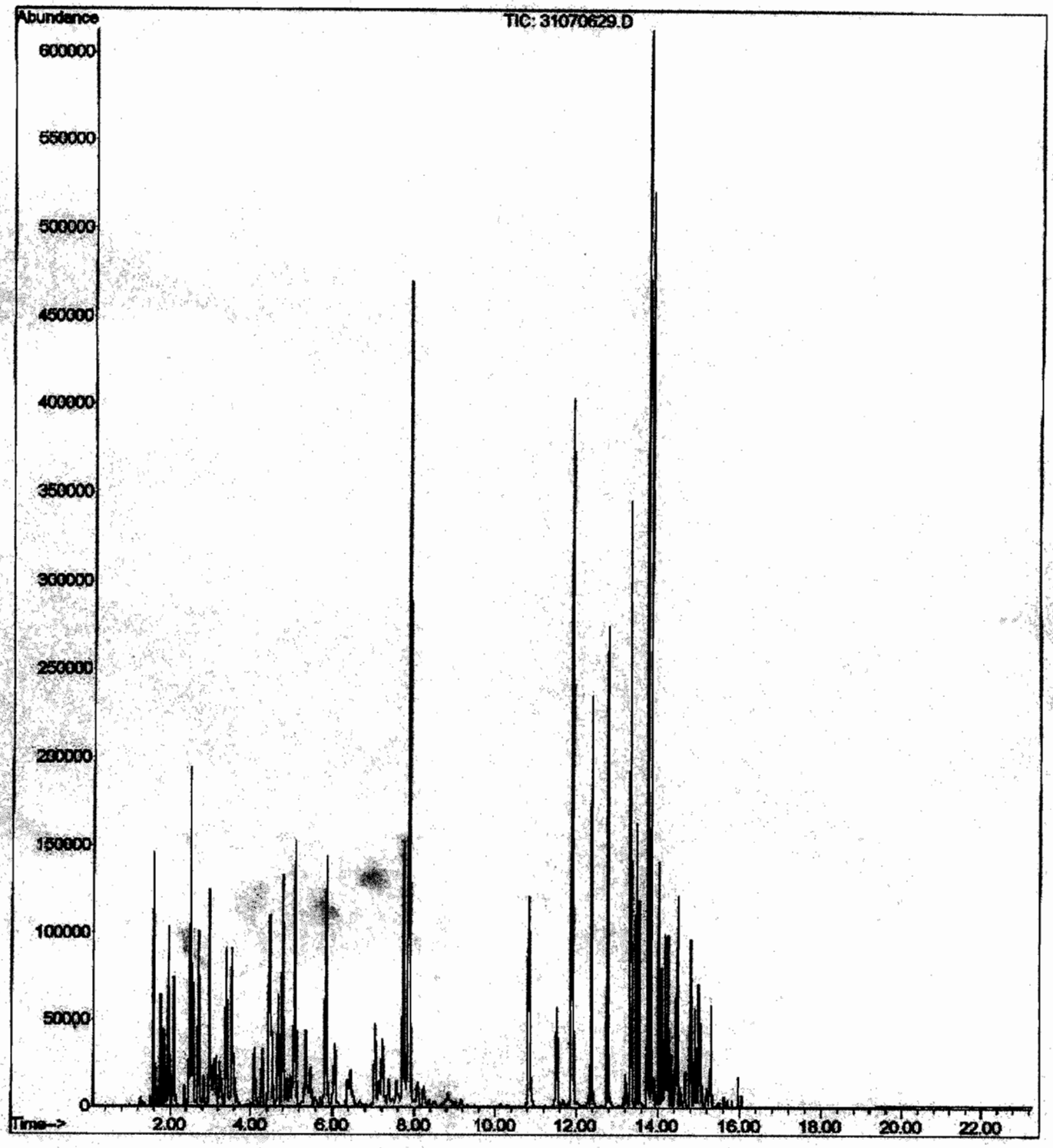
File :C:\MSDChem\1\DATA\2006-Jul-31-1507.b\31070634.D
Operator :
Acquired : 2 Aug 2006 1:44 pm using AcqMethod OXY21506.M
Instrument : PAL GCMS
Sample Name: BH60701-BLK1
Misc Info :
Vial Number: 34



File :C:\MSDChem\1\DATA\2006-Jul-31-1507.b\31070631.D
Operator :
Acquired : 2 Aug 2006 11:48 am using AcqMethod OXY21506.M
Instrument : PAL GCMS
Sample Name: BH60701-BS1@voc
Misc Info :
Vial Number: 31



File :C:\MSDChem\1\DATA\2006-Jul-31-1507.b\31070629.D
Operator :
Acquired : 2 Aug 2006 10:33 am using AcqMethod OXY21506.M
Instrument : PAL GCMS
Sample Name: BH60701-BS1@gas
Misc Info :
Vial Number: 29



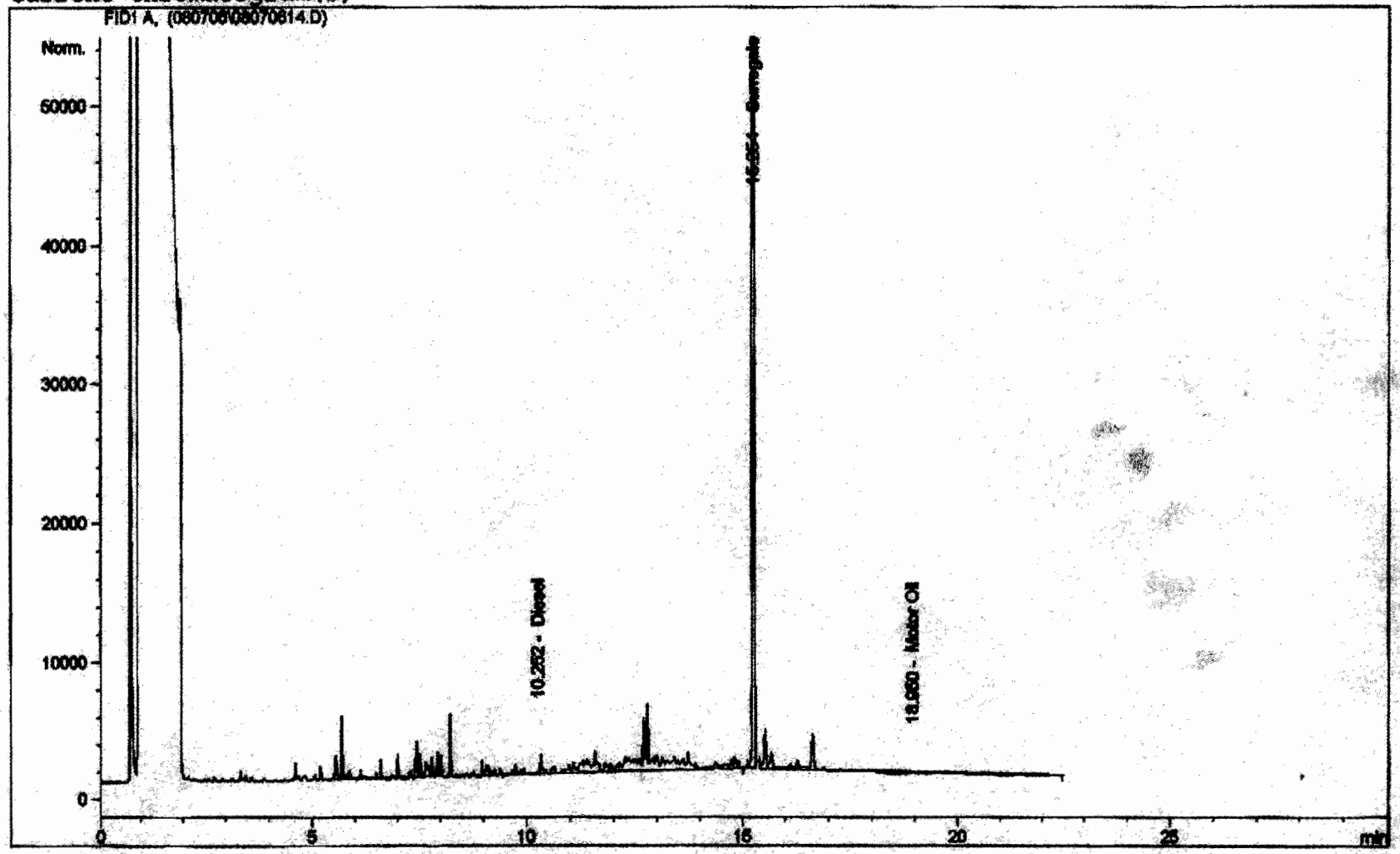
Print of window 38: Current Chromatogram(s)

Injection Date : 8/7/06 5:30:43 PM
Sample Name : BH60702-BLK1
Acq. Operator : jz

Seq. Line : 4
Vial : 4
Inj : 1
Inj Volume : 2 ul

Acq. Method : C:\HPCHEM\1\METHODS\GC052306.M
Last changed : 5/24/06 10:25:47 AM by jz
Analysis Method : C:\HPCHEM\1\METHODS\GC052306.M
Last changed : 8/16/06 10:37:09 AM by jz
(modified after loading)

Current Chromatogram(s)



Print of window 3: Current Chromatogram(s)

Injection Date : 8/7/06 6:03:19 PM Seq. Line : 5
Sample Name : BH60702-BS1 Vial : 5
Acq. Operator : jz Inj : 1
Inj Volume : 2 ul

Acq. Method : C:\HPCHEM\1\METHODS\GC052306.M
Last changed : 5/24/06 10:25:47 AM by jz
Analysis Method : C:\HPCHEM\1\METHODS\GC052306.M
Last changed : 8/16/06 10:37:09 AM by jz
(modified after loading)

Current Chromatogram(s)