

✓ No 265



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January 21, 2005

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

Subject: **StID#3337**
Site Address: 3609 International Blvd., Oakland, California

Dear Mr. Gholami:

Enclosed for your review is a copy of SOMA's "Fourth Quarter 2004 Groundwater Monitoring and Remediation System Operation Report" for the subject property.

Thank you for your time in reviewing our report. If you have any questions or comments, please call me at (925) 244-6600.

Sincerely,

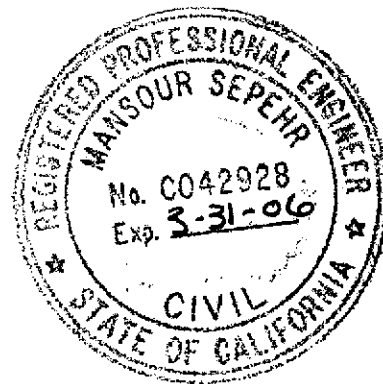
A handwritten signature in black ink, appearing to read 'Mansour Sepehr', is written over a horizontal line.

Mansour Sepehr, Ph.D., PE
Principal Hydrogeologist

Enclosure

cc: Mr. Abolghassem Razi w/enclosure
Tony's Express Auto Service

Mr. Vince Tong w/enclosure
Traction International



Certification

This report has been prepared by SOMA Environmental Engineering, Inc. on behalf of Mr. Abolghassem Razi, the property owner of 3609 International Boulevard, Oakland, California, to comply with the Alameda County Environmental Health Service's requirements for the Fourth Quarter 2004 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. Abolghassem Razi, the owner of Tony's Express Auto Service, which is located at 3609 International Boulevard at the intersection of 36th Avenue in Oakland, California (the "Site"), as shown in Figure 1.

The Site is located in an area where the surrounding properties are primarily commercial businesses and residential housing. The Site currently houses a gasoline service station and convenience store. During the Third Quarter 2002 the station was remodeled and several hydraulic hoists were removed. The station no longer has an auto repair facility. Figure 2 illustrates the locations of the main service station, dispenser islands, underground storage tanks (USTs), the on-site and off-site groundwater monitoring wells, and neighboring properties.

This report summarizes the results of the Fourth Quarter 2004 groundwater monitoring event conducted at the Site on December 7 and December 8, 2004. Included in this report are the results of the laboratory analysis on the groundwater samples that were analyzed for:

- Total petroleum hydrocarbons as gasoline (TPH-g);
- Benzene, toluene, ethylbenzene, total xylenes (collectively referred to as BTEX); and
- Methyl tertiary Butyl Ether (MtBE).

In addition to the above laboratory analyses, a natural attenuation study was conducted during this monitoring event. This study consisted of measuring groundwater bioattenuation parameters, which included dissolved oxygen (DO), ferrous iron (Fe^{+2}), nitrate (NO_3^-) and sulfate (SO_4^{-2}). The objective of the natural attenuation study was to evaluate whether the petroleum hydrocarbons found in the groundwater were biodegrading. Therefore, groundwater samples collected during this monitoring event were analyzed for common electron acceptors and other geochemical indicators. The results of these analyses are also described in this report.

These activities were performed in accordance with the general guidelines of the Regional Water Quality Control Board (RWQCB) and the Alameda County Environmental Health Services (ACEHS).

Appendix A details the groundwater monitoring procedures used during the Fourth Quarter 2004 monitoring event.

This report also describes the operation of the groundwater extraction system installed by SOMA in December 1999, as well as the operation of the vapor extraction system, which was installed by SOMA in July 2000. The locations of

the groundwater extraction system and the vapor extraction system are displayed in Figure 2.

1.1 Background

In 1992, Soil Tech Engineering, Inc. (STE) conducted an initial environmental investigation to determine whether or not the soil near the product lines and USTs had been impacted by petroleum hydrocarbons. In July 1993, STE removed one single-walled 10,000-gallon gasoline tank and one single-walled 6,000-gallon gasoline tank along with a 550-gallon waste oil tank from the Site. Three double-walled USTs replaced these tanks. Currently, there is one 10,000-gallon double-walled gasoline tank and two 6,000-gallon double-walled gasoline tanks beneath the Site. The locations of the USTs are shown in Figure 2.

In December 1997, Mr. Razi retained Western Geo-Engineers (WEGE) to conduct additional investigations and perform groundwater monitoring on a quarterly basis. The results of the WEGE groundwater monitoring events indicated elevated levels of petroleum hydrocarbons and MtBE in the groundwater.

In April 1999, Mr. Razi retained SOMA to conduct groundwater monitoring, risk-based corrective action (RBCA), a corrective action plan (CAP), as well as soil and groundwater remediation at the Site. The results of the RBCA study indicated that the Site is a high-risk groundwater site; therefore, the soil and groundwater in the on and off-site areas warranted remedial actions. The source of the petroleum hydrocarbons in the groundwater was believed to have been the former USTs, which were used to store gasoline at the Site. The results of the CAP study indicated that the installation of a French drain combined with a vapor extraction system would be the most cost effective alternative for the Site's remediation.

In late August 1999, SOMA installed a French drain and groundwater treatment system to prevent further migration of the chemically impacted groundwater. This treatment system has been in operation since early December 1999. In July 2000, following approval from the ACEHS, SOMA installed a vapor extraction system as recommended in our CAP document, dated July 1, 1999.

In January 2002, Environmental Fabric removed old product dispensers and installed new ones in the fuel islands.

On July 25, 2003, SOMA installed an additional on-site extraction pump in the western French drain riser. The extraction pump was installed to create a capture zone in the region around the USTs and to contain off-site migration in the southwestern corner of the Site.

2.0 Results

The following sections provide the results of the field measurements and laboratory analyses for the December 7 and 8, 2004 groundwater monitoring event.

2.1 Field Measurements

Table 1 presents the calculated groundwater elevations, as well as the depths to groundwater for each monitoring well and riser. The calculated groundwater elevation data was used to evaluate the impact of the French drain and determine the extent of the groundwater extraction capture zone.

As shown in Table 1, the depths to groundwater for the monitoring wells ranged from 9.29 feet in monitoring well MW-10 to 11.32 feet in monitoring well MW-3. The corresponding groundwater elevations ranged from 26.81 in well MW-12 to 30.43 feet in well MW-5. The groundwater elevations for the center, east and west risers were 24.79 feet, 25.81 feet and 24.31 feet, respectively.

Groundwater elevations in all of the monitoring wells increased since the Third Quarter 2004. Local recharge rates in each well, as well as seasonal fluctuations determine the variations in the groundwater elevations. Due to the amount of rain encountered this quarter, the groundwater elevations have increased.

Figure 3 displays the groundwater elevation contour map as measured during the Fourth Quarter 2004 monitoring event. Throughout the Site, the groundwater flows towards the French drain at an approximate gradient of 0.071 feet/foot. The lowest site-wide groundwater elevation was measured in the center French drain riser. The calculated groundwater elevation data was also used to evaluate the impact of the French drain's operation. Based on the groundwater elevation data, it appears that the French drain is providing excellent hydraulic control in preventing the contaminants from migrating further off-site.

The field notes for the physical, chemical and biodegradation parameters measured during this monitoring event are included in Appendix B.

Naturally occurring biological processes can enhance the removal rate of contaminants in the subsurface. During the degradation processes, indigenous bacteria that exist in the subsurface utilize the energy released from the transfer of electrons to drive the redox reactions that remove organic mass from contaminated groundwater. The more positive the redox potential of an electron acceptor, the more energetically favorable is the reaction utilizing that electron acceptor. Based on thermodynamic considerations, the most energetically preferred electron acceptor for redox reactions is DO, followed by nitrate, manganese, ferric iron, sulfate, and carbon dioxide, in descending order of preference. Evaluating the distribution of these electron acceptors can provide evidence of where and to what extent hydrocarbon biodegradation is occurring.

In general, DO was detected at low concentrations throughout the Site. The highest DO concentration was measured in well MW-1 at 5.02 mg/L. ORP showed negative redox potentials in all of the wells, with the exception of MW-5, MW-7, MW-10, and MW-11. Oxidation of petroleum hydrocarbons could have occurred in these monitoring wells at these low DO readings. The negative redox potentials indicate these wells are conducive to anaerobic biodegradation.

The presence of Fe^{2+} indicates that the available DO in the subsurface has been consumed and anaerobic bacteria began to utilize other electrons acceptors, such as Fe^{3+} , NO_3^- and SO_4^{2-} , to metabolize dissolved hydrocarbons. Ferrous iron concentrations can thus be used as an indicator of anaerobic biodegradation. Ferrous iron is a product of the reduction reaction of ferric iron and hydrocarbons. Ferrous iron was detected in wells MW-1, MW-3, MW-6, MW-8, and MW-12. In general, ferrous iron concentrations were detected at low values in these referenced wells, with the exception of well MW-3. Ferrous iron was detected at the equipment's maximum allowable range of 3.30 mg/L in well MW-3.

Nitrate concentrations were below the equipment's minimum allowable level in all of the groundwater samples collected throughout the Site. The presence of high ferrous iron concentrations in combination with non-detectable nitrate levels is indicative of anaerobic biodegradation beneath the Site.

The absence of sulfate in the groundwater samples may be indicative of an anaerobic methanogenesis process. Sulfate was below the equipment tolerance level in all of the groundwater samples collected throughout the Site, with the exception of well MW-5. Sulfate was detected in well MW-5 at 35 mg/L.

2.2 Laboratory Analysis

Table 1 presents the results of the laboratory analyses on the groundwater samples collected during the Fourth Quarter 2004 monitoring event. In general, the most impacted monitoring wells this quarter were MW-1 and MW-3, which are in the vicinity of the USTs, and MW-6, which is near the soil vapor extraction (SVE) system.

As shown in Table 1, TPH-g was detected in all of the groundwater samples collected this quarter, with the exception of well MW-4. The most impacted TPH-g well was MW-1, which had a concentration of 22,790 ug/L. However, high TPH-g concentrations were also detected in wells MW-3, MW-6, and MW-8. Figure 4 displays the contour map of the TPH-g concentrations in the groundwater during the Fourth Quarter 2004 monitoring event. As shown in

Figure 4, high TPH-g concentrations were detected in the vicinity of the USTs, near the SVE system, and in the vicinity of the French drain.

As shown in Table 1, all BTEX concentrations were at low levels in wells MW-2 and MW-11. In well MW-4, both toluene and total xylenes were below the laboratory reporting limit, and both benzene and ethylbenzene were at low levels. In wells MW-5 and MW-7, all BTEX analytes were below the laboratory reporting limit. In well MW-12, benzene was detected at a trace concentration, all other BTEX analytes were below the laboratory reporting limit.

BTEX concentrations appear to have impacted the locations in the vicinity of the UST cavity and SVE treatment system to a greater extent. The highest BTEX concentrations, with the exception of ethylbenzene, were detected in well MW-1. The highest ethylbenzene concentration was detected in well MW-6. Figure 5 displays the contour map of benzene concentrations in the groundwater during the Fourth Quarter 2004 monitoring event. As shown in Figure 5, the highest benzene concentrations were found in MW-1 and MW-3, which are in the vicinity of the USTs, and in well MW-6, which is in the vicinity of the vapor extraction system.

MtBE was below the laboratory reporting limit in monitoring wells MW-2, MW-4, MW-6, MW-7, and MW-11. Figure 6 displays the contour map of MtBE concentrations in the groundwater during the Fourth Quarter 2004 monitoring event, analyzed using EPA Method 8260B. In general, with the exception of well MW-1, MtBE was either at low concentrations or below the laboratory reporting limit throughout the Site.

The laboratory report and COC form for the Fourth Quarter 2004 monitoring event are included in Appendix C.

2.3 Historical Analytical Results

Table 1 shows the historical groundwater analytical data. The following concentration trends have been observed in the more impacted wells MW-1, MW-3, and MW-6, since the previous monitoring event.

- In well MW-1, TPH-g increased slightly, and both benzene and MtBE decreased.
- In well MW-3, TPH-g, benzene, and MtBE all decreased. TPH-g has shown a decreasing trend since the First Quarter 2004.
- In well MW-6, both TPH-g and benzene increased slightly, and MtBE remained below the laboratory reporting limit.

To review further detailed groundwater concentration trends refer to Table 1.

3.0 Groundwater Treatment System Operation

The treatment system began operating on December 9, 1999. Since that time, 2,667,620 gallons of groundwater has been treated and discharged under the existing discharge permit (as of December 6, 2004), into the East Bay Municipal Utility District's (EBMUD's) sewer system.

On January 9, 2004, the pneumatic downhole pumps in the western and center French drain risers were removed and replaced with electrical downhole pumps. On July 25, 2004, a downhole pneumatic pump was installed in the western riser of the French drain. The schematic of the remediation system is displayed in Figure 7.

As required by the discharge permit and the ACEHS, sampling of the groundwater treatment system has been performed on a routine basis. Table 2 presents the total volume of treated groundwater and the groundwater analytical results. Table 2 shows that all of the effluent samples have been below the discharge limits set forth by EBMUD.

The laboratory reports for the groundwater treatment system during this quarter are included in Appendix D of this report.

The cumulative masses of TPH-g and MtBE extracted from the groundwater since the installation of the treatment system is displayed in Figure 8. As Figure 8 shows, an approximate total of 177 pounds of TPH-g and 83 pounds of MtBE have been removed since the system's initial start-up until December 6, 2004.

4.0 Soil Vapor Extraction System Operation

The soil vapor extraction (SVE) system consists of 6 vapor extraction wells, a de-moisturizing unit, a blower, and four drums of granulated active carbon (GAC) filters. The vapor extraction system began operating on July 24, 2000. Since then, during its working days, the system has extracted and treated more than 3,000,000 liters per day of soil gas. When the system first began to operate the influent had a concentration of 394 parts per million on volumetric basis (ppmv) of petroleum hydrocarbons. However, it gradually decreased to 68 ppmv after 31 days of operation.

The SVE system has remained in compliance with the Bay Area Air Quality Management District's (BAAQMD's) operating permit. In November 2002 and August 2003, SOMA met a representative of the BAAQMD on-site. Air samples from the SVE system were collected at this time and determined to be in compliance with the discharge permit's requirements.

During the rainy seasons the watertable ascends closer to the ground's surface causing a reduction in the depth of the unsaturated zone beneath the Site. The SVE system during the rainy time period is shutdown. During the drier seasons the system is restarted; this allows a greater petroleum mass to be removed in the larger unsaturated region. The SVE system was shutdown and has been inoperable since October 28, 2004.

SOMA has conducted periodic carbon change-outs on the SVE system to ensure the discharge limits are not exceeded. The last carbon change-out was on May 5, 2004. During this change-out, all four SVE carbon drums were replaced.

Field tests have been conducted to calculate the total mass of petroleum hydrocarbons removed by the SVE system. As shown in Table 3, as of October 28, 2004, the SVE system has removed approximately 424.20 pounds of petroleum hydrocarbons from the vadose zone beneath the Site.

5.0 Conclusions and Recommendations

The findings of the Fourth Quarter 2004 groundwater monitoring event can be summarized as follows:

1. The groundwater remediation system is providing excellent hydraulic control in preventing further migration of the contaminants.
2. The bio-attenuation study confirmed the occurrence of biodegradation beneath the Site. Based on this study, the affected areas appear in the vicinity of the USTs in wells MW-1 and MW-3, as well as the eastern section of the Site in well MW-6.
3. The source area remains in the vicinity of the USTs, in wells MW-1 and MW-3. High TPH-g concentrations were also detected in wells MW-6 and MW-8. However, TPH-g decreased significantly in well MW-3; benzene and MtBE also decreased.
4. In general, the GAC and SVE systems have effectively reduced contaminants throughout the Site.
5. Approximately 2,667,620 gallons of groundwater has been treated and discharged into EBMUD's sewer system, under the existing discharge permit (as of December 6, 2004). All effluent samples from the groundwater treatment system have remained below the allowable discharge requirements. From initial start-up to December 6, 2004, approximately 177 pounds of TPH-g and 83 pounds of MtBE have been removed during the operation of the treatment system.
6. As of October 28, 2004, the SVE system has removed approximately 424.20 pounds of petroleum hydrocarbons from the vadose zone beneath the Site. The operation of the SVE system is based on seasonal

fluctuations; the system is turned off during wetter periods of the year and operational during drier periods. The system was shutdown on October 28, 2004.

Based on the results of this monitoring event, SOMA recommends:

- Continual monitoring of the treatment system to maintain the removal of contaminant mass in the groundwater.
- Continual site monitoring of the biodegradation parameters to determine if the injection of concentrated solutions of terminal electron receptors into the groundwater, in the vicinity of the more contaminated wells, may enhance the biodegradation process.
- Continued quarterly monitoring programs to better understand the seasonal variation in the groundwater quality conditions and rate of contaminant removal.
- Further remedial action, which would include using ozone sparging, especially at wells MW-1, MW-3, and MW-6, which are the more impacted regions.

6.0 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 as well as the summaries of data produced by previous environmental consultants. The number and location 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
Historical Groundwater Elevation Data & Analytical Results
 3609 International Boulevard, Oakland, California

Monitoring Well	Date	Top Of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MRBE ¹ EPA 8260B (µg/L)
MW-1	Oct-94	97.99	15.39	82.60	320,000	24,000	21,000	2,600	15,000	NA
	Dec-94	97.99	9.32	88.67	80,000	3,800	6,600	2,300	11,000	NA
	Mar-95	97.99	8.07	89.92	32,000	190	160	150	490	NA
	Jun-95	97.99	9.53	88.46	21,000	950	650	570	150	NA
	Oct-95	97.99	13.29	84.70	59,000	140	130	140	390	NA
	Jan-96	97.99	10.07	87.92	30,000	71	73	50	120	NA
	Apr-96	97.99	8.29	89.70	31,000	96	120	63	170	NA
	Dec-96	97.99	11.67	86.32	NA	NA	NA	NA	NA	NA
	Apr-97	97.99	11.14	86.85	NA	NA	NA	NA	NA	NA
	Dec-97	97.99	9.30	88.69	27,000	2,300	2,100	1,400	5,100	NA
	Sep-98	97.99	13.58	84.41	NA	NA	NA	NA	NA	NA
	Dec-98	97.99	11.10	86.89	65,000	2,500	2,400	2,300	9,500	160
	Mar-99	97.99	9.91	88.08	17,000	480	860	850	3,000	190
	Jun-99	97.99	11.10	86.89	25,000	1,110	1,460	1,330	5,265	77
	Aug-99	97.99	13.35	84.64	19,750	676	463	893	2,938	38
	Nov-99	97.99	14.45	83.54	10,000	693	15	<5	3,471	50
	Feb-00	97.99	11.20	86.79	40,000	2,280	1,380	8	6,130	47
	May-00	97.99	11.49	86.50	15,610	610	350	310	1,400	<5
	Aug-00	97.99	13.36	84.63	11,000	638	<5	<5	<5	17.1
	Nov-00	97.99	13.20	84.79	7,050	435	52	ND	689	10
	Mar-01	97.99	8.96	89.03	14,570	1,005	440	108	2,030	16
	May-01	97.99	11.50	86.49	4,900	310	81	82	398	150
	Aug-01	97.99	13.51	84.48	14,820	852	342	568	1,606	2,000
	Nov-01	97.99	14.01	83.98	41,000	2,700	5,100	1,000	4,570	74,000
	Feb-02	97.99	10.11	87.88	260,000	3,700	12,000	3,700	19,200	23,000
	May-02	97.99	10.86	87.13	53,000	4,400	5,100	1300	7,000	32,000
	Jul-02	40.11	12.80	27.31	29,000	2,400	2,500	920	4,400	13,000
	Oct-02	40.11	15.50	24.61	27,000	2,200	2,400	950	4,500	34,000
	Jan-03	40.11	9.73	30.38	62,000	3,500	6,000	1600	9,700	48,000
	May-03	40.11	9.71	30.40	59,000	3,100	2,700	1500	7,000	14,000
	Jul-03	40.11	12.44	27.67	36,000	4,800	1,800	1300	5,600	25,000
	Oct-03	40.11	13.89	26.22	630,000 H	3,300	1900 C	3600	27,700	15,000
	Jan-04	40.11	10.45	29.66	39,000	3,100	1,600	950	4,300	8,500
	Apr-04	40.11	11.49	28.62	41,000	1,200	350C	830	2,740	4,300
	Aug-04	40.11	13.61	26.30	22,000	2,000	220	560	3,090	6,900
	Dec-04	40.11	11.10	29.01	22,790	1,634	319	895	2,851	5,504

Table 1
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 3609 International Boulevard, Oakland, California

Monitoring Well	Date	Top Of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE ¹ EPA 8260B (µg/L)
MW-2	Oct-94	98.58	15.38	83.22	NA	NA	NA	NA	NA	NA
	Dec-94	98.58	8.60	89.98	NA	NA	NA	NA	NA	NA
	Mar-95	98.58	7.68	90.90	490	3	3	3	1	NA
	Jun-95	98.58	9.59	88.99	8,000	220	330	350	660	NA
	Oct-95	98.58	13.42	85.16	46,000	160	130	93	240	NA
	Jan-96	98.58	9.93	88.65	46,000	160	130	93	240	NA
	Apr-96	98.58	8.13	90.45	27,000	0.1	92	44	13	NA
	Dec-96	98.58	11.67	86.91	6,200	11	7	2	14	ND
	Apr-97	98.58	11.40	87.18	53,000	160	110	37	0.12	ND
	Dec-97	98.58	9.04	89.54	35,000	4,900	4,900	1,600	7,000	NA
	Jun-98	98.58	NM	NM	25,000	2,000	2,000	1,300	4,300	NA
	Sep-98	98.58	13.58	85.00	29,000	290	160	160	360	<0.5
	Dec-98	98.58	10.94	87.64	26,000	1,400	1,600	880	9,500	<5
	Mar-99	98.58	7.60	90.98	7,600	730	830	610	1,900	55
	Jun-99	98.58	11.24	87.34	3,500	290	428	211	744	ND
	Aug-99	98.58	13.50	85.08	80	6	9	4	11	ND
	Nov-99	98.58	14.10	84.48	<50	<5	<5	<5	<5	<5
	Feb-00	98.58	9.85	88.73	6,400	372	639	46	134	8
	May-00	98.58	10.88	87.70	2,930	130	330	130	570	<5
	Aug-00	98.58	13.03	85.55	<50	<5	<5	<5	<5	<5
	Nov-00	98.58	12.60	85.98	ND	ND	ND	ND	ND	ND
	Mar-01	98.58	8.55	90.03	932	18	34	1.3	225	ND
	May-01	98.58	11.00	87.58	870	37	75	55	179	2.7
	Aug-01	98.58	13.53	85.05	125	4	4	3	11	ND
	Nov-01	98.58	13.43	85.15	470	13	64	22	83	14
	Feb-02	98.58	8.99	89.59	1,700	26	180	95	360	<2
	May-02	98.58	10.59	87.99	1,800	31	140	110	348	<2
	Jul-02	40.71	12.70	28.01	180	11	6.3	9.4	27	<2.0
	Oct-02	40.71	14.23	26.48	<50	<0.5	<0.5	<0.5	0.64	<2.0
	Jan-03	40.71	8.66	32.05	510	5	30.0	24.0	92	<2.0
	May-03	40.71	9.17	31.54	1,300	14	88.0	78.0	271	<2.0
	Jul-03	40.71	12.23	28.48	220	3.9	4.3	7	14.5	<2.0
	Oct-03	40.71	13.65	27.06	170 H	1.9	<0.5	2.2	2.2	<2.0
	Jan-04	40.71	9.54	31.17	960	7.2	37	50	151	<2.0
	Apr-04	40.71	10.80	29.91	730	6.6	19	38	87	<2.0
	Aug-04	40.71	13.54	27.17	220	2.2	1.9	7	11.7	<0.5
	Dec-04	40.71	10.52	30.19	99	1.7	3.3	8.3	25.1	<0.5

Table 1
Historical Groundwater Elevation Data & Analytical Results
 3609 International Boulevard, Oakland, California

Monitoring Well	Date	Top Of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MIBE ¹ EPA 8260B (µg/L)
MW-3	Oct-94	97.78	15.79	81.99	3,000,000	190,000	740,000	310,000	130,000	NA
	Dec-94	97.78	9.79	87.99	250,000	19,000	22,000	4,400	28,000	NA
	Mar-95	97.78	8.69	89.09	350,000	20,000	42,000	5,800	36,000	NA
	Jun-95	97.78	10.25	87.53	350,000	20,000	42,000	5,800	36,000	NA
	Oct-95	97.78	12.91	84.87	150,000	510	410	210	65	NA
	Jan-96	97.78	10.55	87.23	150,000	510	410	210	650	NA
	Apr-96	97.78	8.76	89.02	NA	NA	NA	NA	NA	NA
	Dec-96	97.78	12.02	85.76	NA	NA	NA	NA	NA	NA
	Apr-97	97.78	11.73	86.05	NA	NA	NA	NA	NA	NA
	Dec-97	97.78	NM	NM	NA	NA	NA	NA	NA	NA
	Sep-98	97.78	14.68	83.10	NA	NA	NA	NA	NA	NA
	Dec-98	97.78	11.55	86.23	51,000	5,700	3,900	1,200	6,300	410
	Mar-99	97.78	8.44	89.34	45,000	4,100	6,400	1,000	6,100	470
	Jun-99	97.78	11.8	85.98	48,000	8,245	6,425	1,015	7,173	274
	Aug-99	97.78	13.85	83.93	64,000	7,484	8,052	1,744	9,749	141
	Nov-99	97.78	14.7	83.08	25,000	3,218	1,319	<5	6,697	126
	Feb-00	97.78	10.95	86.83	44,000	6,090	3,360	<5	5,780	276
	May-00	97.78	11.68	86.10	68,000	15,000	8,900	1,500	7,400	<5
	Aug-00	97.78	13.73	84.05	78,000	8,900	5,636	883	7,356	176
	Nov-00	97.78	13.4	84.38	48,000	6,789	4,816	676	7,258	83
	Mar-01	97.78	9.43	88.35	14,754	2,250	140	ND	1,284	110
	May-01	97.78	11.81	86.97	44,000	5,400	3,100	1,400	6,400	200
	Aug-01	97.78	14.1	83.68	41,750	3,485	2,670	1,255	5,420	52
	Nov-01	97.78	14.32	83.46	NA	NA	NA	NA	NA	NA
	Feb-02	97.78	10.01	87.77	62,000	6,000	7,600	1,900	9,200	12,000
	May-02	97.78	11.28	86.50	54,000	6,700	3,200	1,800	7,100	9,100
	Jul-02	40.91	13.25	27.66	45,000	8,900	1,700	1,600	5,600	2,600
	Oct-02	40.91	14.98	25.93	70,000	4,900	5,100	2,100	11,900	21,000
	Jan-03	40.91	9.79	31.12	35,000	2,900	1,300	860	5,200	13,000
	May-03	40.91	10.01	30.90	49,000	5,800	1,400	1,600	7,400	5,900
Jul-03	40.91	12.94	27.97	31,000	4,700	990	1,400	5,200	16,000	
Oct-03	40.91	14.29	26.62	30,000	4,400	930	1,600	5,400	7,400	
Jan-04	40.91	10.57	30.34	45,000	2,100	850	1,500	5,700	2,900	
Apr-04	40.91	11.84	29.07	31,000	4,200	590	1,600	4,370	900	
Aug-04	40.91	14.24	26.67	21,000	3,400	370	1,000	2,350	1,100	
Dec-04	40.91	11.32	29.59	6,441	978	108	490	941	201	
MW-4	Jan-96	97.85	10.11	87.74	9,300	230	110	10	29	NA
	Apr-96	97.85	8.35	89.50	1,900	12	8	5	14	NA
	Dec-96	97.85	11.58	86.27	4,000	14	6	4	12	ND
	Apr-97	97.85	11.23	86.62	ND	ND	ND	ND	ND	ND
	Dec-97	97.85	9.43	88.42	2,300	410	270	100	1,500	NA
	Jun-98	97.85	NM	NM	1,700	780	160	54	200	NA
	Sep-98	97.85	13.64	84.21	6,200	910	77	68	200	18
	Dec-98	97.85	11.13	86.72	1,400	590	33	28	94	24
	Mar-99	97.85	8.46	89.39	600	200	35	19	56	11
	Jun-99	97.85	11.30	86.55	1,000	298	44	19	64	13
	Aug-99	97.85	13.20	84.65	660	497	41	54	145	6
	Nov-99	97.85	14.10	83.75	<50	<5	<5	<5	<5	<5
	Feb-00	97.85	11.25	86.60	7,800	1,200	61	<5	781	<5
	May-00	97.85	11.46	86.39	552	42	19	16	67	<5
	Aug-00	97.85	13.35	84.50	370	5.08	<5	<5	<5	<5
	Nov-00	97.85	13.05	84.80	ND	5.30	ND	ND	8	ND
	Mar-01	97.85	9.24	88.61	62	ND	ND	3.2	8.7	ND
	May-01	97.85	11.50	86.35	80	12	1.9	4.1	9.8	ND
	Aug-01	97.85	13.80	84.05	133	12	2.2	3.9	9	ND
	Nov-01	97.85	13.68	84.17	670	180	5	17	53	ND
	Feb-02	97.85	9.97	87.88	450	63	4.1	22	28.7	<2
	May-02	97.85	10.81	87.04	570	72	29	27	74	<2
	Jul-02	40.01	12.62	27.39	450	20	24	19	74	<2.0
	Oct-02	40.01	14.34	25.67	320	69	0.99	9	5.49	<2.0
	Jan-03	40.01	9.79	30.22	310	49	2.5	13	26.7	<2.0
	May-03	40.01	9.78	30.23	120	27	1.8	9	14.6	<2.0
	Jul-03	40.01	12.44	27.57	<50	1	<0.5	<0.5	<0.5	<0.5
	Oct-03	40.01	13.72	26.29	70	12	<0.5	4.7	3.0	<2.0
	Jan-04	40.01	10.55	29.46	290	18	2.1	8.1	17.1	<2.0
	Apr-04	40.01	11.39	28.62	<50	3.8	<0.5	1.6	1.9	<2.0
Aug-04	40.01	13.68	26.33	<50	1.6	<0.5	0.68	0.53	<2.0	
Dec-04	40.01	10.95	29.06	<50	1.3	<0.5	2.80	<1.0	<0.5	

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MW-5	Oct-95	99.04	13.57	85.47	1,500	1	1	4	5	NA
	Jan-96	99.04	10.03	89.01	1,500	1	1	4	5	NA
	Apr-96	99.04	8.24	90.80	780	1	1	5	4	NA
	Dec-96	99.04	11.48	87.56	NA	NA	NA	NA	NA	NA
	Apr-97	99.04	11.35	87.69	NA	NA	NA	NA	NA	NA
	Dec-97	99.04	9.15	89.89	790	82	66	59	160	NA
	Jun-98	99.04	NM	NM	400	<5	<5	15	<10	NA
	Sep-98	99.04	13.82	85.22	270	2	1	3	3	<.5
	Dec-98	99.04	11.20	87.84	1,400	1	1	ND	2	ND
	Mar-99	99.04	7.73	91.31	650	3	1	16	2	10
	Jun-99	99.04	11.50	87.54	270	4	3	6	4	ND
	Aug-99	99.04	13.55	85.49	120	ND	4	ND	4	ND
	Nov-99	99.04	14.30	84.74	<50	<5	<5	<5	<5	<.5
	Feb-00	99.04	9.85	89.19	70	<5	<5	<5	7	<.5
	May-00	99.04	11.03	88.01	627.4	7.4	24	12	32.4	<.5
	Aug-00	99.04	13.22	85.82	<50	<5	<5	<5	<5	<.5
	Nov-00	99.04	13.55	85.49	ND	ND	ND	ND	ND	ND
	Mar-01	99.04	8.67	90.37	382	6.1	1.9	6.6	5.9	ND
	May-01	99.04	11.12	87.92	180	ND	ND	2.1	0.57	4.4
	Aug-01	99.04	13.79	85.25	258	1	1.1	3.4	7.3	1.4
	Nov-01	99.04	13.72	85.32	920	17	160	28	135	40
	Feb-02	99.04	9.04	90.00	290	3.5	2	6.2	6.2	<0.5
	May-02	99.04	10.69	88.35	160	<0.5	0.78 C	2	2.15	2.3
	Jul-02	41.16	12.94	28.22	110	<0.5	<0.5	0.77	<0.5	<0.5
	Oct-02	41.16	14.51	26.65	77	<0.5	<0.5	<0.5	<0.5	<2.0
	Jan-03	41.16	8.73	32.43	450 Y	<0.5	<0.5	4	0.54	2.1
	May-03	41.16	9.24	31.92	130	<0.5	<0.5	1	<0.5	3.1
	Jul-03	41.16	12.45	28.71	300	<0.5	1.9 C	0.76	<0.5	<2.0
	Oct-03	41.16	13.89	27.27	460 H	<0.5	<0.5	<0.5	<0.5	1.9
	Jan-04	41.16	9.60	31.56	160	<0.5	<0.5	0.55 C	<0.5	<5.0
Apr-04	41.16	11.06	30.10	260	<0.5	0.74C	0.62	<0.5	2.1	
Aug-04	41.16	13.75	27.41	250	<0.5	<0.5	<0.5	<0.5	2	
Dec-04	41.16	10.73	30.43	150	<0.5	<0.5	<0.5	<1.0	2.6	

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MW-6	Oct-95	98.77	13.94	84.83	NA	NA	NA	NA	NA	NA
	Jan-96	98.77	10.55	88.22	120,000	350	310	200	610	NA
	Apr-96	98.77	8.76	90.01	NA	NA	NA	NA	NA	NA
	Dec-96	98.77	12.04	86.73	NA	NA	NA	NA	NA	NA
	Apr-97	98.77	11.75	87.01	NA	NA	NA	NA	NA	NA
	Dec-97	98.77	9.30	89.47	NA	NA	NA	NA	NA	NA
	Sep-98	98.77	14.10	84.67	NA	NA	NA	NA	NA	NA
	Dec-98	98.77	11.60	87.17	NA	NA	NA	NA	NA	NA
	Mar-99	98.77	8.40	90.37	37,000	3,900	4,300	1,600	7,000	180
	Jun-99	98.77	11.90	86.87	18,500	2,060	1,650	735	3,170	ND
	Aug-99	98.77	13.90	84.87	42,000	3,806	3,649	1,554	7,996	10
	Nov-99	98.77	14.75	84.02	40,000	1,084	130	<5	10,940	<5
	Feb-00	98.77	10.95	87.82	17,000	1,360	521	<5	4,150	6
	May-00	98.77	11.70	87.07	21,700	1,700	1,200	17	3,600	<5
	Aug-00	98.77	13.78	84.99	24,000	1,306	870	<5	5,162	<5
	Nov-00	98.77	13.40	85.37	19,000	1,387	618	ND	5,250	ND
	Mar-01	98.77	9.49	89.28	15,637	713	459	238	2,363	ND
	May-01	98.77	11.82	86.95	27,000	760	450	1,600	4,270	ND
	Aug-01	98.77	NM	NM	NA	NA	NA	NA	NA	NA
	Nov-01	98.77	NM	NM	NA	NA	NA	NA	NA	NA
	Feb-02	98.77	9.92	88.85	14,000	440	180	750	1,020	<10
	May-02	98.77	11.33	87.44	10,000	400	160	470	970	<2
	Jul-02	40.92	13.28	27.64	24,000	1,000	410	1,400	3,770	<20
	Oct-02	40.92	14.93	25.99	22,000	1,200	620	1,300	2,800	<20
	Jan-03	40.92	9.78	31.14	12,000	730	230	740	1,690	<20
	May-03	40.92	9.92	31.00	150,000 H	1,400	780	2,500	8,700	<40
	Jul-03	40.92	12.98	27.94	29,000	1,600	520	1,500	4,400	<200
	Oct-03	40.92	14.35	26.57	36,000	1,300	430	1,600	4,570	<40
Jan-04	40.92	10.60	30.32	30,000	1,300	320	1,500	3,040	<50	
Apr-04	40.92	11.80	29.12	99,000	1,700	580 C	2,200	5,200	<50	
Aug-04	40.92	14.36	26.56	12,000	580	130	520	1,020	<10	
Dec-04	40.92	11.22	29.70	12,631	649	134	1,009	2,037	<2.15	
MW-7	Oct-95	97.83	12.95	84.88	NA	10	12	17	NA	3,300
	Jan-96	97.83	9.57	88.26	3,300	9	12	17	45	NA
	Apr-96	97.83	7.75	90.08	1,900	2	3	5	7	NA
	Dec-96	97.83	10.97	86.86	NA	NA	NA	NA	NA	NA
	Apr-97	97.83	12.95	84.88	NA	NA	NA	NA	NA	NA
	Dec-97	97.83	8.65	89.18	1,400	130	98	75	200	NA
	Jun-98	97.83	NM	NM	620	4	<5	9	<10	NA
	Sep-98	97.83	13.09	84.74	1,800	1	1	1	2	68
	Dec-98	97.83	10.52	87.31	990	5	10	5	20	160
	Mar-99	97.83	7.00	90.83	300	3	1	1	1	62
	Jun-99	97.83	10.70	87.13	320	3	7	4	3	26
	Aug-99	97.83	12.80	85.03	570	5	10	ND	ND	ND
	Nov-99	97.83	13.25	84.58	290	<5	9	<5	<5	12
	Feb-00	97.83	9.50	88.33	80	<5	<5	<5	<5	23
	May-00	97.83	10.52	87.31	494.9	4.9	22	4.2	21.9	29
	Aug-00	97.83	12.63	85.20	80	<5	<5	<5	<5	11.7
	Nov-00	97.83	11.95	85.88	50	ND	ND	ND	ND	9.1
	Mar-01	97.83	8.04	89.79	82	0.97	ND	0.76	ND	78
	May-01	97.83	10.60	87.23	370	ND	9.1	1.3	2.3	28
	Aug-01	97.83	13.02	84.81	610	3.7	3	6.2	18.9	10
	Nov-01	97.83	12.83	85.00	1,700	24	220	41	205	69
	Feb-02	97.83	8.91	88.92	380	<0.5	2.5	2	3.8	78
	May-02	97.83	10.13	87.70	560	15	28.0	9.2	44.0	37
	Jul-02	39.94	12.15	27.79	270	5.3	1.3 C	2.3	8.1	46
	Oct-02	39.94	13.74	26.20	350	<0.5	2.1 C	<0.5	3.1 C	43
	Jan-03	39.94	8.45	31.49	220 Y	<0.5	<0.5	0.78	0.55	19
	May-03	39.94	7.69	32.25	280	<0.5	<0.5	<0.5	<0.5	11
	Jul-03	39.94	11.72	28.22	230	<0.5	1.3 C	<0.5	0.63	5.9
Oct-03	39.94	13.10	26.84	460	<0.5	<0.5	<0.5	<0.5	5.0	
Jan-04	39.94	9.23	30.71	360	<0.5	1.4 C	<0.5	<0.5	<5.0	
Apr-04	39.94	10.40	29.54	480	<0.5	2.5 C	<0.5	0.90	0.62	
Aug-04	39.94	12.92	27.02	410	<0.5	.81 C	<0.5	<0.5	1.70	
Dec-04	39.94	10.28	29.66	96	<0.5	<0.5	<0.5	<1.0	<0.5	

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MW-8	Oct-95	97.25	12.86	84.39	NA	NA	NA	NA	NA	NA
	Jan-96	97.25	9.79	87.46	94,000	310	250	180	480	NA
	Apr-96	97.25	7.98	89.27	58,000	250	170	140	330	NA
	Dec-96	97.25	11.13	86.12	27,000	88	43	44	80	ND
	Apr-97	97.25	12.95	84.30	24,000	86	55	50	100	ND
	Dec-97	97.25	8.95	88.30	28,000	6,000	1,600	2,100	4,700	NA
	Jun-98	97.25	NM	NM	54,000	4,800	2,800	3,500	7,300	NA
	Sep-98	97.25	13.02	84.23	NA	NA	NA	NA	NA	NA
	Dec-98	97.25	10.75	86.50	61,000	6,300	1,700	2,200	4,400	1,300
	Mar-99	97.25	7.58	89.67	22,000	1,800	470	2,000	2,000	820
	Jun-99	97.25	10.80	86.45	39,500	3,610	1,635	2,175	5,913	988
	Aug-99	97.25	12.75	84.50	58,000	5,379	2,438	3,001	6,960	639
	Nov-99	97.25	13.65	83.60	10,500	92	<5	<5	3,414	769
	Feb-00	97.25	10.85	86.40	44,200	1,080	617	<5	4,160	240
	May-00	97.25	11.15	86.10	25,940	940	130	1,600	3,960	75
	Aug-00	97.25	12.87	84.38	22,000	632	5.38	<5	2,686	37.3
	Nov-00	97.25	12.65	84.70	3,000	278	350	209	980	21
	Mar-01	97.25	8.75	88.50	2,360	81	16	71	270	221
	May-01	97.25	11.15	86.10	3,100	110	28	140	194	410
	Aug-01	97.25	12.97	84.28	5,620	153	48	373	345	174
	Nov-01	97.25	13.19	84.06	13,000	600	270	750	1,200	400
	Feb-02	97.25	9.88	87.37	240,000	1,400	<25	4,200	6,560	<100
	May-02	97.25	10.32	86.93	9,000	360	56	560	622	2,100
	Jul-02	39.38	11.79	27.59	8,400	340	78	530	517	1,200
	Oct-02	39.38	13.80	25.58	18,000	950	75	1,400	1,289	700
	Jan-03	39.38	9.48	29.90	8,100	300	29	370	302	1,100
	May-03	39.38	9.48	29.90	18,000	380	33 C	1,000	516	540
	Jul-03	39.38	11.92	27.46	12,000	460	54 C	910	435	890
	Oct-03	39.38	13.09	26.29	16,000	830	87	2,000	675	280
	Jan-04	39.38	10.32	29.06	18,000	330	37 C	860	239	500
	Apr-04	39.38	11.23	28.15	12,000	240	26 C	650	128.8 C	<4
	Aug-04	39.38	13.02	26.36	6,000	310	27	660	56.8 C	<4
Dec-04	39.38	10.79	28.59	6,650	171	15	360	35	166	

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MW-10	Dec-96	94.54	10.44	84.10	NA	NA	NA	NA	NA	NA
	Apr-97	94.54	10.07	84.47	1,000	21	9	3	3	ND
	Dec-97	94.54	8.78	85.76	10,000	5,300	76	1,100	780	NA
	Sep-98	94.54	11.93	82.61	9,900	5,400	66	970	620	2,600
	Dec-98	94.54	10.19	84.35	8,700	3,800	51	790	420	1,800
	Mar-99	94.54	7.30	87.24	4,100	15	28	420	250	2,800
	Jun-99	94.54	9.95	84.59	4,200	1,168	34	264	154	1,195
	Aug-99	94.54	11.60	82.94	3,250	2,135	97	600	248	1,800
	Nov-99	94.54	12.50	82.04	2,950	1,134	20	<5	70	652
	Feb-00	94.54	9.25	85.29	<50	<5	<5	<5	<5	448
	May-00	94.54	9.45	85.09	4,400	1,500	25	390	107.1	580
	Aug-00	94.54	11.52	83.02	6,800	1,055	26	54	53.8	1,283
	Nov-00	94.54	11.35	83.19	ND	ND	ND	ND	ND	145
	Mar-01	94.54	8.07	86.47	4,935	969	18	41	72	630
	May-01	94.54	9.80	84.74	2,900	630	11	200	31	270
	Aug-01	94.54	11.64	82.90	242	35	1	11	2	64
	Nov-01	94.54	12.06	82.48	3,500	900	260	310	258	410
	Feb-02	94.54	8.28	86.26	4,700	1,100	20	370	63.7	500
	May-02	94.54	9.49	85.05	3,400	660	13	260	48.0	270
	Jul-02	36.71	10.93	25.78	160	26	0.55	8.1	1.0	72
	Oct-02	36.71	12.54	24.17	550	130	3.00	31.0	2.7	70
	Jan-03	36.71	8.23	28.48	17,000	870	11	290	27	270
	May-03	36.71	8.30	28.41	2,500	650	10	190	15.81 C	180
	Jul-03	36.71	10.76	25.95	750	160	4	58	6.66 C	79
	Oct-03	36.71	11.91	24.80	2,000	410	11	170	9.14 C	110
	Jan-04	36.71	8.91	27.80	4,000	600	15	280	15.3 C	110
	Apr-04	36.71	9.62	27.09	5,100	580	<1	330	26.4	160
	Aug-04	36.71	11.50	25.21	3,400	550	13	240	17.0	100
Dec-04	36.71	9.29	27.42	2,524	556	10	184	16.0	144	
MW-11	Dec-96	95.94	11.99	83.95	NA	NA	NA	NA	NA	NA
	Apr-97	95.94	11.47	84.47	NA	NA	NA	NA	NA	NA
	Dec-97	95.94	10.40	85.54	710	66	97	59	190	NA
	Jun-98	95.94	NM	NM	1,100	45	24	71	100	NA
	Sep-98	95.94	13.24	82.70	170	7	1	4	9	22
	Dec-98	95.94	11.58	84.36	650	27	4	25	33	>0.5
	Mar-99	95.94	8.81	87.13	710	30	6	53	84	8
	Jun-99	95.94	11.50	84.44	4,600	1,240	35	290	159	1,291
	Aug-99	95.94	12.75	83.19	170	4	4	ND	6	ND
	Nov-99	95.94	13.85	82.09	<50	<5	<5	<5	<5	<5
	Feb-00	95.94	13.60	82.34	700	20	15	<5	35	<5
	May-00	95.94	13.80	82.14	477	27	13	9.5	29.0	<5
	Aug-00	95.94	14.87	81.07	590	10.5	5.94	<5	7.75	<5
	Nov-00	95.94	12.55	83.39	60	ND	ND	ND	ND	ND
	Mar-01	95.94	9.61	86.33	273	8.6	2.1	10	14	ND
	May-01	95.94	11.15	84.79	280	12	8.3	3.3	9.8	12
	Aug-01	95.94	13.04	82.90	NA	NA	NA	NA	NA	NA
	Nov-01	95.94	13.48	82.46	300	7.9	26	5.1	28.9	ND
	Feb-02	95.94	9.69	86.25	560	34	20	32	37.3	< 0.5
	May-02	95.94	10.99	84.95	280	16	3	7.6	7.6	<2
	Jul-02	NS	13.24	NC	120	5.6	<0.5	0.61	0.53	<2.0
	Oct-02	NS	NM	NC	NA	NA	NA	NA	NA	NA
	Jan-03	NS	9.76	NC	700	32	5.7	25	14.10	<2.0
	May-03	NS	9.66	NC	280	17	1.5 C	8	4.10	<2.0
	Jul-03	NS	12.30	NC	340	19 C	3.2	0.58	0.89	<2.0
	Oct-03	NS	13.38	NC	210	5.0 C	<0.5	<0.5	<0.5	<0.5
	Jan-04	NS	NM	NC	NA	NA	NA	NA	NA	NA
	Apr-04	NS	NM	NC	NA	NA	NA	NA	NA	NA
Aug-04	NS	NM	NC	NA	NA	NA	NA	NA	NA	
Dec-04	NS	10.54	NC	486	24	3.0	18	4.00	<0.5	

Table 1
Historical Groundwater Elevation Data & Analytical Results
 3609 International Boulevard, Oakland, California

Monitoring Well	Date	Top Of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE ¹ EPA 8260B (µg/L)
MW-12	Nov-99	94.84	13.20	81.64	80	<5	<5	<5	<5	229
	Feb-00	94.84	10.20	84.64	4,000	351	37	<5	24	513
	May-00	94.84	10.48	84.36	3,930	230	10	34	12	200
	Aug-00	94.84	12.07	82.77	1,730	15.4	12.4	<5	<5	185
	Nov-00	94.84	12.05	82.79	1,010	9.3	19.0	ND	7.40	215
	Mar-01	94.84	9.04	85.80	1,517	13	5.6	5.5	11	214
	May-01	94.84	10.52	84.32	31,000	1,200	ND	95	165	1,900
	Aug-01	94.84	12.24	82.60	2,090	71	1.8	3	4	142
	Nov-01	94.84	12.76	82.08	3,000	81	69	13	73	120
	Feb-02	94.84	8.78	86.06	2,500	77	<0.5	5.7	7.4	95
	May-02	94.84	10.26	84.58	2,700	74	<0.5	20	5.1	94
	Jul-02	36.84	10.93	25.91	2,200	57	<0.5	11	2.6	100
	Oct-02	36.84	13.13	23.71	2,600	71	<0.5	<0.5	10.3	84
	Jan-03	36.84	9.23	27.61	2,300	65	<0.5	1	4.00	86
	May-03	36.84	9.24	27.60	2,200	58	<0.5	4.2 C	4.1 C	96
	Jul-03	36.84	11.44	25.40	2,200	32 C	16 C	<0.5	9.20	66
	Oct-03	36.84	12.50	24.34	2200 H	31 C	<0.5	<0.5	3.5 C	49
	Jan-04	36.84	9.56	27.28	1,700	24 C	14 C	3	5.00	72
	Apr-04	36.84	10.21	26.63	2,000	11 C	<0.5	<0.5	5 C	36
	Aug-04	36.84	12.00	24.84	1,900	8.9 C	<0.5	<0.5	1.1 C	26
Dec-04	36.84	10.03	26.81	1,018	2	<0.5	<0.5	<1.0	26	
FDC	Feb-00	97.10	15.40	81.70	NA	NA	NA	NA	NA	NA
	May-00	97.10	12.41	84.69	NA	NA	NA	NA	NA	NA
	Aug-00	97.10	15.70	81.40	NA	NA	NA	NA	NA	NA
	Nov-00	97.10	16.85	80.25	NA	NA	NA	NA	NA	NA
	Mar-01	97.10	9.39	87.71	NA	NA	NA	NA	NA	NA
	May-01	97.10	15.85	81.25	NA	NA	NA	NA	NA	NA
	Aug-01	97.10	13.30	83.80	NA	NA	NA	NA	NA	NA
	Nov-01	97.10	17.82	79.28	NA	NA	NA	NA	NA	NA
	Feb-02	97.10	16.74	80.36	NA	NA	NA	NA	NA	NA
	May-02	97.10	10.36	86.74	NA	NA	NA	NA	NA	NA
	Jul-02	39.35	11.93	27.42	NA	NA	NA	NA	NA	NA
	Oct-02	39.35	13.74	25.61	NA	NA	NA	NA	NA	NA
	Jan-03	39.35	15.18	24.17	NA	NA	NA	NA	NA	NA
	May-03	39.35	16.20	23.15	NA	NA	NA	NA	NA	NA
	Jul-03	39.35	16.45	22.90	NA	NA	NA	NA	NA	NA
	Oct-03	39.35	16.53	22.82	NA	NA	NA	NA	NA	NA
	Jan-04	39.35	13.74	25.61	NA	NA	NA	NA	NA	NA
	Apr-04	39.35	16.30	23.05	NA	NA	NA	NA	NA	NA
	Aug-04	39.35	16.05	23.30	NA	NA	NA	NA	NA	NA
	Dec-04	39.35	14.56	24.79	NA	NA	NA	NA	NA	NA
FDE	May-00	97.90	13.22	84.68	NA	NA	NA	NA	NA	NA
	Aug-00	97.90	NM	NM	NA	NA	NA	NA	NA	NA
	Nov-00	97.90	12.75	85.15	NA	NA	NA	NA	NA	NA
	Mar-01	97.90	9.14	88.76	NA	NA	NA	NA	NA	NA
	May-01	97.90	13.05	84.85	NA	NA	NA	NA	NA	NA
	Aug-01	97.90	13.69	84.21	NA	NA	NA	NA	NA	NA
	Nov-01	97.90	13.92	83.98	NA	NA	NA	NA	NA	NA
	Feb-02	97.90	13.18	84.72	NA	NA	NA	NA	NA	NA
	May-02	97.90	11.18	86.72	NA	NA	NA	NA	NA	NA
	Jul-02	40.06	12.81	27.25	NA	NA	NA	NA	NA	NA
	Oct-02	40.06	14.53	25.53	NA	NA	NA	NA	NA	NA
	Jan-03	40.06	13.13	26.93	NA	NA	NA	NA	NA	NA
	May-03	40.06	11.79	28.27	NA	NA	NA	NA	NA	NA
	Jul-03	40.06	13.10	26.96	NA	NA	NA	NA	NA	NA
	Oct-03	40.06	13.85	26.21	NA	NA	NA	NA	NA	NA
	Jan-04	40.06	13.27	26.79	NA	NA	NA	NA	NA	NA
Apr-04	40.06	13.20	26.86	NA	NA	NA	NA	NA	NA	
Aug-04	40.06	14.97	25.09	NA	NA	NA	NA	NA	NA	
Dec-04	40.06	14.25	25.81	NA	NA	NA	NA	NA	NA	

LAST DIRECTIVE 7/24/00 (CHAN)

Table 1
Historical Groundwater Elevation Data & Analytical Results
 3609 International Boulevard, Oakland, California

Monitoring Well	Date	Top Of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE ¹ EPA 8260B (µg/L)
FDW	May-00	96.90	12.20	84.70	NA	NA	NA	NA	NA	NA
	Aug-00	96.90	NM	NM	NA	NA	NA	NA	NA	NA
	Nov-00	96.90	15.50	81.40	NA	NA	NA	NA	NA	NA
	Mar-01	96.90	10.12	86.78	NA	NA	NA	NA	NA	NA
	May-01	96.90	13.50	83.40	NA	NA	NA	NA	NA	NA
	Aug-01	96.90	13.08	83.82	NA	NA	NA	NA	NA	NA
	Nov-01	96.90	14.31	82.59	NA	NA	NA	NA	NA	NA
	Feb-02	96.90	12.78	84.12	NA	NA	NA	NA	NA	NA
	May-02	96.90	10.14	86.76	NA	NA	NA	NA	NA	NA
	Jul-02	39.16	11.79	27.37	NA	NA	NA	NA	NA	NA
	Oct-02	39.16	13.50	25.66	NA	NA	NA	NA	NA	NA
	Jan-03	39.16	12.13	27.03	NA	NA	NA	NA	NA	NA
	May-03	39.16	10.84	28.32	NA	NA	NA	NA	NA	NA
	Jul-03	39.16	12.12	27.04	NA	NA	NA	NA	NA	NA
	Oct-03	39.16	13.48	25.68	NA	NA	NA	NA	NA	NA
	Jan-04	39.16	13.58	25.58	NA	NA	NA	NA	NA	NA
	Apr-04	39.16	13.90	25.26	NA	NA	NA	NA	NA	NA
	Aug-04	39.16	15.69	23.47	NA	NA	NA	NA	NA	NA
	Dec-04	39.16	14.85	24.31	NA	NA	NA	NA	NA	NA

Notes:

- ¹ MtBE was analyzed using the EPA Method 8021B and confirmed using 8260B.
- C: Presence confirmed, but confirmation concentration differed by more than a factor of two.
- H: Heavier hydrocarbons may have contributed to the quantitation.
- NA: Not Analyzed
- ND, < : Not Detected above laboratory reporting limits.
- NS: Not Surveyed.
- Y: Sample exhibits fuel pattern which does not resemble standard.
- ¹Top of casing elevations were re-surveyed to comply with the EDF requirements for electronic reporting of data to the State Water Resources Control Board Database on August 9, 2002.
- NA: Not Applicable, Well/Drain did not exist at time of sampling
- NC: Not calculated. No top of casing elevation was available for MW-11.
- NM: Not Measured
- FDC: French drain center riser.
- FDE: French drain east riser.
- FDW: French drain west riser.

Table 2
Total Volume of Water Treated, Historical Operational Data, and Effluent and GAC-1 Analytical Results
3609 International Boulevard, Oakland, California

Month	Date	Meter	Lab Results For Effluent and GAC-1					
		Reading (gallons)	(concentrations in ug/L)		Benzene	Toluene	Ethylbenzene	Total Xylenes
			MtBE ²	TPH-g				
December	12/6/2004	2,667,620	<0.5 <0.5	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1.0 <1.0
November	11/8/2004	2,631,600	<0.5 <0.5	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
October	10/13/2004	2,606,420	< 2.0 <2.0	< 50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
September	9/13/2004	2,594,390	< 2.0 < 2.0	< 50 < 50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
August	8/25/2004	2,586,010	55 Gallon Drum Changed Out					
	8/9/2004	2,581,250	< 2.0 < 2.0	< 50 < 50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
July	7/13/2004	2,568,830	< 2.0 < 2.0	< 50 < 50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
	7/21/2004	2,564,710	55 Gallon Drum Changed Out					
June	6/14/2004	2,549,470	< 2.0 < 2.0	< 50 < 50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
May	5/26/2004	2,530,000	Carbon Change-out of 2000 lb vessel and 55 gallon polishing vessel					
	5/10/2004	2,488,760	Semi Annual Treatment System Meeting With Ebud					
	5/17/2004	2,518,910	Replaced 55-gallon polishing vessel and restarted the system					
	5/5/2004	2,500,650	Carbon Changed Out and 55 Gallon Drum Changed Out					
	5/3/2004	2,497,350	< 2.0 < 2.0	< 50 < 50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
April	4/15/2004	2,436,190	< 5.0 <5.0	< 50 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0
March	3/17/2004	2,376,200	Carbon Change-out of 2000 lb vessel and 55 gallon polishing vessel					
February	2/24/2004	2,276,770	< 5.0 <5.0	< 50 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0
January	1/27/2004	2,165,220	< 5.0 <5.0	< 50 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0
	1/13/2004	2,116,720	< 5.0 <5.0	< 50 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0

Table 2
Total Volume of Water Treated, Historical Operational Data, and Effluent and GAC-1 Analytical Results
3609 International Boulevard, Oakland, California

Month	Date	Meter	Lab Results For Effluent and GAC-1					
		Reading (gallons)	(concentrations in ug/L)		Benzene	Toluene	Ethylbenzene	Total Xylenes
			MIBE ²	TPH-g				
December	12/8/2003	2,092,330	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
November	11/17/2003	2,087,670	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
	11/3/2003	2,079,460	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
October	10/13/2003	2,073,060	5.3	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
	10/1/2003	2,072,610	Carbon Change-out of 2000 lb vessel and 55 gallon polishing vessel					
September	9/15/2003	2,056,910	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			6	< 50	< 5.0	< 5.0	< 5.0	< 5.0
	9/2/2003	2,040,040	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
August	8/19/2003	2,021,040	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
July	7/21/2003	1,995,240	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			40	< 50	< 5.0	< 5.0	< 5.0	< 5.0
	7/9/2003	1,990,260	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			36	< 50	< 5.0	< 5.0	< 5.0	< 5.0
June	6/18/2003	1,978,560	Carbon Change-out of 2000 lb vessel and 55 gallon polishing vessel					
	6/10/2003	1,972,780	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
May	5/21/2003	1,951,830	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
	5/1/2003	1,918,270	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
April	4/11/2003	1,882,440	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
March	3/19/2003	1,846,490	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
February	2/25/2003	1,804,960	replaced 55-gallon polishing vessel with new 55 gallon carbon drum					
	2/19/2003	1,791,720	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
January	1/27/2003	1,733,500	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
	1/2/2003	1,675,600	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0

Table 2
Total Volume of Water Treated, Historical Operational Data, and Effluent and GAC-1 Analytical Results
3609 International Boulevard, Oakland, California

Month	Date	Meter Reading (gallons)	Lab Results For Effluent and GAC-1 (concentrations in ug/L)					
			MtBE ²	TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylenes
December	12/10/2002	1,672,870	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
November	11/22/2002	1,668,650	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
	11/13/2002	1,664,780	replaced gasket on top of 2000 lb GAC vessel, slight leak was detected					
	11/7/2002	1,663,880	Carbon Change-out of 2000 lb vessel and 55 gallon polishing vessel					
October	10/16/02 ³	1,661,590	< 310	2,000 Y Z	< 310	< 310	< 310	< 310
			< 0.5	< 50	< 0.5	< 0.5	< 0.5	< 0.5
September	9/19/2002	1,653,600	< 5	< 50	< 5	< 5	< 5	< 5
			< 5	< 50	< 5	< 5	< 5	< 5
August	8/23/2002	1,641,650	1	< 50	< 0.5	< 0.5	< 0.5	< 0.5
			< 0.5	< 50	< 0.5	< 0.5	< 0.5	< 0.5
July	7/23/2002	1,632,834	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
June	6/24/2002	1,610,050	1.7	< 50	< 0.5	< 0.5	< 0.5	< 0.5
			< 0.5	< 50	< 0.5	< 0.5	< 0.5	< 0.5
May	5/30/2002	1,571,630	< 0.5	< 50	< 0.5	< 0.5	< 0.5	< 0.5
			< 0.5	< 50	< 0.5	< 0.5	< 0.5	< 0.5
	5/20/2002	1,548,000	removed newly installed compressor, installed another compressor					
	5/8/2002	1,538,850	installed new compressor					
	5/1/2002	1,529,650	installed new 55 gallon GAC Vessel					
April	4/24/2002	1,528,740	< 0.5	< 50	< 0.5	< 0.5	< 0.5	< 0.5
			< 0.5	< 50	< 0.5	< 0.5	< 0.5	< 0.5
	4/1/2002	1,478,500	repaired valve plate assembly on compressor					
March	3/25/2002	1,478,420	performed carbon change-out on treatment system					
	3/18/2002	NR	replaced piston on compressor					
	3/14/2002	1,478,330	compressor not building up pressure					
February	2/27/2002	1,449,830	< 0.5	< 50	< 0.5	< 0.5	< 0.5	< 0.5
			1.1	< 50	< 0.5	< 0.5	< 0.5	< 0.5
January	1/22/2002	1,381,370	< 2.0	< 50	< 0.5	< 0.5	< 0.5	< 0.5
			< 2.0	< 50	< 0.5	< 0.5	< 0.5	< 0.5

Table 2
Total Volume of Water Treated, Historical Operational Data, and Effluent and GAC-1 Analytical Results
3609 International Boulevard, Oakland, California

Month	Date	Meter	Lab Results For Effluent and GAC-1				Benzene	Toluene	Ethylbenzene	Total Xylenes
		Reading (gallons)	(concentrations in ug/L)							
			MIBE ²	TPH-g						
December	12/12/2001	1,311,340	ND	ND	ND	ND	ND	ND	ND	
			ND	ND	ND	ND	ND	ND		
November	11/2/2001	1,272,660	ND	ND	ND	ND	ND	ND	ND	
			0.6	ND	ND	ND	ND	ND		
September	9/28/2001	NA	ND	ND	ND	ND	ND	ND	ND	
			ND	ND	ND	ND	ND	ND		
August	8/22/2001	1,243,100	ND	ND	ND	ND	ND	ND	ND	
			ND	ND	ND	ND	ND	ND		
July	7/26/2001	1,227,270	ND	ND	ND	ND	ND	ND	ND	
			ND	ND	ND	ND	ND	ND		
	7/11/2001	1,226,730	NA	NA	NA	NA	NA	NA		
			NA	NA	NA	NA	NA	NA		
June	6/29/2001	1,224,600	NA	NA	NA	NA	NA	NA	NA	
			ND	ND	ND	ND	ND	ND		
	6/26/2001	NR	installed new compressor							
	6/16/2001	1,216,580	NA	NA	NA	NA	NA	NA	NA	
			NA	NA	NA	NA	NA	NA		
			compressor not working, repaired compressor							
	6/7/2001	1,216,580	NA	NA	NA	NA	NA	NA	NA	
			NA	NA	NA	NA	NA	NA		
May	5/30/2001	1,205,198	NA	NA	NA	NA	NA	NA	NA	
			NA	NA	NA	NA	NA	NA		
	5/23/2001	1,194,390	NA	NA	NA	NA	NA	NA	NA	
			NA	NA	NA	NA	NA	NA		
	5/17/2001	1,182,360	ND	ND	ND	ND	ND	ND	ND	
			ND	ND	ND	ND	ND	ND		
	5/10/2001	1,166,850	NA	NA	NA	NA	NA	NA	NA	
			NA	NA	NA	NA	NA	NA		
	5/5/2001	1,151,600	NA	NA	NA	NA	NA	NA	NA	
			NA	NA	NA	NA	NA	NA		
April	4/28/2001	1,135,690	NA	NA	NA	NA	NA	NA	NA	
			NA	NA	NA	NA	NA	NA		
	4/21/2001	1,113,570	NA	NA	NA	NA	NA	NA	NA	
			NA	NA	NA	NA	NA	NA		
	4/11/2001	1,082,700	NA	ND	ND	ND	ND	ND	ND	
			ND	ND	ND	ND	ND	ND		
	4/6/2001	1,065,540	NA	NA	NA	NA	NA	NA	NA	
			NA	NA	NA	NA	NA	NA		

Table 2
Total Volume of Water Treated, Historical Operational Data, and Effluent and GAC-1 Analytical Results
3609 International Boulevard, Oakland, California

Month	Date	Meter	Lab Results For Effluent and GAC-1					Total Xylenes
		Reading (gallons)	(concentrations in ug/L)		Benzene	Toluene	Ethylbenzene	
			MIBE ²	TPH-g				
March	3/29/2001	1,036,330	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
			system was re-started					
	3/21/2001	1,036,070	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
			belt replaced on compressor					
	3/17/2001	1,035,100	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
	3/13/2001	1,032,500	ND	ND	ND	ND	ND	ND
			NA	NA	NA	NA	NA	NA
	3/2/2001	996,520	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
	3/1/2002	NR	system re-started after carbon change-out					
February	2/28/2002	NR	Carbon Change-out was performed on GAC-1, washed algae from holding tank, cleaned 2000 lb GAC, re-started system					
	2/10/2001	975,490	System shut down for maintenance and cleaning.					
January	1/29/2001	957,880	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
December	12/5/2000	883,000	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
November	11/24/2000	NR	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
	11/1/2000	842,000	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
October	10/1/2000	809,000	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
August	8/27/2000	781,000	ND	ND	ND	ND	ND	ND
	8/24/2000	778,000	Totalizer meter replaced at 775,000 gallons					
July	7/26/2000	726,000	ND	ND	ND	ND	ND	ND
	7/19/2000	718,000	ND	ND	ND	ND	ND	ND
	7/13/2000	712,000	ND	ND	ND	ND	ND	ND
	7/7/2000	706,000	ND	ND	ND	ND	ND	ND
June	6/29/2000	700,000	ND	ND	ND	ND	ND	ND
	6/21/2000	682,220	ND	ND	ND	ND	ND	ND
	6/16/2000	669,720	ND	ND	ND	ND	ND	ND
	6/10/2000	651,200	ND	ND	ND	ND	ND	ND
May	5/31/2000	629,000	ND	ND	ND	ND	ND	ND
	5/23/2000	603,700	ND	ND	ND	ND	ND	ND
	5/18/2000	570,000	ND	ND	ND	ND	ND	ND
	5/10/2000	530,400	ND	ND	ND	ND	ND	ND
April	4/30/2000	488,300	ND	ND	ND	ND	ND	ND
	4/18/2000	485,300	ND	ND	ND	ND	ND	0.51
			compressor stopped, system shut down until April 29, 2000					
	4/10/2000	440,200	ND	ND	ND	ND	ND	ND
	4/4/2000	390,100	ND	ND	ND	ND	ND	ND
	4/2/2000	NR	performed a carbon change-out on GAC-1					

Table 2
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3609 International Boulevard, Oakland, California

Month	Date	Meter	Lab Results For Effluent and GAC-1					
		Reading (gallons)	(concentrations in ug/L)		Benzene	Toluene	Ethylbenzene	Total Xylenes
			MTBE ²	TPH-g				
March	3/31/2000	NR	replaced GAC-2 with a special GAC designed for removal of MtBE					
	3/24/2000	388,000	ND	ND	ND	ND	ND	ND
	3/17/2000	357,100	ND	ND	ND	ND	ND	ND
	3/10/2000	329,000	ND	ND	ND	ND	ND	ND
	3/3/2000	300,000	transfer overheated, repaired pump, restarted system 3/6/00					
February	2/25/2000	274,000	ND	ND	ND	ND	ND	ND
	2/18/2000	233,000	ND	ND	ND	ND	ND	ND
	2/11/2000	190,000	ND	ND	ND	ND	ND	ND
	2/4/2000	160,800	ND	ND	ND	ND	ND	ND
January	1/28/2000	130,600	ND	ND	ND	ND	ND	ND
	1/21/2000	103,435	ND	ND	ND	ND	ND	ND
	1/17/2000	NR	GAC-1 was replaced with 2,000 lb GAC unit second polishing GAC was replaced with 55 gallon GAC unit					
	1/14/2000	83,500	185	ND	ND	ND	ND	ND
December	12/23/1999	51,680	1486	NA	ND	ND	ND	ND
			ND	NA	ND	ND	ND	ND
	12/16/1999	30,450	963	NA	ND	ND	ND	ND
			ND	NA	ND	ND	ND	ND
	12/9/1999	9,000	230	ND	ND	ND	ND	ND
Pumping began on December 6, 1999								

Notes:

1 Effluent is equivalent to PSP#1

2 MTBE was analyzed using EPA Method 8260B, prior to the September 2003. After September 2003, MIBE was only analyzed by EPA Method 8021B.

3 Lab data as shown for Oct. 2002 is erroneous data. During lab analysis a high detection of 2-Butanone was detected in only the effluent sample. The influent sample for 2-Butanone was at only 20 ppb.

This caused a high dilution factor causing a high non-detectable value. The high TPH-g value was misrepresentative due to the Y and Z flags.

ND, <: Not Detected above laboratory reporting limits

NA: Not Analyzed

NR: Not recorded. Totalizer reading not recorded.

Y: Sample exhibits fuel pattern which does not resemble standard

Z: Sample exhibits unknown single peak or peaks

Table 3
Total Mass of Petroleum Hydrocarbons Removed by Vapor Extraction System
3609 International Boulevard, Oakland, California

Date	Time	PID (ppmv)		Flow Rate (ft ³ /min)	Time Elapsed (Hours)	Air Flow (Liters)	Mass Removed ¹ (Pounds)
		Influent	Effluent				
7/24/2000	5:00	394	0	85	0	0	0.00
7/25/2000	5:15	38	2	95	24	3,914,096	1.01
7/26/2000	5:05	207	1	80	48	3,228,121	4.52
7/27/2000	9:00	160	5	92	64	2,500,944	2.71
7/28/2000	4:30	141	7	87	96	4,656,139	4.44
7/29/2000	1:30	225	8	85	117	3,032,734	4.62
7/30/2000	9:00	226	12	85	136	2,816,110	4.31
7/31/2000	3:00	141	5	85	166	4,332,478	4.13
8/1/2000	5:00	135	4	80	192	3,533,942	3.23
8/2/2000	4:00	80	4	80	215	3,126,180	1.69
8/3/2000	5:00	60	5	85	240	3,610,398	1.47
8/4/2000	3:00	57	4	85	262	3,177,150	1.23
8/5/2000	2:00	97	8	87	285	3,399,721	2.23
8/6/2000	12:00	114	8	80	307	2,990,259	2.31
8/7/2000	12:00	93	9	85	331	3,465,982	2.18
8/8/2000	4:30	152	10	85	360	4,115,854	4.23
8/10/2000	10:00	173	1	85	377	2,527,279	2.96
8/11/2000	7:00	78	4	70	410	3,924,715	2.07
8/12/2000	9:00	100	6	70	424	1,665,031	1.13
8/13/2000	5:00	107	9	70	456	3,805,784	2.75
8/14/2000	12:30	122	5	70	476	2,319,150	1.91
8/15/2000	6:00	103	12	70	505	3,508,457	2.44
8/16/2000	12:30	112	0	70	524	2,200,219	1.67
8/18/2000	9:00	90	0	75	568	5,670,449	3.45
8/21/2000	12:00	74	5	80	643	10,194,065	5.10
8/24/2000	12:00	68	13	80	712	9,378,540	4.31
8/27/2000	12:30	68.5	2	80	785	9,854,263	4.57
8/31/2000	1:30	52	6	80	882	13,184,324	4.64
9/4/2000	12:30	54	5	80	977	12,912,482	4.72
9/7/2000	12:00	55	3	80	1,048	9,718,342	3.62
9/11/2000	4:30 ²	141	0	80	1,149	13,660,047	13.03
9/14/2000	9:30	56	5	80	1,214	8,834,856	3.35
9/18/2000	2:00	46	9.5	80	1,314	13,660,047	4.25
9/18/2000	4:30 ⁸	34	0	80	1,317	339,802	0.08
9/21/2000	4:30	43	1	80	1,389	9,786,302	2.85
9/25/2000	5:30	55	6	80	1,486	13,184,324	4.91
9/28/2000	9:00	47.5	7.5	80	1,550	8,766,896	2.82

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Date	Time	PID (ppmv)		Flow Rate (ft ³ /min)	Time Elapsed (Hours)	Air Flow (Liters)	Mass Removed ¹ (Pounds)
		Influent	Effluent				
10/1/2000	1:00	38.5	6	80	1,626	10,329,986	2.69
10/5/2000	3:00 ⁴	28.5	3	80	1,724	13,320,245	2.57
10/5/2000	5:00	36	0	80	1,726	271,842	0.07
10/8/2000	3:00	28.5	3	80	1,796	9,514,460	1.83
10/14/2000	3:00	24.5	2.5	80	1,940	19,572,604	3.24
10/17/2000	2:00	36.5	3.5	80	2,011	9,650,381	2.38
10/20/2000	8:30	18.5	3.5	80	2,078	9,038,737	1.13
10/25/2000	2:00	38	3.7	80	2,203	17,058,068	4.39
10/29/2000	10:00	35	4	80	2,295	12,504,719	2.96
11/2/2000	4:00	30.5	4	80	2,397	13,863,928	2.86
11/7/2000	4:00	30	6	80	2,517	16,310,504	3.31
11/19/2000	12:00	92.7	5.5	80	2,801	38,601,525	24.20
11/24/2000	13:30	25	6.5	80	2,923	16,514,385	2.79
11/29/2000	15:00	14.5	3.5	80	3,044	16,514,385	1.62
12/4/2000	18:30	10.7	1	80	3,190	19,776,486	1.43
12/13/2000	15:30	24	3	80	3,405	29,222,986	4.74
12/28/2000	14:30	10	6	85	3,764	51,845,314	3.51
2001							
1/4/2001 ⁵	14:00	8.7	3.7	85	3,907	20,723,684	1.22
8/8/2001	15:00	217	0	85	3,907	0	0
9/6/2001	12:00	85	0	85	4,048	20,362,644	11.71
9/13/2001	16:00	186	8	85	4,220	24,839,538	31.26
9/18/2001	15:00	184	9	85	4,344	17,907,574	22.29
9/21/2001 ⁶		--	--	--	4,344	0	0
10/12/01 ⁷		--	--	--	4,344	0	0
10/23/2001	17:00	114	58	87	4,344	0	0
10/25/01 ⁴	15:00	133	0	85	4,390	6,643,132	5.98
10/29/2001 ⁸	13:20	569	0	85	4,485	13,647,304	52.53
11/7/2001	15:30	177	0	87	4,679	28,675,904	34.34
11/16/2001	15:00	117	0	87	4,894	31,853,904	25.21
11/21/01 ⁸	12:00	85	72	87	5,011	17,294,231	9.94
2002							
2/15/02 ¹⁰	16:30	49	0	80	5,011.5	67,960	0.02
2/16/2002	15:45	50	0	80	5,035	3,160,160	1.07
2/21/2002	16:00	37	4	80	5,155	16,344,484	4.09
2/27/2002	10:30	11	0	83	5,294	19,530,979	1.45
3/7/02 ¹¹	12:20	10		80	5,488	26,429,812	1.79
2002							
6/12/2002 ¹²	16:15	53	2	75	NA	NA	NA
6/17/2002	11:00	28	2	80	114.75	15,593,148	0.96
6/24/2002	11:20	24	3.1	80	168.33	22,866,400	1.21
2002							
7/5/2002	13:25	20	5	80	264.09	35,873,552	1.58
7/11/2002	15:30	26	8.0	80	144.09	19,572,752	1.12
7/23/2002	10:10	28	7.5	83	287.78	40,557,673	2.50
8/9/2002	12:20	7.5	0	80	408.09	55,434,983	0.91

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3609 International Boulevard, Oakland, California

Date	Time	PID (ppmv)		Flow Rate (ft ³ /min)	Time Elapsed (Hours)	Air Flow (Liters)	Mass Removed ¹ (Pounds)
		Influent	Effluent				
8/15/2002 ¹¹	15:00	7.0	1	80	144.11	19,575,902	0.30
8/23/2002 ¹³	15:20	NA	NA	NA	NA	NA	NA
8/26/2002	11:15	14.0	2.0	80	71.83	9,757,387	0.30
9/11/2002	10:10	34.4	0	80	383.95	52,156,428	3.95
9/19/2002	10:55	8.8	1.1	80	192.75	26,183,160	0.51
9/25/2002	10:30	18.8	1.8	80	144.75	19,662,840	0.81
10/2/2002	8:10	17.1	2.5	80	168.75	22,923,000	0.86
10/9/2002		PID malfunction		80	168.75	22,923,000	NA
10/16/2002	13:45	17.0	4.0	80	168.75	22,923,000	0.86
10/24/2002		16.5	6.4	80	192.75	26,183,160	0.95
11/1/2002		21.1	0.0	85	192.75	27,819,608	1.29
11/6/2002	10:12	PID malfunction		87	120.75	17,837,915	NA
11/7/2002		17.5	0.0	85	24.75	3,572,168	0.14
11/13/2002	11:30	15.0	0.0	85	144.75	20,891,768	0.69
11/22/2002	14:30	6.6	0.0	80	219.00	29,748,960	0.43
11/22/2002		system shut-down due to rainy season and low influent readings					
2003							
5/9/2003	10:30	0.1	0.0	82	0	0	0
5/12/2003	10:30	0.4	0.3	85	72.00	10,391,760	0.01
5/21/2003	11:00	2.2	2.2	83	216.50	30,512,211	0.15
6/4/2003	10:30	2.5	0.1	82	335.50	46,713,678	0.26
6/10/2003	10:30	2.2	0.08	82	144.00	20,049,984	0.10
6/16/2003	12:15	2.1	0.07	82	146.25	20,363,265	0.09
6/24/2003	16:55	2.6	0.08	82	196.75	27,394,683	0.16
6/30/2003	11:30	2.2	0.1	82	138.50	19,284,186	0.09
7/16/2003	12:00	2.2	0.22	82	384.50	53,536,242	0.26
7/21/2003	10:50	2.1	0.21	82	119.00	16,569,084	0.08
7/28/2003	11:15	2.2	0.22	82	168.25	23,426,457	0.11
8/11/2003	12:15	2.1	0.21	82	337.00	46,922,532	0.22
8/19/2003	10:05	2.1	0.22	82	190.00	26,454,840	0.12
8/25/2003	11:30	2.2	0.23	81	145.30	19,984,271	0.10
9/2/2003	10:50	2.1	0.21	80	190.30	25,850,352	0.12
9/8/2003	2:10	9.1	3.19	83	147.30	20,759,578	0.42
9/11/2003	10:00	All 4 SVE carbon drums changed-out					
9/22/2003	1:30	7	0.2	88	335.25	50,094,396	0.77
10/1/2003	10:30	6.5	0.2	85	213.00	30,742,290	0.44
10/6/2003	11:00	7	0.3	85	120.50	17,391,765	0.27
10/13/2003	11:15	5	0.2	85	168.25	24,283,523	0.27
10/29/2003	10:00	2.4	0	85	382.75	55,242,308	0.29
11/3/2003	11:30	3	0	85	121.50	17,536,095	0.12
11/10/2003	11:10	3.5	0	85	167.67	24,199,330	0.19
11/17/2003	13:50	4.1	0	85	170.70	24,637,131	0.22
11/24/2003	11:00	3.8	0	85	165.20	23,843,316	0.20
11/24/2003		system shut-down due to rainy season and low influent readings					

Table 3
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3609 International Boulevard, Oakland, California

Date	Time	PID (ppmv)		Flow Rate (ft ³ /min)	Time Elapsed (Hours)	Air Flow (Liters)	Mass Removed ¹ (Pounds)
		Influent	Effluent				
2004							
4/5/2004	13:00	5.6	0.11	85	0	2405.5	0
4/12/2004	10:30 AM	6.5	0.2	83	165.5	23,324,577	0.33
4/20/2004	12:00 PM	7.1	0.9	84	193.5	27,599,292	0.43
4/23/2004	11:00PM	7.2	2.3	80	59	8,014,560	0.13
5/3/2004	12:00 PM	7.1	3.4	80	241	32,737,440	0.51
5/5/2004	11:00 PM	All 4 SVE carbon drums changed-out					
5/17/2004	12:00 PM	2.7	0.8	82	336	46,783,296	0.28
5/26/2004	11:00 AM	3.8	0.5	82	215	29,935,740	0.25
6/1/2004	1:00 PM	3.6	0.9	82	122	16,986,792	0.13
6/7/2004	11:50 AM	3.2	0	82	142.9	19,896,824	0.14
6/14/2004	11:50 AM	10.9	0	86	168	24,532,704	0.59
6/21/2004	10:50: AM	13.5	0	83	167	23,535,978	0.70
6/28/2004	11:50 AM	10.9	0.5	85	169	24,391,770	0.58
2004							
7/2/2004	11:30 AM	8.7	0	85	95.8	13,826,814	0.26
7/13/2004	2:00 PM	9.1	0.22	85	266.5	38,463,945	0.77
7/21/2004	12:00 PM	8.9	0.5	85	262	37,814,460	0.74
7/26/2004	11:50 AM	8.5	0.4	85	119.5	17,247,435	0.32
8/2/2004	11:30 AM	4.9	0.1	85	167.8	24,218,574	0.26
8/9/2004	11:50 AM	5.6	0.2	85	144.2	20,812,386	0.26
8/16/2004	12:00 PM	6	0.4	85	168.1	24,261,873	0.32
8/24/2004	11:50 AM	6.2	1.2	85	191.9	27,696,927	0.38
8/30/2004	11:30 AM	6	0.4	85	143.66	20,734,448	0.27
9/7/2004	1:05 PM	5.5	0.8	85	193.5	27,927,855	0.34
9/13/2004	12:05 PM	5.3	0.9	85	143	20,639,190	0.24
9/20/2004	11:08 AM	7	2.9	85	167	24,103,110	0.37
9/27/2004	2:50 PM	6.5	2.1	85	171.75	24,788,678	0.35
2004							
10/4/2004	11:30 AM	6.9	3	85	164.55	23,749,502	0.36
10/13/2004	10:30 AM	6.5	2.9	85	215	31,030,950	0.44
10/18/2004	2:30 PM	6	1.5	85	124	17,896,920	0.24
10/28/2004	2:00 PM	3.1	0.9	85	239.5	34,567,035	0.24
10/28/2004	system shut-down due to rainy season and low influent readings						
Total Mass of Petroleum Hydrocarbons Removed =							424.20
Average Daily Removal Rate (pounds / day)=							0.27

Notes:

- ¹ The representative molecular weight of hydrocarbons was assumed to be 78 gram/mole and used the measured temperature of Vapor (36 °C) in converting ppm-v to ppm on mass basis.
- ² System accidentally shut down from main box, readings taken 30 minutes after startup.
- ³ GAC Replaced
- ⁴ GAC-1 removed, new GAC installed at effluent end
- ⁵ SVE System turned off for rainy season due to low influent concentrations
- ⁶ system down, hoses disconnected and GAC moved for replacement
- ⁷ system down for electrical repair
- ⁸ Carbon change-out of three drums, moved new effluent drum on 10/25/01 to GAC-1
- ⁹ system shut-down due to high effluent value
- ¹⁰ System re-started (since November 21, 2001), installed new 4-55 gallon vapor phase carbon vessels, repaired blower
- ¹¹ System was shut-down due to low influent reading
- ¹² System was restarted on 6/12/02
- ¹³ System was re-started but no readings were taken

FIGURES

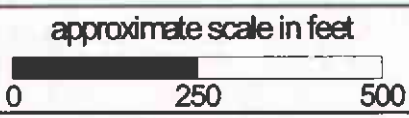


Figure 1: Site vicinity map.



COMMERCIAL AREA

COMMERCIAL AREA

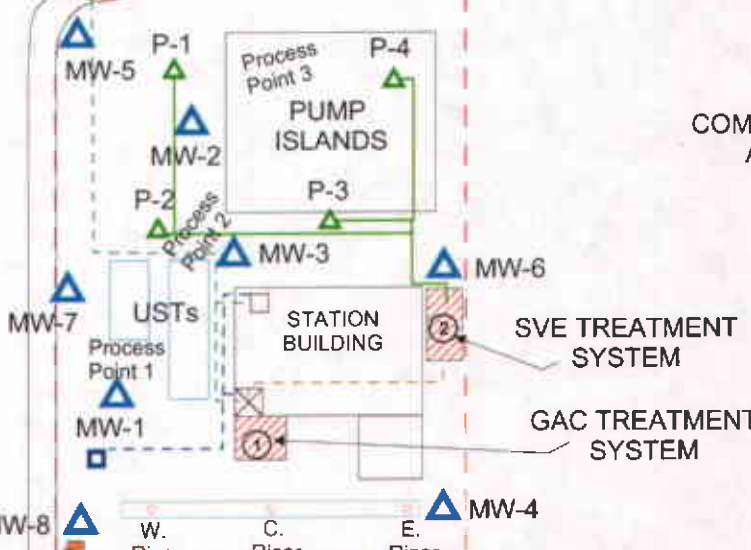
36th AVENUE

Main sewer line

Manhole

EBMUD

Storm drain



LAS BOUGANVILLAS APTS

E 12th STREET

- MONITORING WELL
- EXTRACTION WELL
- EXTRACTION MANIFOLD PIPING
- FACILITY PROPERTY LINES
- SEWER LINE APPROXIMATE
- WATER LINE TO WATER METER APPROXIMATE
- TREATMENT SYSTEM DISCHARGE LINE APPROXIMATE
- RESTROOM
- SINK
- NEPTUNE WATER METER
- TREATMENT SYSTEM SAMPLING POINT

(Discharge permit No: 504-27421)
Tony's Express Auto Service



approximate scale in feet

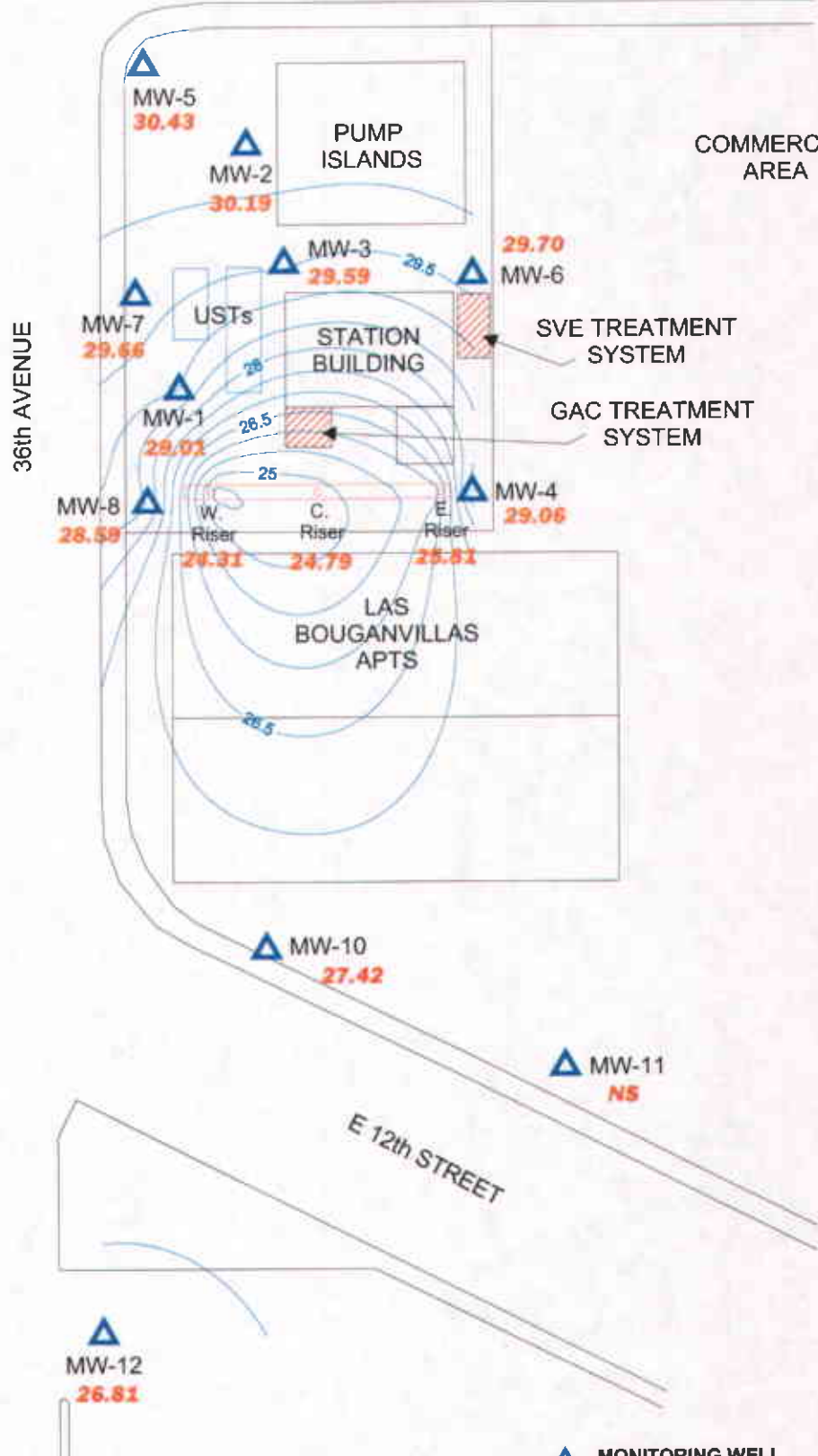


Figure 2: Site map showing location of groundwater monitoring wells, French drain, SVE system, and GAC system.

COMMERCIAL AREA

INTERNATIONAL BLVD

COMMERCIAL AREA



approximate groundwater flow direction towards W. Riser

▲ MONITORING WELL
NS NOT SURVEYED DUE TO OBSTRUCTIONS

approximate scale in feet



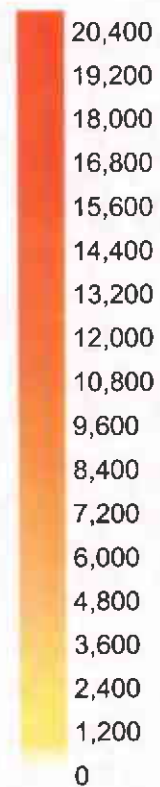
Figure 3: Groundwater elevation contour map in feet.
December 2004.

COMMERCIAL AREA

INTERNATIONAL BLVD

COMMERCIAL AREA

TPH-g
ug/L



36th AVENUE

MW-5
150

MW-2
99

MW-3
6,441

MW-6
12,631

MW-7
96

MW-1
22,790

SVE TREATMENT SYSTEM

GAC TREATMENT SYSTEM

MW-8
6,650

W. Riser C. Riser E. Riser

MW-4
<50

STATION BUILDING

LAS BOUGANVILLAS APTS

MW-10
2,524

MW-11
486

E 12th STREET

MW-12
1,018

▲ MONITORING WELL

< LESS THAN LAB REPORTING LIMITS

approximate groundwater flow direction towards W. Riser

approximate scale in feet



Figure 4: Contour map of TPH-g concentrations in the groundwater. December 2004.

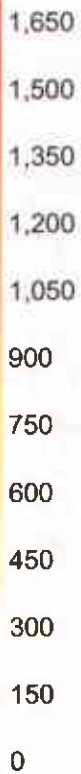


COMMERCIAL AREA

INTERNATIONAL BLVD

COMMERCIAL AREA

Benzene
ug/L



36th AVENUE

MW-5
<0.5

MW-2
1.7

PUMP ISLANDS

MW-7
<0.5

USTs

MW-3
978

MW-6
649

STATION BUILDING

SVE TREATMENT SYSTEM

MW-1
1,634

GAC TREATMENT SYSTEM

MW-8
171

W. Riser

C. Riser

E. Riser

MW-4
1.3

LAS BOUGANVILLAS APTS

MW-10
556

MW-11
24

E 12th STREET

MW-12
2



▲ MONITORING WELL

< LESS THAN LAB REPORTING LIMITS

approximate groundwater flow direction towards W. Riser

approximate scale in feet

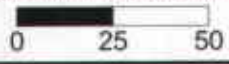


Figure 5: Contour map of Benzene concentrations in the groundwater. December 2004.



COMMERCIAL AREA

INTERNATIONAL BLVD

COMMERCIAL AREA

MtBE
ug/L



36th AVENUE

MW-5
2.6

MW-2
<0.5

PUMP ISLANDS

MW-3
201

MW-6
<2.15

MW-7
<0.5

USTs

STATION BUILDING

SVE TREATMENT SYSTEM

MW-1
5,504

GAC TREATMENT SYSTEM

MW-8
166

W. Riser C. Riser E. Riser

MW-4
<0.5

LAS BOUGANVILLAS APTS

MW-10
144

MW-11
<0.5

E 12th STREET

MW-12
26

▲ MONITORING WELL

< LESS THAN LAB REPORTING LIMITS

approximate groundwater flow direction towards W. Riser

approximate scale in feet

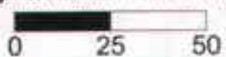
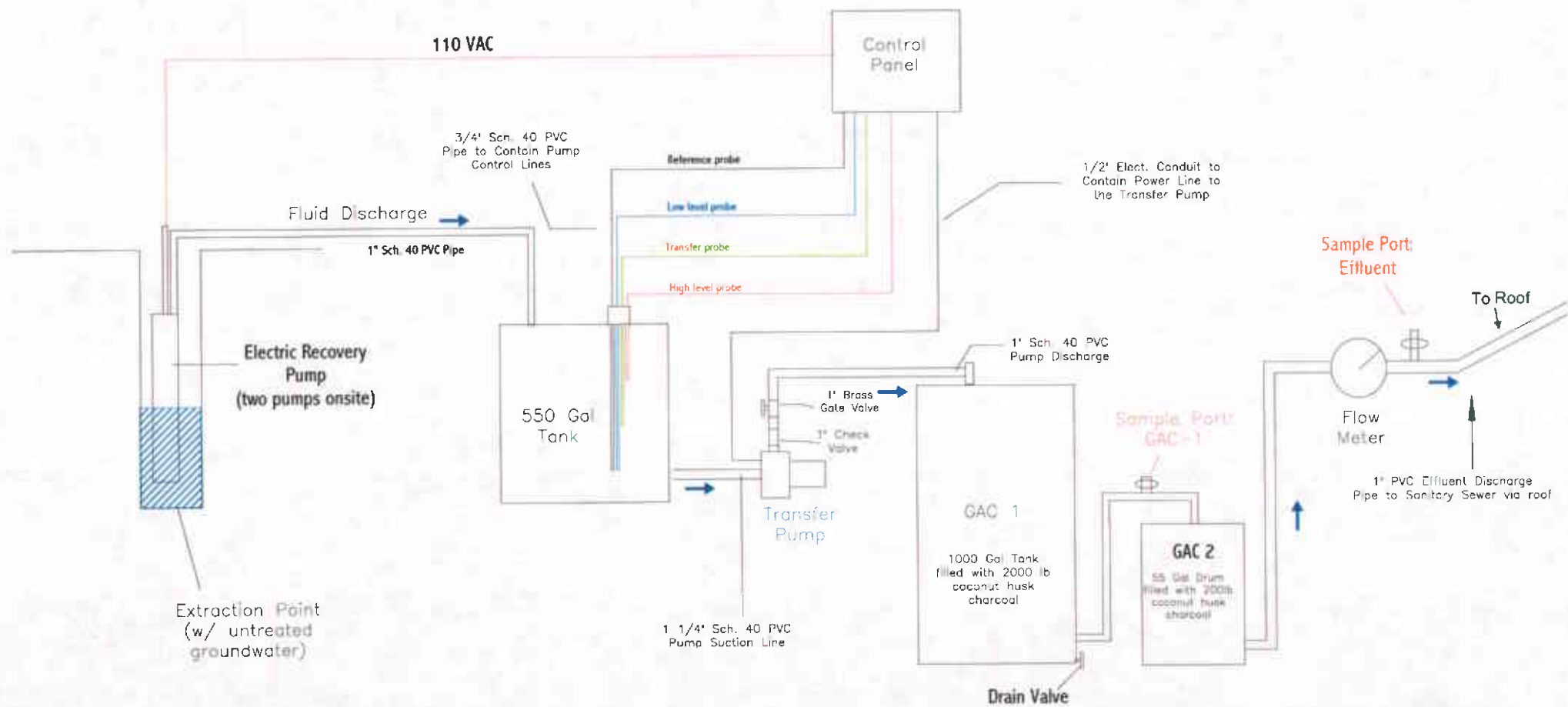


Figure 6: Contour map of MtBE concentrations in the groundwater. (EPA Method 8260B). December 2004.



(Discharge permit No: 504-27421)
 Tony's Express Auto Service. September 1, 2004

Figure 7: Schematic of the Groundwater Remediation System.

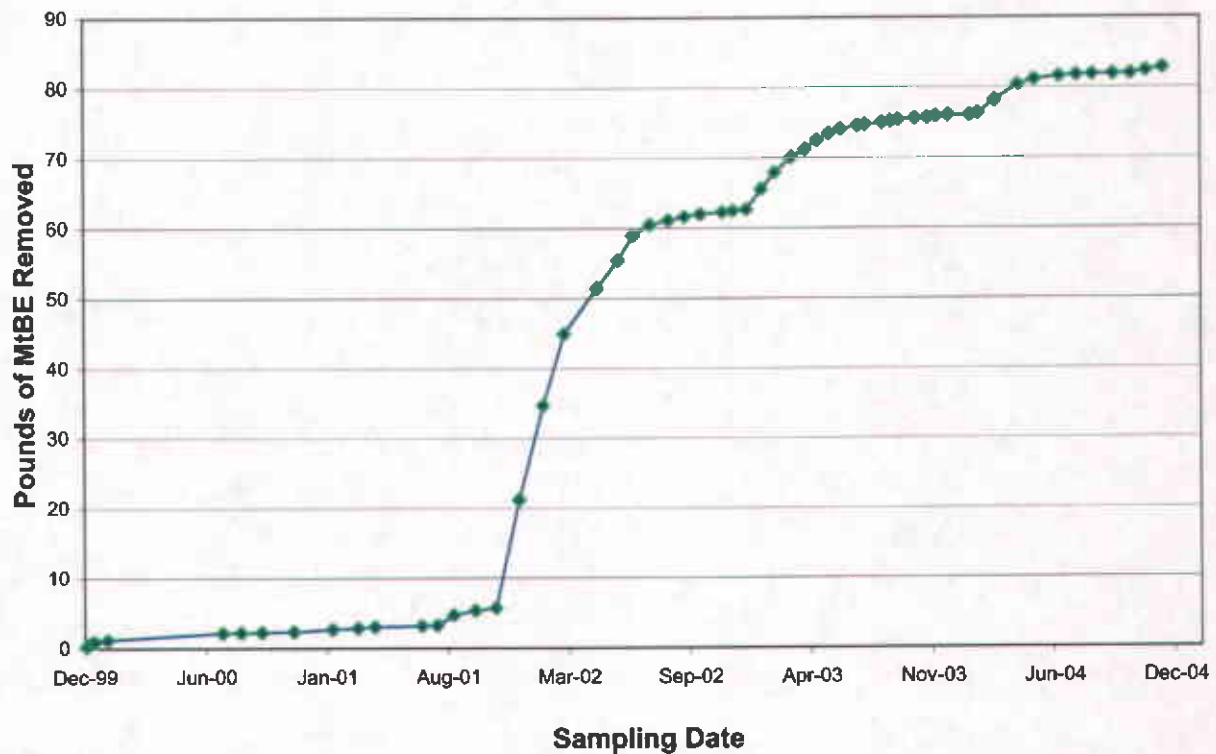
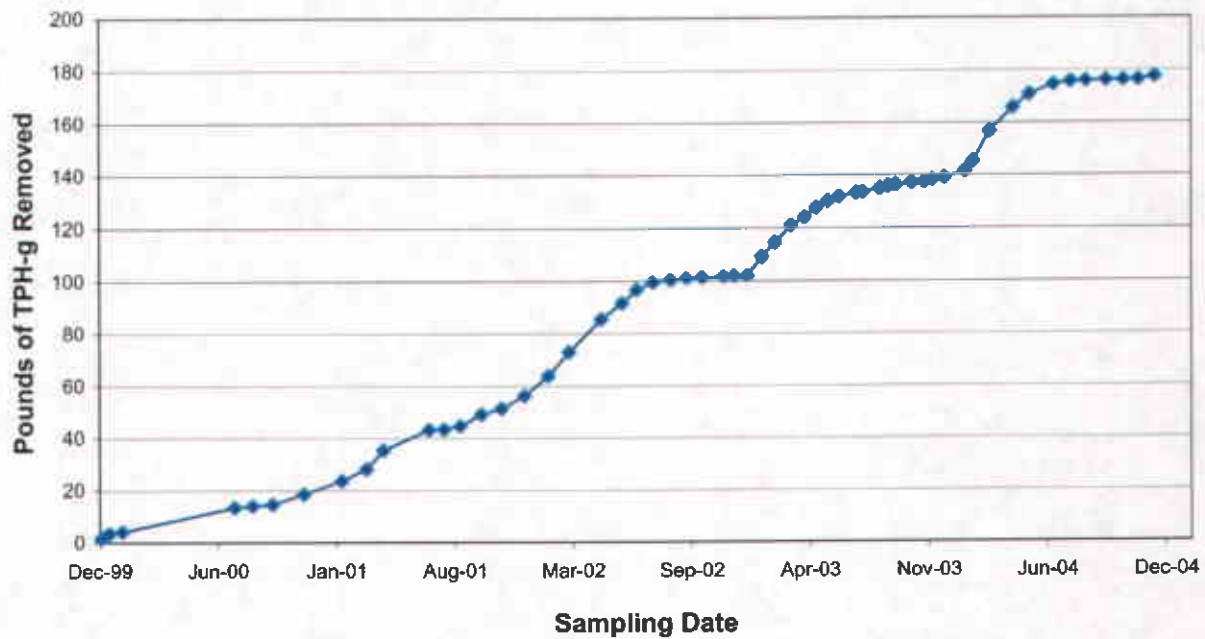


Figure 8. Cumulative mass of TPH-g and MtBE removed from groundwater since the installation of the treatment system.

APPENDIX A

SOMA's Groundwater Monitoring Procedures

Field Activities

On December 7 and 8, 2004, SOMA's field crew conducted a groundwater monitoring event in accordance with the procedures and guidelines of the RWQCB, San Francisco Bay Region. During this groundwater monitoring event a total of eight on-site monitoring wells (MW-1 to MW-8), three off-site monitoring wells (MW-10 to MW-12), and three on-site French drain risers were measured for depth to groundwater. Field measurements and grab groundwater samples were collected from all on and off-site monitoring wells.

The depth to groundwater in each monitoring well and riser 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 and riser were used to calculate the groundwater elevation.

Kier and Wright Civil Engineers Surveyors, Inc. surveyed the wells and risers on August 9, 2002. At the time of the survey, monitoring well MW-11 could not be accessed due to obstacles preventing the proper use of surveying equipment; therefore, this well was not surveyed. The top of casing elevations were based on the survey data measured at this time. The elevation data was based on a datum of 14.20 NAVD88. The new survey was conducted to comply with an Electronically Deliverable Format (EDF) request made by the State Water Resources Control Board (SWRCB) Database.

The survey data measured by Kier and Wright is presented in Appendix B.

Prior to the collection of samples, each well was purged using a battery operated 2-inch diameter pump (Model ES-60 DC). During the purging activities, in order to obtain accurate measurements of groundwater parameters and especially to avoid the intrusion of oxygen from ambient air into the groundwater samples, field measurements were conducted in-situ (i.e., down-hole inside each monitoring well). The pH, temperature, electric conductivity (EC), dissolved oxygen (DO), turbidity, and Oxygen Reduction Potential (ORP) were measured in-situ using a Horiba, Model U-22 multi-parameter instrument. The Horiba, Model U-22 was calibrated at the Site using standard solutions and procedures provided by the manufacturer.

Detailed field measurements are shown in Appendix B.

The purging continued until the parameters for pH, temperature, EC, DO, turbidity, and redox stabilized, or three casing volumes were purged. The groundwater samples were also tested on-site for ferrous iron (Fe^{+2}), and nitrate (NO_3^-), and sulfate (SO_4^{-2}) concentrations once stabilization occurred. Ferrous iron, nitrate, and sulfate were measured colorimetrically using the Hach Colorimeter Model 890.

For sampling purposes, after purging, a disposable polyethylene bailer was used to collect sufficient samples from each monitoring well for laboratory analyses. The groundwater sample was transferred into three 40-mL VOA vials and preserved with hydrochloric acid. The vials were then sealed to prevent development of air bubbles within the headspace. After the groundwater samples were collected, they were placed on ice and maintained at 4°C in a cooler. A chain of custody (COC) form was written and placed along with the samples in the cooler. On December 8, 2004, SOMA's field crew delivered the groundwater samples to Pacific Analytical Laboratory in Alameda, California.

Laboratory Analysis

Pacific Analytical Laboratory, a state certified laboratory, analyzed the groundwater samples for TPH-g, BTEX and MtBE. TPH-g, BTEX, and MtBE was prepared using EPA Method 5030B and measured using EPA Method 8260B.

Appendix B

**Table of Elevations & Coordinates on Monitoring Wells
Surveyed by Kier Wright Civil Engineers Surveyors, Inc.,
and
Field Measurements of Physical, Chemical, and
Biodegradation Parameters of Groundwater**

**TABLE OF ELEVATIONS & COORDINATES
 ON MONITORING WELLS**
 SOMA ENVIRONMENTAL
 Oakland-E. 14 the St. "International Blvd"

WELL NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
FD-C	2109299.85	6064039.85	39.35 40.25	Notch on north side of PVC Punch north rim of box
FD-E	2109281.13	6064067.87	40.06 40.55	Notch on north side of PVC Punch north rim of box
FD-W	2109314.99	6064017.59	39.16 39.95	Notch on north side of PVC Punch north rim of box
MW-1	2109338.74	6064025.97	40.11 40.76	Notch on north side of PVC Punch north rim of box
MW-2	2109383.20	6064073.06	40.71 41.61	Notch on north side of PVC Punch north rim of box
MW-3	2109351.11	6064064.63	40.91 41.68	Notch on north side of PVC Punch north rim of box
MW-4	2109278.18	6064076.40	40.01 40.67	Notch on north side of PVC Punch north rim of box
MW-5	2109410.84	6064058.46	41.16 41.60	Notch on south side of PVC Punch south rim of box
MW-6	2109320.46	6064105.06	40.92 41.52	Notch on north side of PVC Punch north rim of box
MW-7	2109368.19	6064025.54	39.94 40.54	Notch on north side of PVC Punch north rim of box
MW-8	2109321.68	6064000.46	39.38 39.72	Notch on north side of PVC Punch north rim of box

**TABLE OF ELEVATIONS & COORDINATES
ON MONITORING WELLS**

SOMA ENVIRONMENTAL
Oakland-E. 14 the St. "International Blvd"

WELL NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
MW-10	2109193.97	6063957.39	36.71 37.70	Notch on north side of PVC Punch north rim of box
MW-11	2109125.26	6064007.52	XXXX	NO ELEVATION , BOAT ON TOP
MW-12	2109121.85	6063865.00	36.84 36.87	Notch on north side of PVC

Bench mark: NGS Bench mark No.M 554. To reach the station from the intersection of Interstate Highway 880 and Hegenberger Rd in South Oakland go northeast on Hegenberger Rd for 0.5 MI to a side road right Baldwin St. Turn right and go south on Baldwin St for 0.35 MI to a T-intersection, 85th Ave. for 0.1 MI to a side road right, Railroad Ave. Turn right and go south on Railroad Ave. for 0.1 MI to the station on the left, east, side of the road in a large concrete headwall for a culvert.

Elevation = 14.20 NAVD88 Datum

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

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

Appendix C

Chain of Custody Form and Laboratory Report
for the
Fourth Quarter 2004 Monitoring Event

PAL Pacific Analytical Laboratory
851 West Midway Ave. Suite 201
Alameda, CA 94501

Phone (510) 864-0364

LABORATORY REPORT

Prepared For: **SOMA Environmental Engineering Inc.**
2680 Bishop Dr.
Suite 203
San Ramon, CA 94583

Attention: **Joyce Bobek**

Date: **1/6/2005**

Project ID: **2331**

Location: **3609 International Blvd, Oakland**

Lab Job Number: **1034**

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.

Reviewed by: _____

Laboratory Director

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#

1034

Project No: 2331				Sampler: <i>Elena Marzo / John Lehman</i>				Analyses/Method			
Project Name: 3609 International Blvd Oakland				Report To: Joyce Bobek				TPHg, BTEX, MIBE 8260B			
Project P.O.: ---				Company: SOMA Environmental Engineering, Inc.							
Turnaround Time: Standard				Tel: 925-244-6600 Fax: 925-244-6601							
		Sampling Date/Time		Matrix			# of Containers		Preservatives		
Lab No.	Sample ID	Date	Time	Soil	Water	Waste	HCL	H ₂ SO ₄	HNO ₃	ICE	Field Notes
1034 - 1034 - 1034 - 1034 - 1034 - 1034 - 1034 - 1034 - 1034 - 1034 - 1034 -	01 02 03 04 05 06 07 08 09 10 11	MW-1 MW-2 MW-3 MW-4 MW-5 MW-6 MW-7 MW-8 MW-10 MW-11	12/8/4 12/8/4 12/8/4 12/8/4 12/8/4 12/8/4 12/8/4 12/8/4 12/8/4 12/8/4 12/8/4	10:15am 12:5pm 12:40pm 10:20am 4:10pm 11:10am 4:35pm 10:20am 3:07pm 3:35pm	X		4 Vials	X			Grab sample
Sampler Remarks: EDF output required				Relinquished by: <i>Elena Marzo</i>		Date/Time: 12/8/4 2:15pm		Received by: THU LE		Date/Time: 12/8/04 2:15pm	

SOMA environmental Engineering Inc. 2680 Bishop Dr. San Ramon	Lab Job # Project ID: Location: Sampled: Received:	1034 2331 3609 International Blvd., Oakland. 12/7-8/2004 12/8/2004	
TPHg by GC/MS			
Sampled:	12/8/2004	Received:	12/8/2004
Field ID:	MW-1	Lab ID:	1034-01
Type:	Sample	Dilution Factor:	86
Matrix:	Water	Date Prep:	12/10/2004
Units:	µg/L	Date Analyzed:	12/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
Gasoline (C6-C12)	22790	4300	8260B
BTEX/MTBE by GC/MS			
Sampled:	12/8/2004	Received:	12/8/2004
Field ID:	MW-1	Lab ID:	1034-01
Type:	Sample	Dilution Factor:	86
Matrix:	Water	Date Prep:	12/10/2004
Units:	µg/L	Date Analyzed:	12/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
MTBE	5504	43	8260B
Benzene	1634	43	8260B
Toluene	319	43	8260B
Ethyl benzene	895	43	8260B
m&p-xylene	2378	86	8260B
o-xylene	473	43	8260B
Surrogate	% REC	%REC Limits	Analysis
Dibromofluoromethane	79	70-130	8260B
Toluene-d8	93	70-130	8260B

TPHg by GC/MS			
Sampled:	12/8/2004	Received:	12/8/2004
Field ID:	MW-2	Lab ID:	1034-02
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Date Prep:	12/10/2004
Units:	µg/L	Date Analyzed:	12/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
Gasoline (C6-C12)	99	50	8260B
BTEX/MTBE by GC/MS			
Sampled:	12/8/2004	Received:	12/8/2004
Field ID:	MW-2	Lab ID:	1034-02
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Date Prep:	12/10/2004
Units:	µg/L	Date Analyzed:	12/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
MTBE	ND	0.5	8260B
Benzene	1.7	0.5	8260B
Toluene	3.3	0.5	8260B
Ethyl benzene	8.3	0.5	8260B
m&p-xylene	19.7	1	8260B
o-xylene	5.4	0.5	8260B
Surrogate	% REC	%REC Limits	Analysis
Dibromofluoromethane	81	70-130	8260B
Toluene-d8	94	70-130	8260B

Pacific Analytical Laboratory
Majid Akhavan
Laboratory Director

TPHg by GC/MS			
Sampled:	12/8/2004	Received:	12/8/2004
Field ID:	MW-3	Lab ID:	1034-03
Type:	Sample	Dilution Factor:	8.6
Matrix:	Water	Date Prep:	12/10/2004
Units:	µg/L	Date Analyzed:	12/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
Gasoline (C6-C12)	6441	430	8260B
BTEX/MTBE by GC/MS			
Sampled:	12/8/2004	Received:	12/8/2004
Field ID:	MW-3	Lab ID:	1034-03
Type:	Sample	Dilution Factor:	8.6
Matrix:	Water	Date Prep:	12/10/2004
Units:	µg/L	Date Analyzed:	12/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
MTBE	201	4.3	8260B
Benzene	978	4.3	8260B
Toluene	109	4.3	8260B
Ethyl benzene	490	4.3	8260B
m&p-xylene	796	8.6	8260B
o-xylene	145	4.3	8260B
Surrogate	% REC	%REC Limits	Analysis
Dibromofluoromethane	79	70-130	8260B
Toluene-d8	95	70-130	8260B

TPHg by GC/MS			
Sampled:	12/8/2004	Received:	12/8/2004
Field ID:	MW-4	Lab ID:	1034-04
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Date Prep:	12/10/2004
Units:	µg/L	Date Analyzed:	12/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
Gasoline (C6-C12)	ND	50	8260B
BTEX/MTBE by GC/MS			
Sampled:	12/8/2004	Received:	12/8/2004
Field ID:	MW-4	Lab ID:	1034-04
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Date Prep:	12/10/2004
Units:	µg/L	Date Analyzed:	12/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
MTBE	ND	0.5	8260B
Benzene	1.3	0.5	8260B
Toluene	ND	0.5	8260B
Ethyl benzene	2.8	0.5	8260B
m&p-xylene	ND	1	8260B
o-xylene	ND	0.5	8260B
Surrogate	% REC	%REC Limits	Analysis
Dibromofluoromethane	82	70-130	8260B
Toluene-d8	95	70-130	8260B

TPHg by GC/MS			
Sampled:	12/7/2004	Received:	12/7/2004
Field ID:	MW-5	Lab ID:	1034-05
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Date Prep:	12/10/2004
Units:	µg/L	Date Analyzed:	12/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
Gasoline (C6-C12)	150	50	8260B
BTEX/MTBE by GC/MS			
Sampled:	12/7/2004	Received:	12/7/2004
Field ID:	MW-5	Lab ID:	1034-05
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Date Prep:	12/10/2004
Units:	µg/L	Date Analyzed:	12/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
MTBE	2.6	0.5	8260B
Benzene	ND	0.5	8260B
Toluene	ND	0.5	8260B
Ethyl benzene	ND	0.5	8260B
m&p-xylene	ND	1	8260B
o-xylene	ND	0.5	8260B
Surrogate	% REC	%REC Limits	Analysis
Dibromofluoromethane	82	70-130	8260B
Toluene-d8	94	70-130	8260B

TPHg by GC/MS			
Sampled:	12/8/2004	Received:	12/8/2004
Field ID:	MW-6	Lab ID:	1034-06
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Date Prep:	12/10/2004
Units:	µg/L	Date Analyzed:	12/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
Gasoline (C6-C12)	12631	50	8260B
BTEX/MTBE by GC/MS			
Sampled:	12/8/2004	Received:	12/8/2004
Field ID:	MW-6	Lab ID:	1034-06
Type:	Sample	Dilution Factor:	4.3
Matrix:	Water	Date Prep:	12/10/2004
Units:	µg/L	Date Analyzed:	12/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
MTBE	ND	2.15	8260B
Benzene	649	2.15	8260B
Toluene	134	2.15	8260B
Ethyl benzene	1009	2.15	8260B
m&p-xylene	1747	4.3	8260B
O-xylene	290	2.15	8260B
Surrogate	% REC	%REC Limits	Analysis
Dibromofluoromethane	80	70-130	8260B
Toluene-d8	100	70-130	8260B

TPHg by GC/MS			
Sampled:	12/7/2004	Received:	12/7/2004
Field ID:	MW-7	Lab ID:	1034-07
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Date Prep:	12/10/2004
Units:	µg/L	Date Analyzed:	12/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
Gasoline (C6-C12)	96	50	8260B
BTEX/MTBE by GC/MS			
Sampled:	12/7/2004	Received:	12/7/2004
Field ID:	MW-7	Lab ID:	1034-07
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Date Prep:	12/10/2004
Units:	µg/L	Date Analyzed:	12/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
MTBE	ND	0.5	8260B
Benzene	ND	0.5	8260B
Toluene	ND	0.5	8260B
Ethyl benzene	ND	0.5	8260B
m&p-xylene	ND	1	8260B
o-xylene	ND	0.5	8260B
Surrogate	% REC	%REC Limits	Analysis
Dibromofluoromethane	78	70-130	8260B
Toluene-d8	94	70-130	8260B

TPHg by GC/MS			
Sampled:	12/7/2004	Received:	12/7/2004
Field ID:	MW-8	Lab ID:	1034-08
Type:	Sample	Dilution Factor:	
Matrix:	Water	Date Prep:	12/10/2004
Units:	µg/L	Date Analyzed:	12/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
Gasoline (C6-C12)	6650	50	8260B
BTEX/MTBE by GC/MS			
Sampled:	12/7/2004	Received:	12/7/2004
Field ID:	MW-8	Lab ID:	1034-08
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Date Prep:	12/10/2004
Units:	µg/L	Date Analyzed:	12/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
MTBE	166	4.3	8260B
Benzene	171	4.3	8260B
Toluene	15	4.3	8260B
Ethyl benzene	360	4.3	8260B
m&p-xylene	32	8.6	8260B
o-xylene	3	4.3	8260B
Surrogate	% REC	%REC Limits	Analysis
Dibromofluoromethane	88	70-130	8260B
Toluene-d8	114	70-130	8260B

TPHg by GC/MS			
Sampled:	12/7/2004	Received:	12/7/2004
Field ID:	MW-10	Lab ID:	1034-10
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Date Prep:	12/10/2004
Units:	µg/L	Date Analyzed:	12/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
Gasoline (C6-C12)	2524	50	8260B
BTEX/MTBE by GC/MS			
Sampled:	12/7/2004	Received:	12/7/2004
Field ID:	MW-10	Lab ID:	1034-10
Type:	Sample	Dilution Factor:	4.3
Matrix:	Water	Date Prep:	12/10/2004
Units:	µg/L	Date Analyzed:	12/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
MTBE	144	2.15	8260B
Benzene	556	2.15	8260B
Toluene	10	2.15	8260B
Ethyl benzene	184	2.15	8260B
m&p-xylene	16	4.3	8260B
o-xylene	ND	2.15	8260B
Surrogate	% REC	%REC Limits	Analysis
Dibromofluoromethane	79	70-130	8260B
Toluene-d8	98	70-130	8260B

SOMA environmental Engineering Inc. 2680 Bishop Dr. San Ramon	Lab Job # Project ID: Location: Sampled: Received:	1038 2331 3609 International Blvd., Oakland 12/7-8/2004 12/8/2004	
TPHg by GC/MS			
Sampled:	12/7/2004	Received:	12/7/2004
Field ID:	MW-11	Lab ID:	1034-11
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Date Prep:	12/10/2004
Units:	µg/L	Date Analyzed:	12/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
Gasoline (C6-C12)	486	50	8260B
BTEX/MTBE by GC/MS			
Sampled:	12/7/2004	Received:	12/7/2004
Field ID:	MW-11	Lab ID:	1034-11
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Date Prep:	12/10/2004
Units:	µg/L	Date Analyzed:	12/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
MTBE	ND	0.5	8260B
Benzene	24	0.5	8260B
Toluene	3	0.5	8260B
Ethyl benzene	18	0.5	8260B
m&p-xylene	4	1	8260B
o-xylene	ND	0.5	8260B
Surrogate	% REC	%REC Limits	Analysis
Dibromofluoromethane	79	70-130	8260B
Toluene-d8	94	70-130	8260B

TPHg by GC/MS			
Sampled:	12/7/2004	Received:	12/7/2004
Field ID:	MW-12	Lab ID:	1034-12
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Date Prep:	12/10/2004
Units:	µg/L	Date Analyzed:	12/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
Gasoline (C6-C12)	1018	50	8260B
BTEX/MTBE by GC/MS			
Sampled:	12/7/2004	Received:	12/7/2004
Field ID:	MW-12	Lab ID:	1034-12
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Date Prep:	12/10/2004
Units:	µg/L	Date Analyzed:	12/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
MTBE	26	0.5	8260B
Benzene	2	0.5	8260B
Toluene	ND	0.5	8260B
Ethyl benzene	ND	0.5	8260B
m&p-xylene	ND	1	8260B
o-xylene	ND	0.5	8260B
Surrogate	% REC	%REC Limits	Analysis
Dibromofluoromethane	79	70-130	8260B
Toluene-d8	94	70-130	8260B

TPHg by GC/MS			
Field ID:	N/A	Lab ID:	Blank
Type:	QC	Dilution Factor:	1
Matrix:	Water	Prep:	12/8/2004
Units:	µg/L	Date Analyzed:	12/8/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
Gasoline (C6-C12)	ND	50	8260B
BTEX/MTBE by GC/MS			
Field ID:	N/A	Lab ID:	Blank
Type:	QC	Dilution Factor:	1
Matrix:	Water	Prep:	12/8/2004
Units:	µg/L	Date Analyzed:	12/8/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
MTBE	ND	0.5	8260B
Benzene	ND	0.5	8260B
Toluene	ND	0.5	8260B
Ethyl benzene	ND	0.5	8260B
m&p-xylene	ND	1	8260B
O-xylene	ND	0.5	8260B
Surrogate	% REC	%REC Limits	Analysis
Dibromofluoromethane	92	70-130	8260B
Toluene-d8	85	70-130	8260B

ND= Not Detected

RL= Reporting Limits

TPHg by GC/MS			
Field ID:	N/A	Lab ID:	MS
Type:	QC	Dilution Factor:	1
Matrix:	Water	Prep:	12/8/2004
Units:	µg/L	Date Analyzed:	12/8/2004
Batch:		Prep. Method:	5030B
Analyte	% REC	% REC Limit	Analysis
Gasoline (C6-C12)	72	70-130	8260B
BTEX/MTBE by GC/MS			
Field ID:	N/A	Lab ID:	MS
Type:	QC	Dilution Factor:	1
Matrix:	Water	Prep:	12/8/2004
Units:	µg/L	Date Analyzed:	12/10/2004
Batch:		Prep. Method:	5030B
Analyte	% REC.	REC Limit	Analysis
MTBE	103	8260B	8260B
Benzene	106	8260B	8260B
Toluene	101	8260B	8260B
Ethyl benzene	100	8260B	8260B
m&p-xylene	101	8260B	8260B
o-xylene	107	8260B	8260B
Surrogate	% REC	%REC Limits	Analysis
Dibromofluoromethane	85	70-130	8260B
Toluene-d8	95	70-130	8260B

ND= Not Detected

RL= Reporting Limits

TPHg by GC/MS			
Field ID:	N/A	Lab ID:	MSD
Type:	QC	Dilution Factor:	1
Matrix:	Water	Prep:	12/8/2004
Units:	µg/L	Date Analyzed:	12/8/2004
Batch:		Prep. Method:	5030B
Analyte	% REC.	REC Limit	Analysis
Gasoline (C6-C12)	65*	70-130	8260B
BTEX/MTBE by GC/MS			
Field ID:	N/A	Lab ID:	MSD
Type:	QC	Dilution Factor:	1
Matrix:	Water	Prep:	12/8/2004
Units:	µg/L	Date Analyzed:	12/10/2004
Batch:		Prep. Method:	5030B
Analyte	% REC.	REC Limit	Analysis
MTBE	121	70-130	8260B
Benzene	119	70-130	8260B
Toluene	115	70-130	8260B
Ethyl benzene	113	70-130	8260B
m&p-xylene	115	70-130	8260B
O-xylene	122	70-130	8260B
Surrogate	% REC.	%REC Limits	Analysis
Dibromofluoromethane	84	70-130	8260B
Toluene-d8	95	70-130	8260B

ND= Not Detected

RL= Reporting Limits

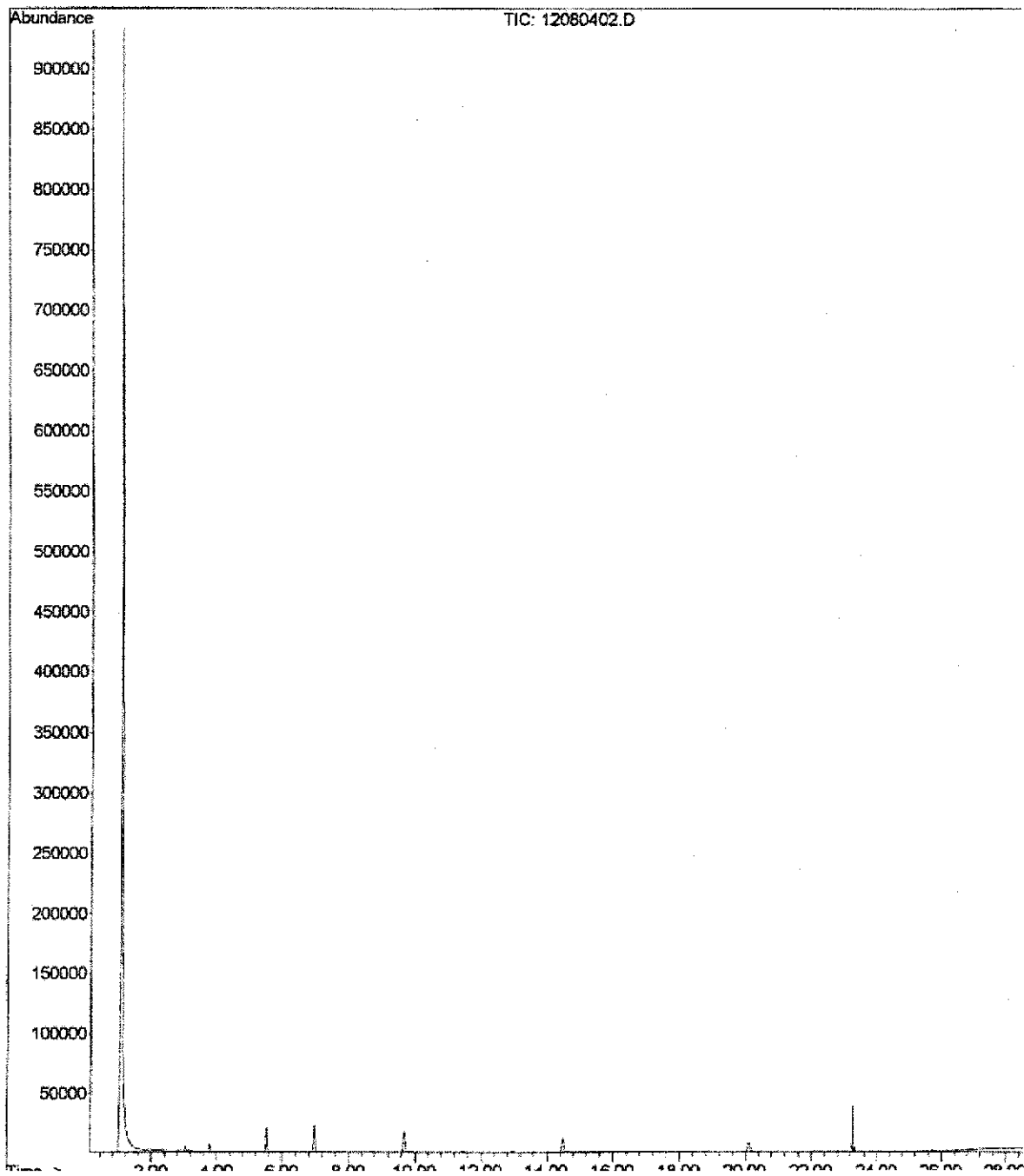
*= Low recovery due
to the matrix effect

TPHg by GC/MS			
Field ID:	N/A	Lab ID:	LCS
Type:	QC	Dilution Factor:	1
Matrix:	Water	Prep:	12/8/2004
Units:	µg/L	Date Analyzed:	12/9/2004
Batch:		Prep. Method:	5030B
Analyte	Result	%REC Limits	Analysis
Gasoline (C6-C12)	72	70-130	8260B
BTEX/MTBE by GC/MS			
Field ID:	N/A	Lab ID:	LCS
Type:	QC	Dilution Factor:	1
Matrix:	Water	Prep:	12/8/2004
Units:	µg/L	Date Analyzed:	12/8/2004
Batch:		Prep. Method:	5030B
Analyte	Result	%REC Limits	Analysis
MTBE	99	70-130	8260B
Benzene	94	70-130	8260B
Toluene	91	70-130	8260B
Ethyl benzene	84	70-130	8260B
m&p-xylene	85	70-130	8260B
o-xylene	93	70-130	8260B
Surrogate	% REC	%REC Limits	Analysis
Dibromofluoromethane	85	70-130	8260B
Toluene-d8	95	70-130	8260B

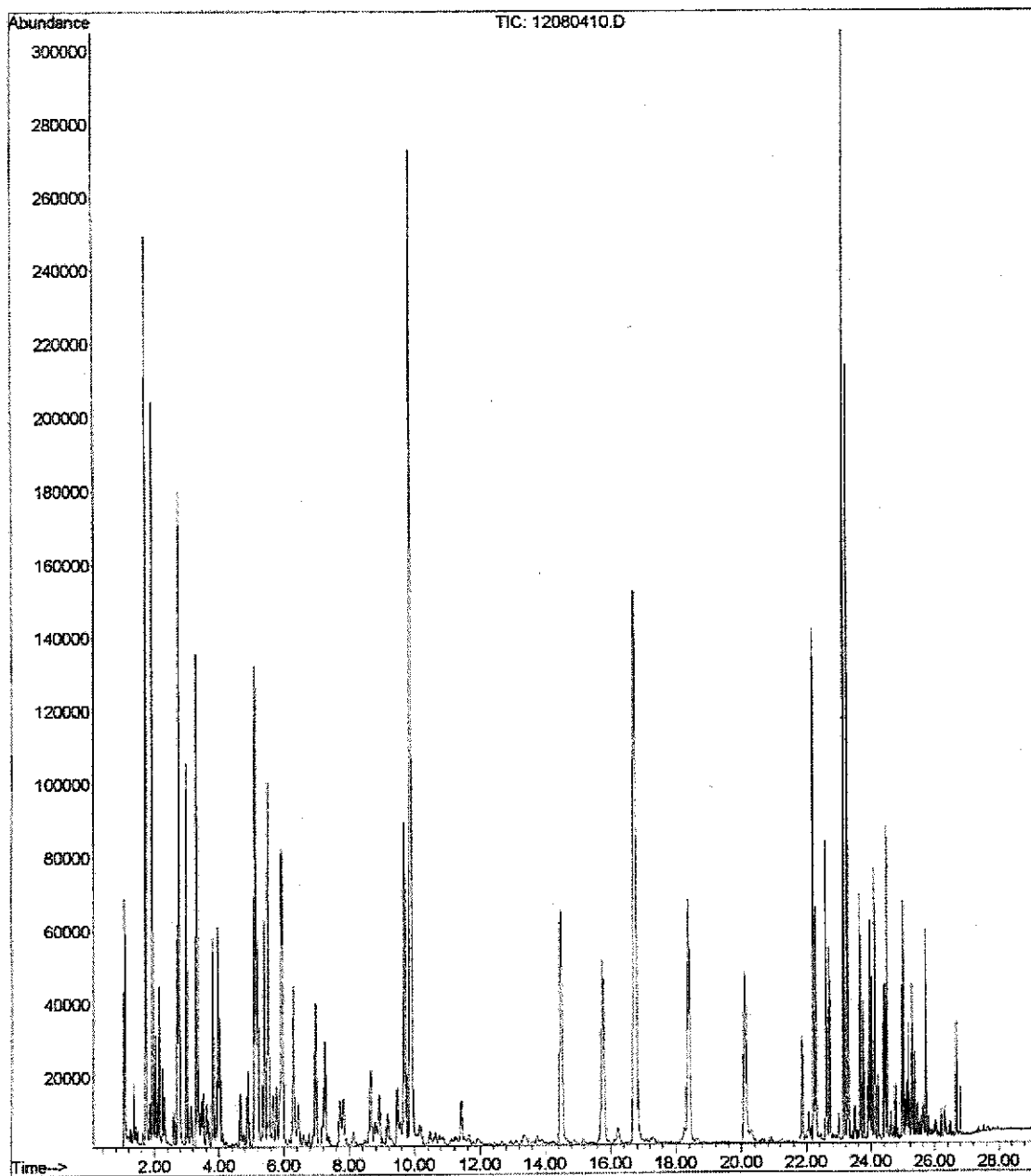
ND= Not Detected

RL= Reporting Limits

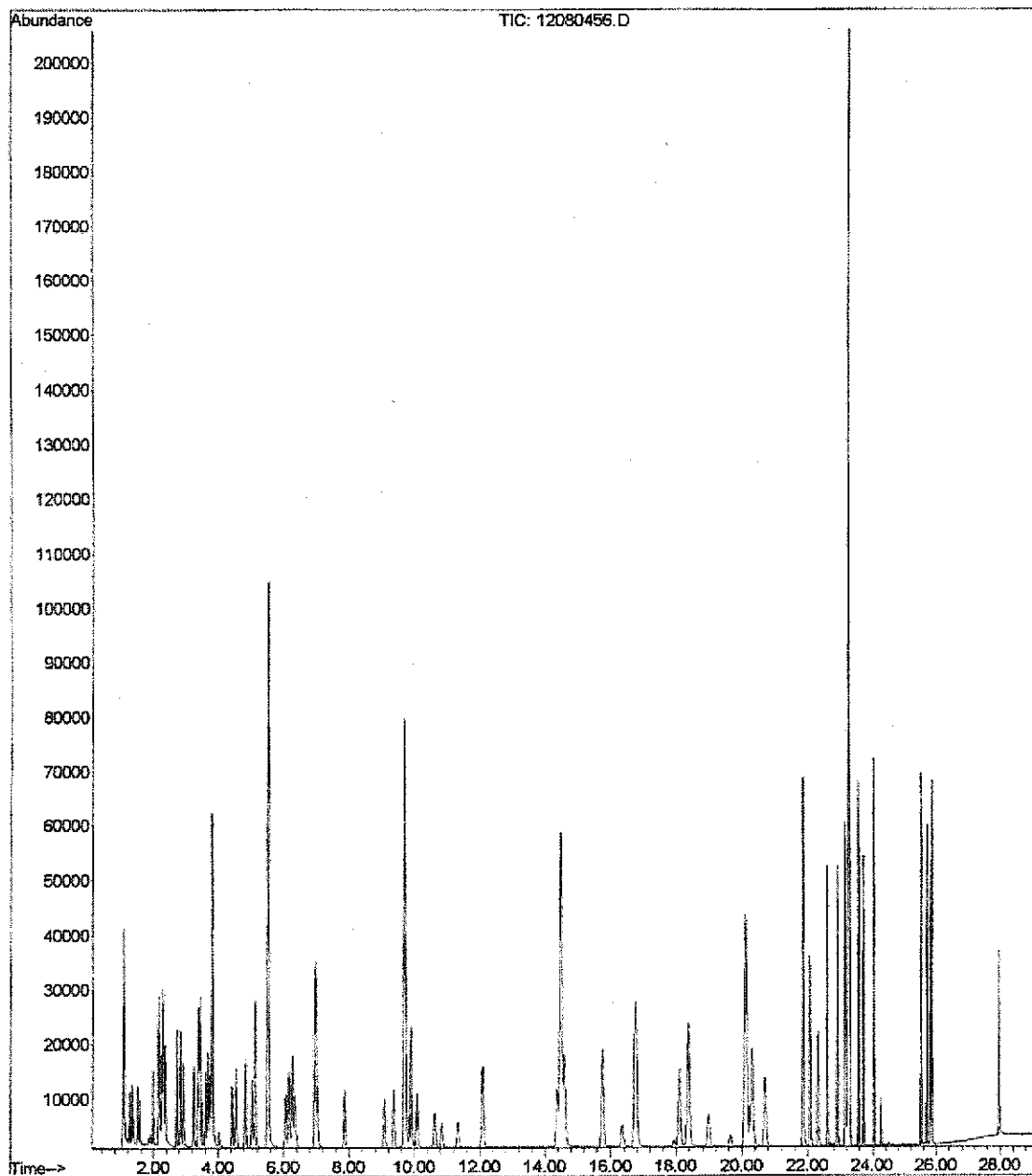
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Operator : THU
Acquired : 8 Dec 2004 10:47 am using AcqMethod VOCOXY
Instrument : PAL GCMS
Sample Name: MB-1
Misc Info :
Vial Number: 2



File :C:\MSDCHEM\1\DATA\2004-DEC-08-1005.B\12080410.D
Operator : THU
Acquired : 8 Dec 2004 4:41 pm using AcqMethod VOOCOXY
Instrument : PAL GCMS
Sample Name: MS-103303 GAS
Misc Info :
Vial Number: 10



File :C:\MSDCHEM\1\DATA\2004-DEC-08-1005.B\12080456.D
Operator : THU
Acquired : 10 Dec 2004 8:40 pm using AcqMethod VOCOXY
Instrument : PAL GCMS
Sample Name: MSD-103303 VOC
Misc Info :
Vial Number: 56



Appendix D

Chain of Custody Forms and Laboratory Reports
for the
Groundwater Extraction Treatment System

PAL

Pacific Analytical Laboratory
851 West Midway Ave. Suite 201
Alameda, CA 94501

Phone (510) 864-0364

LABORATORY REPORT

Prepared For: **SOMA Environmental Engineering Inc.**
2680 Bishop Dr.
Suite 203
San Ramon, CA 94583

Attention: **Joyce Bobek**

Date: **1/6/2005**

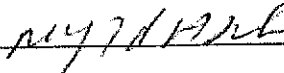
Project ID: **2333**

Location: **Oakland International**

Lab Job Number: **1031**

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.

Reviewed by: _____



Laboratory Director

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

PAL
 Login# 1031

Project No: 2333				Sampler: Mehran Nowroozi				Analyses/Method				
Project Name: Oakland INT				Report To: Joyce Bobek				TP4-5, STEX, NT8E 8260 G				
Project P.O.: ----				Company: SOMA Environmental Engineering, Inc.								
Turnaround Time: Standard				Tel: 925-244-6600 Fax: 925-244-6601								
		Sampling Date/Time		Matrix			# of Containers	Preservatives			Field Notes	
Lab No.	Sample ID	Date	Time	Soil	Water	Waste		HCL	H ₂ SO ₄	HNO ₃		ICE
01	PSR#1	12/6/04	12:30 PM		X		3-VoAS	X				Grab SAMPLE
02	GAS-1	12/6/04	12:35 PM		X		↓	X				↓
03	INFLUENT	12/6/04	12:40 PM		X			X				↓
Sampler Remarks:				Relinquished by:		Date/Time:		Received by:		Date/Time:		
Note: EDF output required				Mehran Nowroozi		12/6/04 1:15 PM		THU LE		12/6/2004 1:15 PM		

SOMA Environmental	Lab Job #	1031
2680 Bishop Dr.	Project ID:	2333
Suite 203	Project Location:	Oakland International
San Ramon, CA 94583	Sampled:	12/6/2004
	Received:	12/6/2004

TPHg by GC/MS

Field ID:	PSP#1	Lab ID:	1031-01
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Date Prep:	12/6/2004
Units:	µg/L	Date Analyzed:	12/7/2004
Batch:		Method Prep:	5030B

Analyte	Result	Reporting Limit	Analysis
Gasoline (C6-C12)	ND	50	8260B

BTEX/MTBE by GC/MS

Field ID:	PSP#1	Lab ID:	1031-01
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Prep:	12/6/2004
Units:	µg/L	Date Analyzed:	12/7/2004
Batch:		Method Prep:	5030B

Analyte	Result	Reporting Limit	Analysis
MTBE	ND	0.5	8260B
Benzene	ND	0.5	8260B
Toluene	ND	0.5	8260B
Ethyl benzene	ND	0.5	8260B
m&p-xylene	ND	1	8260B
o-xylene	ND	0.5	8260B
Surrogate	% REC	%REC Limits	Analysis
DiBromofluoromethane	83	70-130	8260B
Toluene-d8	95	70-130	8260B

ND= Not Detected

RL= Reporting Limits

TPHg by GC/MS			
Field ID:	GAC-1	Lab ID:	1031-02
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Date Prep:	12/6/2004
Units:	µg/L	Date Analyzed:	12/7/2004
Batch:		Method Prep:	5030B
Analyte	Result	Reporting Limit	Analysis
Gasoline (C6-C12)	ND	50	8260B
BTEX/MTBE by GC/MS			
Field ID:	GAC-1	Lab ID:	1031-02
Type:	Sample	Dilution Factor:	
Matrix:	Water	Prep:	12/6/2004
Units:	µg/L	Date Analyzed:	12/7/2004
Batch:		Method Prep:	5030B
Analyte	Result	Reporting Limit	Analysis
MTBE	ND	0.5	8260B
Benzene	ND	0.5	8260B
Toluene	ND	0.5	8260B
Ethyl benzene	ND	0.5	8260B
m&p-xylene	ND	1	8260B
o-xylene	ND	0.5	8260B
Surrogate	% REC	%REC Limits	Analysis
DiBromofluoromethane	84	70-130	8260B
Toluene-d8	94	70-130	8260B

ND= Not Detected
 RL= Reporting Limits

Pacific Analytical Laboratory
 Majid Akhavan
 Laboratory Director

This Package may be reproduced only in its entirety

TPHg by GC/MS			
Field ID:	Influent	Lab ID:	1031-03
Type:	Sample	Dilution Factor:	21.5
Matrix:	Water	Date Prep:	12/6/2004
Units:	µg/L	Date Analyzed:	12/7/2004
Batch:		Method Prep:	5030B
Analyte	Result	Reporting Limit	Analysis
Gasoline (C6-C12)	3935	1075	8260B
BTEX/MTBE by GC/MS			
Field ID:	Influent	Lab ID:	1031-03
Type:	Sample	Dilution Factor:	21.5
Matrix:	Water	Prep:	12/6/2004
Units:	µg/L	Date Analyzed:	12/7/2004
Batch:		Method Prep:	5030B
Analyte	Result	Reporting Limit	Analysis
MTBE	1303	10.75	8260B
Benzene	660	10.75	8260B
Toluene	127	10.75	8260B
Ethyl benzene	82	10.75	8260B
m&p-xylene	722	21.5	8260B
o-xylene	301	10.75	8260B
Surrogate	% REC	%REC Limits	Analysis
DiBromofluoromethane	83	70-130	8260B
Toluene-d8	94	70-130	8260B

ND= Not Detected

RL= Reporting Limits

TPHg by GC/MS			
Field ID:	N/A	Lab ID:	Blank
Type:	QC	Dilution Factor:	1
Matrix:	Water	Prep:	12/6/2004
Units:	µg/L	Date Analyzed:	12/6/2004
Batch:			
Analyte	Result	Reporting Limit	Analysis
Gasoline (C6-C12)	ND	50	8260B
BTEX/MTBE by GC/MS			
Field ID:	N/A	Lab ID:	Blank
Type:	QC	Dilution Factor:	1
Matrix:	Water	Prep:	12/6/2004
Units:	µg/L	Date Analyzed:	12/6/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
MTBE	ND	0.5	8260B
Benzene	ND	0.5	8260B
Toluene	ND	0.5	8260B
Ethyl benzene	ND	0.5	8260B
m&p-xylene	ND	1	8260B
o-xylene	ND	0.5	8260B
Surrogate	% REC	%REC Limits	Analysis
Dibromofluoromethane	80	70-130	8260B
Toluene-d8	94	70-130	8260B

ND= Not Detected

RL= Reporting Limits

TPHg by GC/MS			
Field ID:	N/A	Lab ID:	MS
Type:	QC	Dilution Factor:	1
Matrix:	Water	Prep:	12/6/2004
Units:	µg/L	Date Analyzed:	12/6/2004
Batch:		Prep. Method:	5030B
Analyte	% REC	% REC Limit	Analysis
Gasoline (C6-C12)	106	70-130	8260B
BTEX/MTBE by GC/MS			
Field ID:	N/A	Lab ID:	MS
Type:	QC	Dilution Factor:	1
Matrix:	Water	Prep:	12/6/2004
Units:	µg/L	Date Analyzed:	12/6/2004
Batch:			
Analyte	% REC.	REC Limit	Analysis
MTBE	98	70-130	8260B
Benzene	130	70-130	8260B
Toluene	130	70-130	8260B
Ethyl benzene	130	70-130	8260B
m&p-xylene	130	70-130	8260B
O-xylene	129	70-130	8260B
Surrogate	% REC	%REC Limits	Analysis
DiBromofluoromethane	80	70-130	8260B
Toluene-d8	93	70-130	8260B

ND= Not Detected

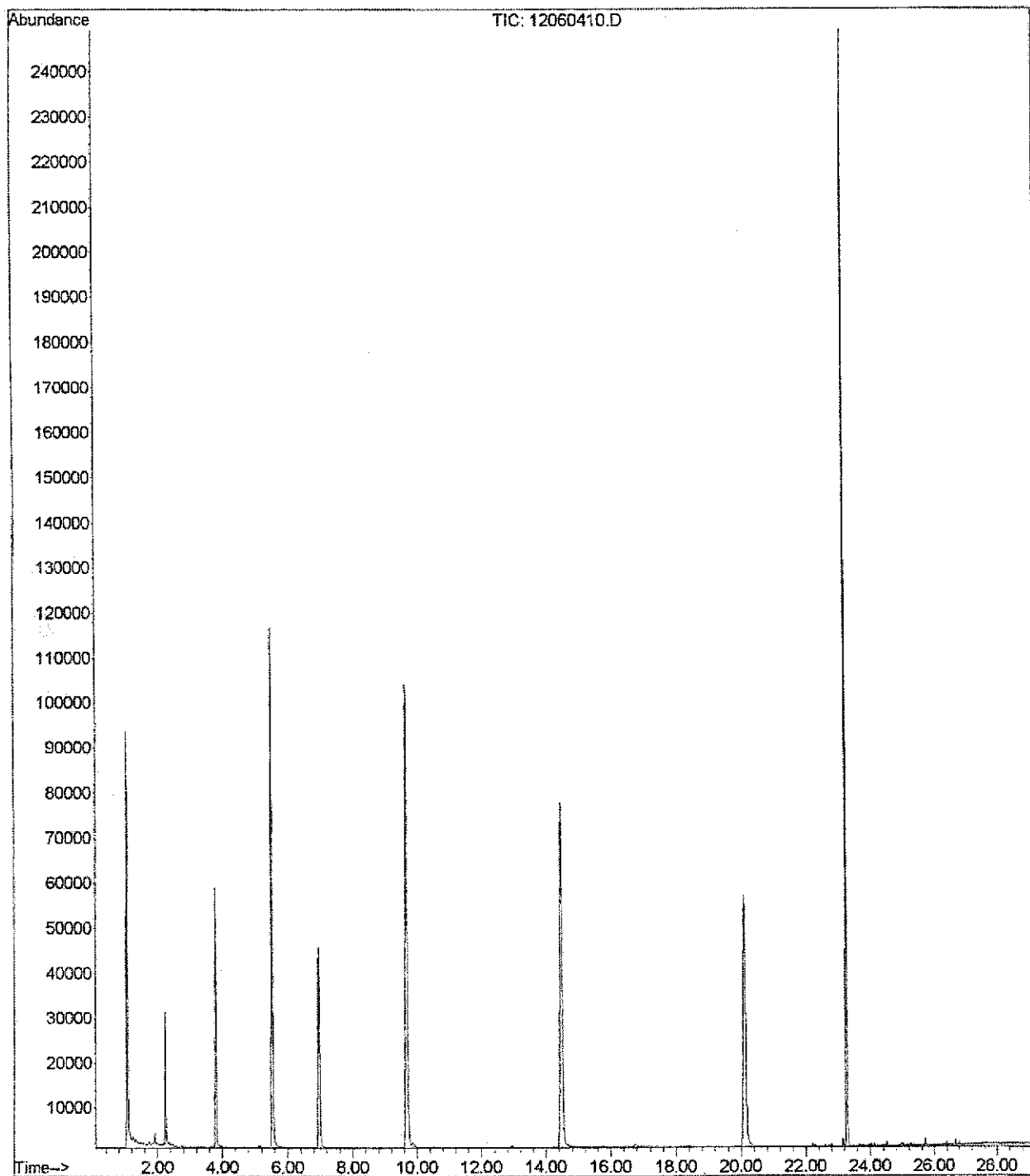
RL= Reporting Limits

TPHg by GC/MS			
Field ID:	N/A	Lab ID:	MSD
Type:	QC	Dilution Factor:	1
Matrix:	Water	Prep:	12/6/2004
Units:	µg/L	Date Analyzed:	12/6/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
Gasoline (C6-C12)	111	50	8260B
BTEX/MTBE by GC/MS			
Field ID:	N/A	Lab ID:	MSD
Type:	QC	Dilution Factor:	1
Matrix:	Water	Prep:	12/6/2004
Units:	µg/L	Date Analyzed:	12/6/2004
Batch:		Prep. Method:	5030B
Analyte	% REC.	REC Limit	Analysis
MTBE	101	70-130	8260B
Benzene	130	70-130	8260B
Toluene	130	70-130	8260B
Ethyl benzene	130	70-130	8260B
m&p-xylene	135	70-130	8260B
o-xylene	130	70-130	8260B
Surrogate	% REC.	%REC Limits	Analysis
DiBromofluoromethane	79	70-130	8260B
Toluene-d8	94	70-130	8260B

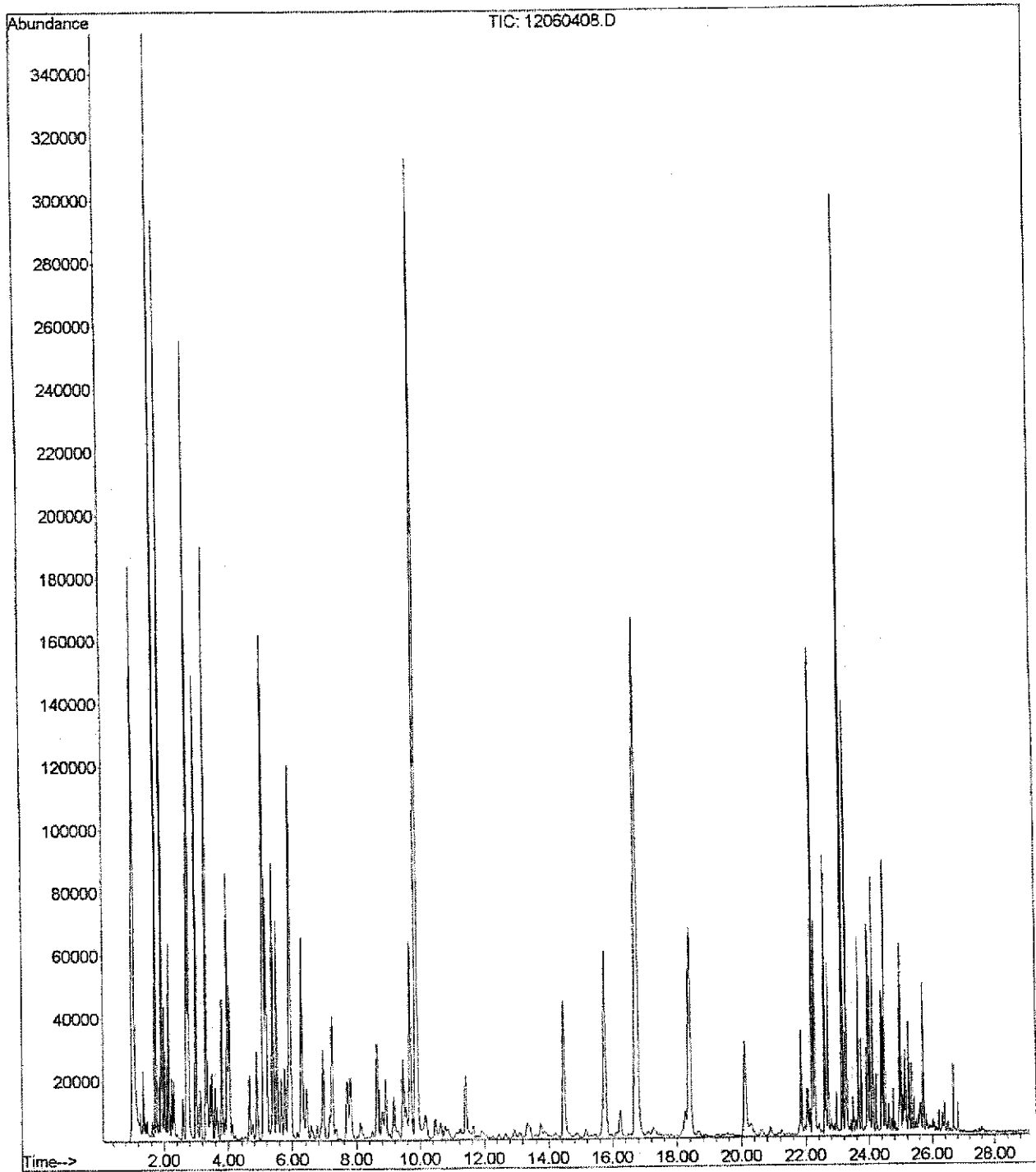
ND= Not Detected

RL= Reporting Limits

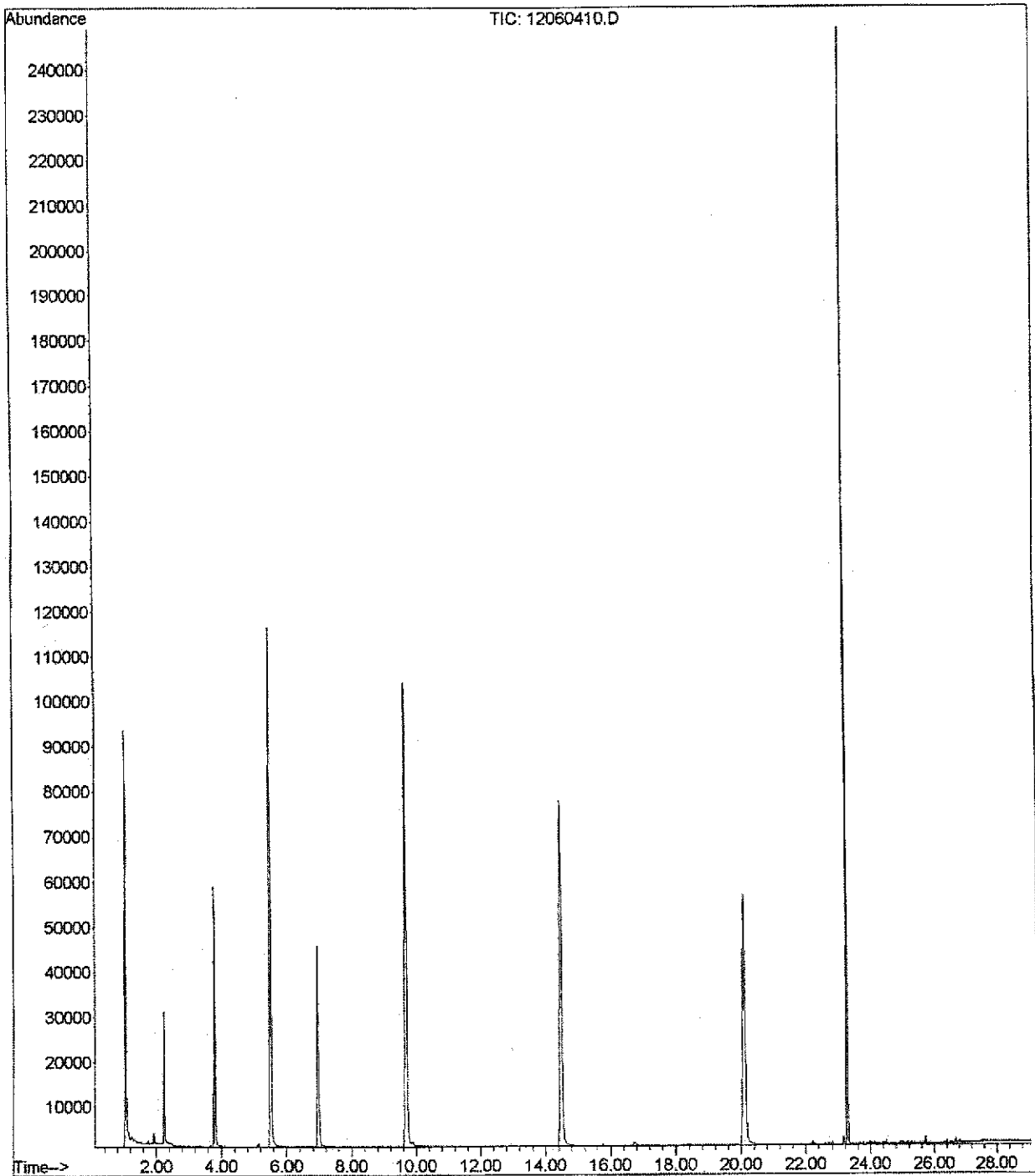
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Acquired : 6 Dec 2004 4:57 pm using AcqMethod VOCCOXY
Instrument : PAL GCMS
Sample Name: MB-102501 GAS
Misc Info :
Vial Number: 10



File :C:\MSDChem\1\DATA\2004-Dec-06-1022.b\12060408.D
Operator : THU
Acquired : 6 Dec 2004 3:45 pm using AcqMethod VOXY
Instrument : PAL GCMS
Sample Name: MS-102501 GAS
Misc Info :
Vial Number: 8



File :C:\MSDCHEM\1\DATA\2004-DEC-06-1022.B\12060410.D
Operator : THU
Acquired : 6 Dec 2004 4:57 pm using AcqMethod VOCOXY
Instrument : PAL GCMS
Sample Name: MB-102501 GAS
Misc Info :
Vial Number: 10



LABORATORY REPORT

Prepared For: **SOMA Environmental Engineering Inc.**
2680 Bishop Dr.
Suite 203
San Ramon, CA 94583

Attention: **Joyce Bobek**

Date: **11/20/2004**

Project ID: **2333**

Location: **3609 International Blvd., Oakland**

Lab Job Number: **1009**

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.

Reviewed by: _____

Laboratory Director

SOMA Environmental	Lab Job #	1009
2680 Bishop Dr.	Project ID:	2333
Suite 203	Project Location:	3609 International Blvd. Oakland
San Ramon, CA 945	Sampled:	11/8/2004
	Received:	11/8/2004

TPHg by GC/MS

Field ID:	Influent	Lab ID:	110804-001
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Date Prep:	11/9/2004
Units:	µg/L	Date Analyzed:	11/9/2004
Batch:		Method Prep:	5030B

Analyte	Result	Reporting Limit	Analysis
Gasoline (C6-C12)	252	50	8260B

BTEX/MTBE by GC/MS

Field ID:	Influent	Lab ID:	110804-001
Type:	Sample	Dilution Factor:	21.5
Matrix:	Water	Prep:	11/9/2004
Units:	µg/L	Date Analyzed:	11/9/2004
Batch:			

Analyte	Result	Reporting Limit	Analysis
MTBE	2024	10.75	8260B
Benzene	1146	10.75	8260B
Toluene	156	10.75	8260B
Ethyl benzene	110	10.75	8260B
m&p-xylene	974	21.5	8260B
o-xylene	412	10.75	8260B
Surrogate	% REC	%REC Limits	Analysis
Dibromofluoromethane	89	70-130	8260B
Toluene-d8	82	70-130	8260B

ND= Not Detected

RL= Reporting Limits

TPHs by GC/MS			
Field ID:	GAC-1	Lab ID:	110804-002
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Date Prep:	11/9/2004
Units:	µg/L	Date Analyzed:	11/9/2004
Batch:		Method Prep:	5030B
Analyte	Result	Reporting Limit	Analysis
Gasoline (C6-C12)	ND	50	8260B
BTEX/MTBE by GC/MS			
Field ID:	GAC-1	Lab ID:	110804-002
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Prep:	11/9/2004
Units:	µg/L	Date Analyzed:	11/9/2004
Batch:		Method Prep:	5030B
Analyte	Result	Reporting Limit	Analysis
MTBE	ND	0.5	8260B
Benzene	ND	0.5	8260B
Toluene	ND	0.5	8260B
Ethyl benzene	ND	0.5	8260B
m&p-xylene	ND	1	8260B
o-xylene	ND	0.5	8260B
Surrogate	% REC	%REC Limits	Analysis
DiBromofluoromethane	89	70-130	8260B
Toluene-d8	82	70-130	8260B

ND= Not Detected
 RL= Reporting Limits

Pacific Analytical Laboratory
 Majid Akhavan
 Laboratory Director

TPHg by GC/MS			
Field ID:	PSP#1	Lab ID:	110804-003
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Date Prep:	11/9/2004
Units:	µg/L	Date Analyzed:	11/9/2004
Batch:		Method Prep:	5030B
Analyte	Result	Reporting Limit	Analysis
Gasoline (C6-C12)	ND	50	8260B
BTEX/MTBE by GC/MS			
Field ID:	PSP#1	Lab ID:	110804-003
Type:	Sample	Dilution Factor:	1
Matrix:	Water	Prep:	11/9/2004
Units:	µg/L	Date Analyzed:	11/9/2004
Batch:			
Analyte	Result	Reporting Limit	Analysis
MTBE	ND	0.5	8260B
Benzene	ND	0.5	8260B
Toluene	ND	0.5	8260B
Ethyl benzene	ND	0.5	8260B
m&p-xylene	ND	1	8260B
o-xylene	ND	0.5	8260B
Surrogate	% REC	% REC Limits	Analysis
Dibromofluoromethane	89	70-130	8260B
Toluene-d8	82	70-130	8260B

ND= Not Detected

RL= Reporting Limits

TPH _g by GC/MS			
Field ID:	N/A	Lab ID:	Blank
Type:	QC	Dilution Factor:	1
Matrix:	Water	Prep:	11/11/2004
Units:	µg/L	Date Analyzed:	11/11/2004
Batch:			
Analyte	Result	Reporting Limit	Analysis
Gasoline (C6-C12)	ND	50	8260B
BTEX/MTBE by GC/MS			
Field ID:	N/A	Lab ID:	Blank
Type:	Sample	Dilution Factor:	
Matrix:	Water	Prep:	11/9/2004
Units:	µg/L	Date Analyzed:	11/9/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
MTBE	ND	0.5	8260B
Benzene	ND	0.5	8260B
Toluene	ND	0.5	8260B
Ethyl benzene	ND	0.5	8260B
m&p-xylene	ND	1	8260B
o-xylene	ND	0.5	8260B
Surrogate	% REC	%REC Limits	Analysis
Dibromofluoromethane	92	70-130	8260B
Toluene-d8	85	70-130	8260B

ND= Not Detected

RL= Reporting Limits

TPH ₂ by GC/MS			
Field ID:	N/A	Lab ID:	MS
Type:	QC	Dilution Factor:	1
Matrix:	Water	Prep:	11/11/2004
Units:	µg/L	Date Analyzed:	11/11/2004
Batch:		Prep. Method:	5030B
Analyte	% REC	% REC Limit	Analysis
Gasoline (C6-C12)	79	70-130	8260B
BTEX/MTBE by GC/MS			
Field ID:	N/A	Lab ID:	MS
Type:	QC	Dilution Factor:	1
Matrix:	Water	Prep:	11/9/2004
Units:	µg/L	Date Analyzed:	11/9/2004
Batch:			
Analyte	% REC	REC Limit	
MTBE	81	8260B	
Benzene	83	8260B	
Toluene	79	8260B	
Ethyl benzene	92	8260B	
m&p-xylene	92	8260B	
o-xylene	93	8260B	
Surrogate	% REC	%REC Limits	Analysis
Dibromofluoromethane	72	70-130	8260B
Toluene-d8	75	70-130	8260B

ND= Not Detected

RL= Reporting Limits

TPHg by GC/MS			
Field ID:	N/A	Lab ID:	MSD
Type:	QC	Dilution Factor:	1
Matrix:	Water	Prep:	11/11/2004
Units:	µg/L	Date Analyzed:	11/11/2004
Batch:		Prep. Method:	5030B
Analyte	Result	Reporting Limit	Analysis
Gasoline (C6-C12)	77	50	8260B
BTEX/MTBE by GC/MS			
Field ID:	N/A	Lab ID:	MS
Type:	QC	Dilution Factor:	1
Matrix:	Water	Prep:	11/9/2004
Units:	µg/L	Date Analyzed:	11/9/2004
Batch:		Prep. Method:	5030B
Analyte	% REC.	REC Limit	Analysis
MTBE	107	70-130	8260B
Benzene	108	70-130	8260B
Toluene	105	70-130	8260B
Ethyl benzene	117	70-130	8260B
m&p-xylene	233	70-130	8260B
o-xylene	116	70-130	8260B
Surrogate	% REC.	%REC Limits	Analysis
Dibromofluoromethane	91	70-130	8260B
Toluene-d8 ^L	78	70-130	8260B

ND= Not Detected

RL= Reporting Limits

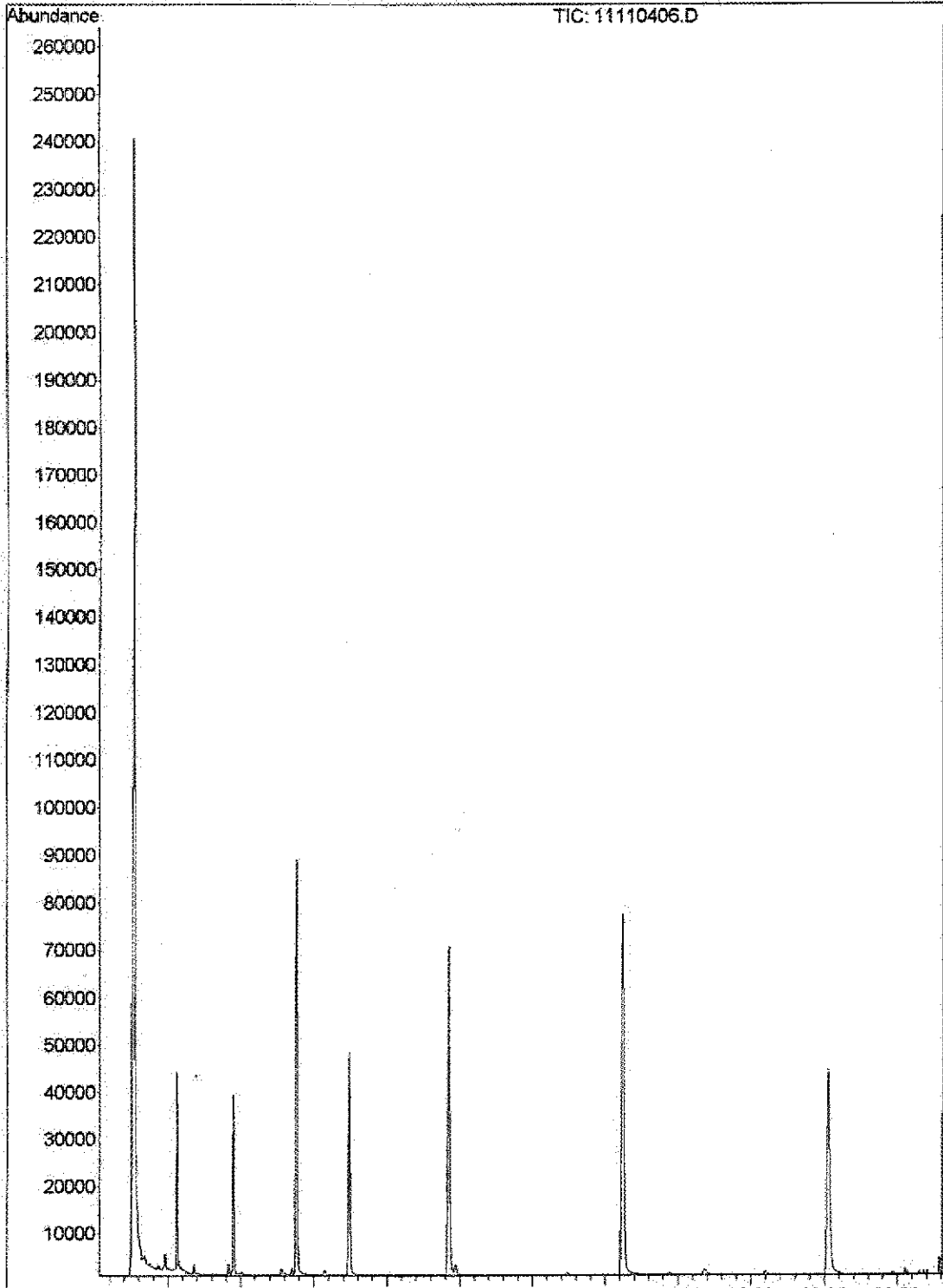
L= Low Recovery

TPHg by GC/MS			
Field ID:	N/A	Lab ID:	LCS
Type:	QC	Dilution Factor:	1
Matrix:	Water	Prep:	11/9/2004
Units:	µg/L	Date Analyzed:	11/9/2004
Batch:			
Analyte	Result	%REC Limits	Analysis
Gasoline (C6-C12)	77	70-130	8260B
BTEX/MTBE by GC/MS			
Field ID:	N/A	Lab ID:	LCS
Type:	QC	Dilution Factor:	1
Matrix:	Water	Prep:	11/9/2004
Units:	µg/L	Date Analyzed:	11/9/2004
Batch:			
Analyte	Result	%REC Limits	Analysis
MTBE	95	70-130	8260B
Benzene	86	70-130	8260B
Toluene	85	70-130	8260B
Ethyl benzene	97	70-130	8260B
m&p-xylene	95	70-130	8260B
o-xylene	95	70-130	8260B
Surrogate	% REC	%REC Limits	Analysis
Dibromofluoromethane	111	70-130	8260B
Toluene-d8	96	70-130	8260B

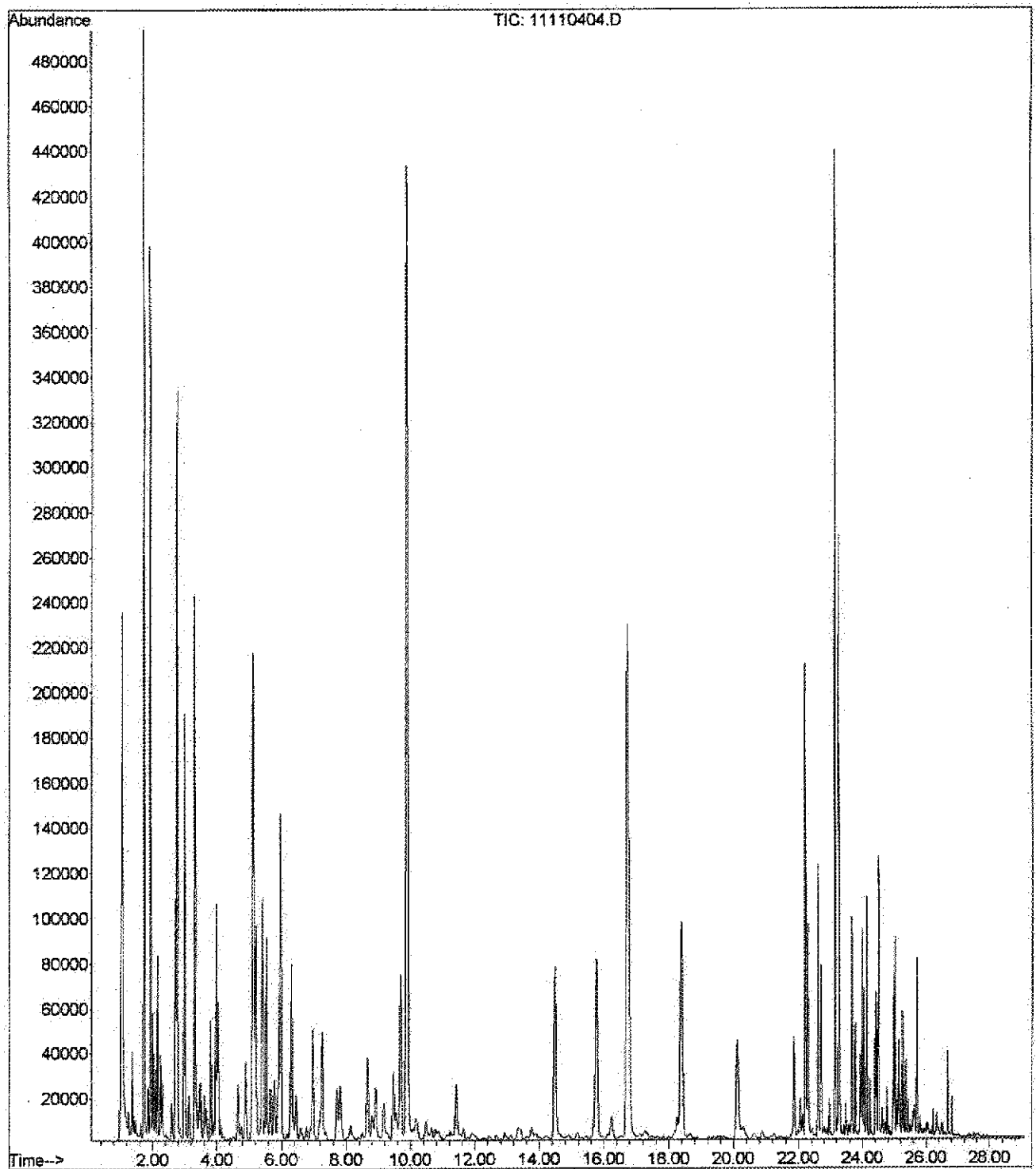
ND= Not Detected

RL= Reporting Limits

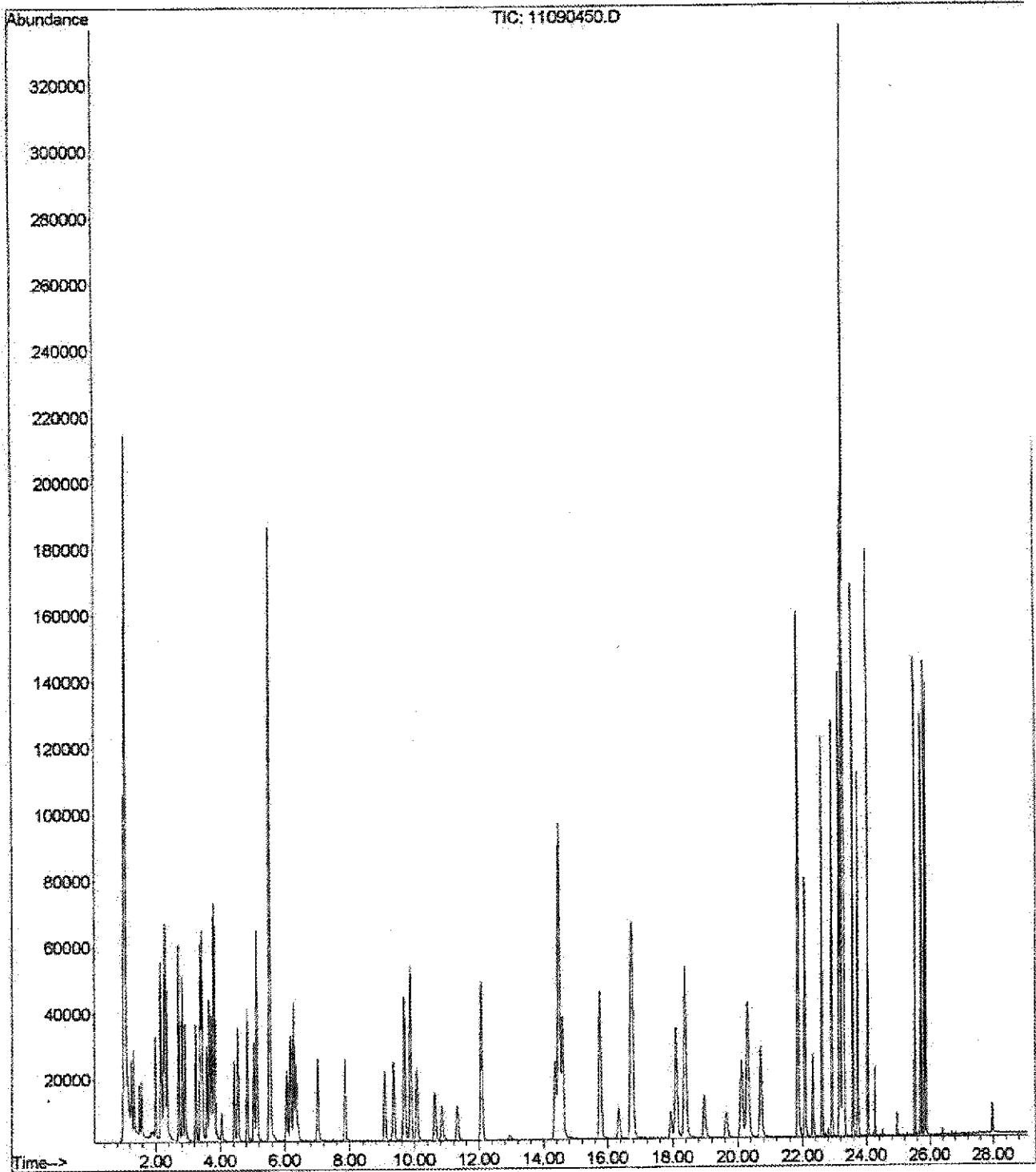
File : C:\MSDCHEM\1\DATA\2004-Nov-11-1116.b\11110406.D
Operator : THU
Acquired : 11 Nov 2004 2:33 pm using AcqMethod VOCOX
Instrument : PAL GCMS
Sample Name: BLKN
Misc Info :
Vial Number: 6



File :C:\MSDCHEM\1\DATA\2004-Nov-11-1116.b\11110404.D
Operator : THU
Acquired : 11 Nov 2004 1:21 pm using AcqMethod VOCOXY
Instrument : PAL GCMS
Sample Name: MS-111101
Misc Info :
Vial Number: 4



File : C:\MSDCHEM\1\DATA\2004-NOV-09-0936.B\11090450.D
Operator : THU
Acquired : 10 Nov 2004 5:52 pm using AcqMethod VOCOXY
Instrument : PAL GCMS
Sample Name: MS-110901
Misc Info :
Vial Number: 50





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A N A L Y T I C A L R E P O R T

Prepared for:

SOMA Environmental Engineering Inc.
2680 Bishop Dr.
Suite 203
San Ramon, CA 94583

Date: 27-OCT-04

Lab Job Number: 175250

Project ID: 2333


Location: 3609 International Blvd

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by:


Project Manager

Reviewed by:


Operations Manager

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CASE NARRATIVE

Laboratory number: 175250
Client: SOMA Environmental Engineering Inc.
Project: 2333
Location: 3609 International Blvd
Request Date: 10/13/04
Samples Received: 10/13/04

This hardcopy data package contains sample and QC results for three water samples, requested for the above referenced project on 10/13/04. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):

No analytical problems were encountered.

Total Volatile Hydrocarbons

Lab #: 175250	Location: 3609 International Blvd
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2333	
Matrix: Water	Sampled: 10/13/04
Units: ug/L	Received: 10/13/04
Diln Fac: 1.000	Analyzed: 10/13/04
Batch#: 95428	

Field ID: INFLUENT Lab ID: 175250-001
 Type: SAMPLE

Analyte	Result	RL	Analysis
Gasoline C7-C12	1,900	50	EPA 8015B
MTBE	520	2.0	EPA 8021B
Benzene	240	0.50	EPA 8021B
Toluene	24	0.50	EPA 8021B
Ethylbenzene	13	0.50	EPA 8021B
m,p-Xylenes	130	0.50	EPA 8021B
o-Xylene	100	0.50	EPA 8021B

Surrogate	REC	Limits	Analysis
Trifluorotoluene (FID)	109	70-141	EPA 8015B
Bromofluorobenzene (FID)	92	80-143	EPA 8015B
Trifluorotoluene (PID)	97	59-133	EPA 8021B
Bromofluorobenzene (PID)	91	76-128	EPA 8021B

Field ID: GAC-1 Lab ID: 175250-002
 Type: SAMPLE

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	REC	Limits	Analysis
Trifluorotoluene (FID)	87	70-141	EPA 8015B
Bromofluorobenzene (FID)	92	80-143	EPA 8015B
Trifluorotoluene (PID)	93	59-133	EPA 8021B
Bromofluorobenzene (PID)	97	76-128	EPA 8021B

ND= Not Detected
 RL= Reporting Limit
 Page 1 of 2

Chromatogram

Sample Name : 175250-001.95428

Sample #: a1.0

Page 1 of 1

FileName : G:\GC05\DATA\287G010.raw

Date : 10/14/04 09:02 AM

Method : TVHBTXE

Time of Injection: 10/13/04 05:52 PM

Start Time : 0.00 min End Time : 25.00 min

Low Point : -12.31 mV

High Point : 508.55 mV

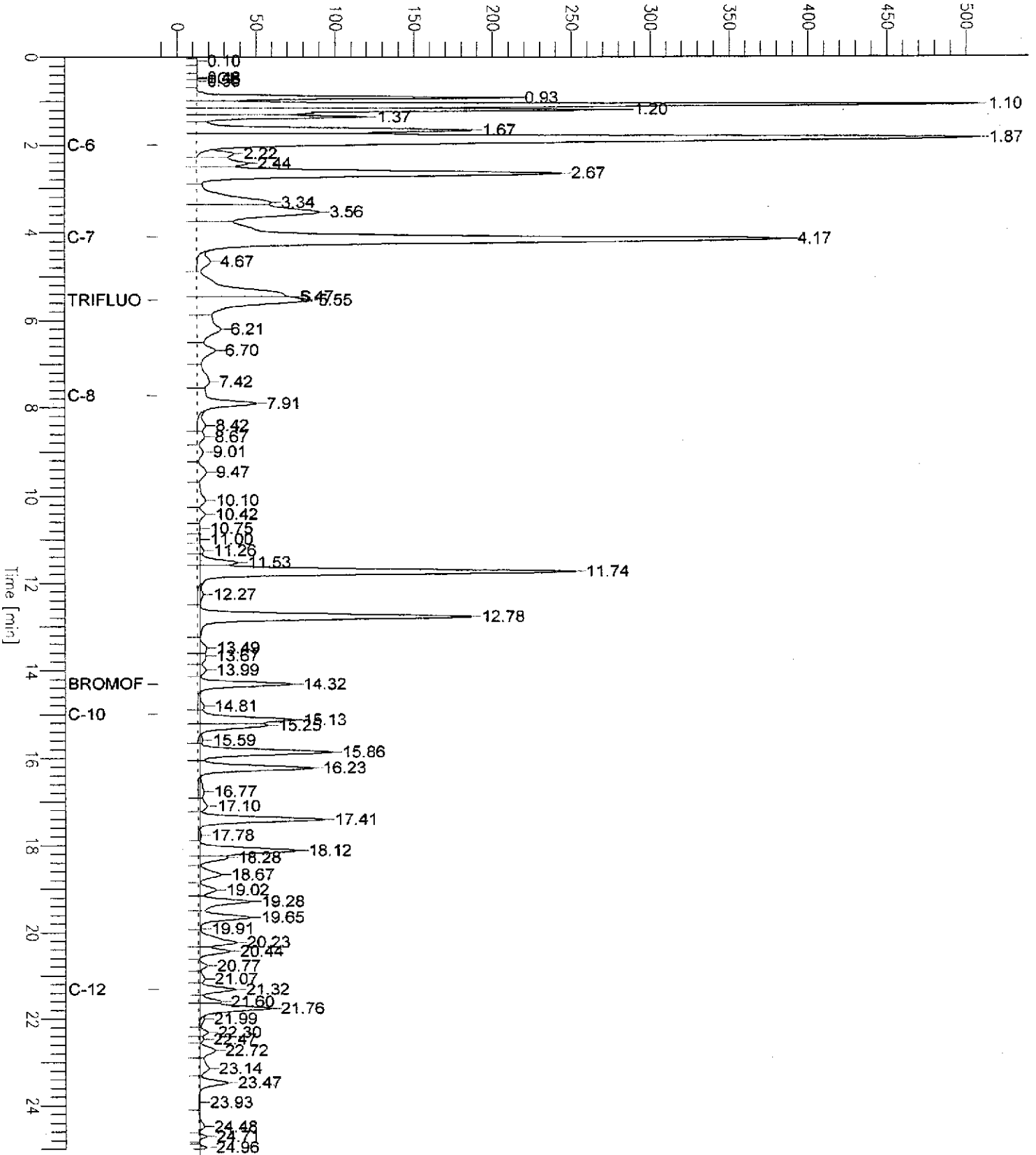
Scale Factor: 1.0

Plot Offset: -12 mV

Plot Scale: 520.9 mV

Influent

Response [mV]



Chromatogram

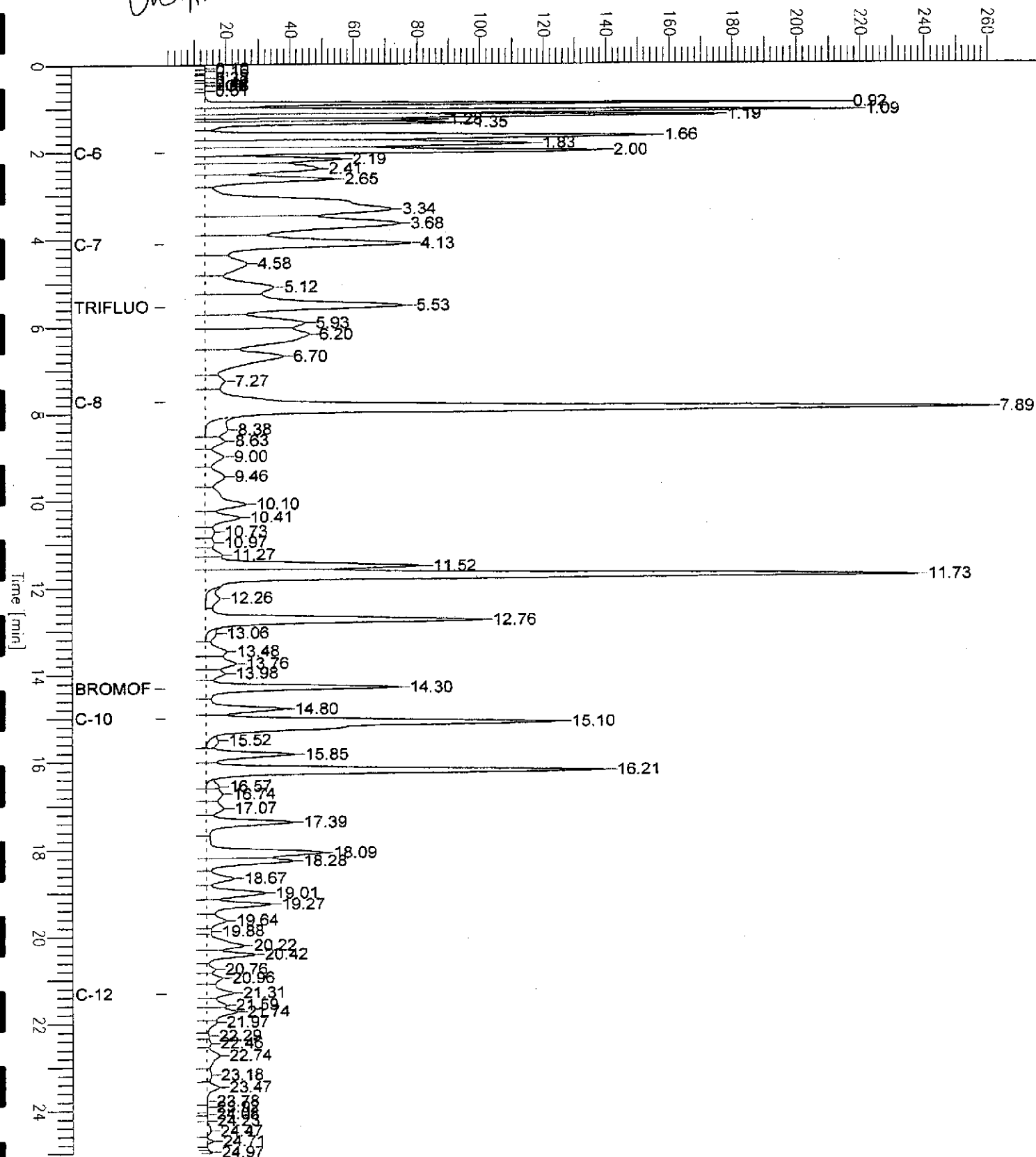
Sample Name : ccv/lcs,qc267944,95428,04ws1816,5/5000
FileName : G:\GC05\DATA\287G002.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor : 1.0 Plot Offset : 1 mV

Sample # :
Date : 10/13/04 11:25 AM
Time of Injection: 10/13/04 10:59 AM
Low Point : 1.02 mV High Point : 260.53 mV
Plot Scale: 259.5 mV

Page 1 of 1

Gasoline

Response [mV]



Total Volatile Hydrocarbons

Lab #:	175250	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333		
Matrix:	Water	Sampled:	10/13/04
Units:	ug/L	Received:	10/13/04
Diln Fac:	1.000	Analyzed:	10/13/04
Batch#:	95428		

Field ID: PSP#1 Lab ID: 175250-003
 Type: SAMPLE

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	83	70-141	EPA 8015B
Bromofluorobenzene (FID)	87	80-143	EPA 8015B
Trifluorotoluene (PID)	87	59-133	EPA 8021B
Bromofluorobenzene (PID)	92	76-128	EPA 8021B

Type: BLANK Lab ID: QC267942

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	81	70-141	EPA 8015B
Bromofluorobenzene (FID)	85	80-143	EPA 8015B
Trifluorotoluene (PID)	85	59-133	EPA 8021B
Bromofluorobenzene (PID)	89	76-128	EPA 8021B

ND= Not Detected
 RL= Reporting Limit
 Page 2 of 2

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	175250	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC267943	Batch#:	95428
Matrix:	Water	Analyzed:	10/13/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	22.77	114	67-124
Benzene	20.00	21.23	106	80-120
Toluene	20.00	21.66	108	80-120
Ethylbenzene	20.00	22.10	111	80-120
m,p-Xylenes	20.00	19.76	99	80-120
o-Xylene	20.00	22.55	113	80-120

Surrogate	%REC	Limits
Trifluorotoluene (PID)	89	59-133
Bromofluorobenzene (PID)	94	76-128

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	175250	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC267944	Batch#:	95428
Matrix:	Water	Analyzed:	10/13/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,770	89	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	114	70-141
Bromofluorobenzene (FID)	95	80-143

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	175250	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8015B
Field ID:	PSP#1	Batch#:	95428
MSS Lab ID:	175250-003	Sampled:	10/13/04
Matrix:	Water	Received:	10/13/04
Units:	ug/L	Analyzed:	10/13/04
Diln Fac:	1.000		

Type: MS Lab ID: QC268034

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	21.82	2,000	1,833	91	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	120	70-141
Bromofluorobenzene (FID)	99	80-143

Type: MSD Lab ID: QC268035

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,822	90	80-120	1	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	121	70-141
Bromofluorobenzene (FID)	95	80-143