HerSchy Environmental, Inc.

December 4, 2003
Project A51-01.02

Mr. Barney Chan
Alameda County
Health Care Services Agency
Environmental Health Services
1131 Harbor Bay Parkway, Ste. 250
Alameda, CA 94502-6577

Re: Results of September, 2003 Quarterly Groundwater Monitoring, Alaska Gasoline Company, Oakland, California, Case #RO0000127

Dear Mr. Chan:

HerSchy Environmental is pleased to present the results of the most recent quarterly groundwater monitoring event for the above-referenced site. The site is located at 6211 San Pablo Avenue, which is on the northwest corner of San Pablo Avenue and 62nd Street in Oakland, Alameda County, California (Figure 1). Previous work includes the drilling, sampling, and laboratory analysis of soil and groundwater. Details of this investigation are contained in the April 22, 1999 report titled, *"Results of Underground Storage Tank (UST) Site Assessment, Alaska Gasoline Company, Oakland, California"*, prepared by HerSchy Environmental.

METHODS OF INVESTIGATION

Groundwater Sampling Procedures:

The depth to groundwater in each well was measured to the nearest 0.01 feet using an electric sounder prior to initiating groundwater sampling activities. The groundwater elevation was determined for each well by subtracting the depth to groundwater from the surveyed well elevation. The depth to groundwater, total depth of the well, and the well diameter were used to calculate the volume of groundwater within the well casing. At least three casing volumes were purged from each well prior to collecting a groundwater sample. Physical characteristics (temperature, electrical conductivity, and pH), were measured at the initiation of purging and then again just prior to collection of the groundwater sample. These characteristics were recorded on field sampling data sheets which are presented in Appendix A. One sample from each well was collected and contained in paired 40-milliliter vials. Each of the sample containers were filled completely to form a positive meniscus, capped, and checked to ensure no air bubbles were present.

P.O. Box 229 ◆ Bass Lake, CA 93604-0229 ◆ Phone: 559 • 641-7320 ◆ Fax: 559 • 641-7340

Samples were sealed in a ziplock bag and placed in a cooler chest with frozen gel packs ("blue ice") immediately after sampling. Samples were maintained at or below four degrees Celsius until delivered to the laboratory. Groundwater samples were handled under chain-of-custody documentation until delivered to a California certified laboratory.

Laboratory Analysis:

Groundwater samples were analyzed for gasoline-range total petroleum hydrocarbons (TPHg), benzene, toluene, ethylbenzene, and xylenes (BTEX), and for methyl tertiary butyl ether (MTBE). Laboratory analysis was performed using EPA method 8015M for TPHg, and EPA method 8020 for BTEX.

RESULTS OF INVESTIGATION

Groundwater Conditions:

Groundwater was present beneath the site at an average depth of 7.92 feet below the surveyed well elevations during the September 9, 2003 monitoring event. During this event, the elevation of groundwater averaged 26.44 feet above mean sea level. The groundwater elevation decreased approximately 1.18 feet since the March, 2002 monitoring event. Due to the presence of floating product in MW-4, the groundwater elevation for this well was not used in determining the groundwater flow direction or gradient. Groundwater flow direction was South 50 degrees West at a gradient of .0031 during the September 9, 2003 monitoring event. Groundwater conditions are summarized in Table 1 and presented graphically in Figure 2.

Table 1
Groundwater Conditions, Alaska Gasoline, Oakland

Well Number	Elevation	Depth to GW	GW Elevation
March 8, 2001:			
MW-1	34.70	6.32	28.38
MW-2	34.94	5.89	29.05
MW-3	33.74	5.36	28.30
Flow Direction = S. 39 W.; Gradient = .0092			
November 17, 2001:			
MW-1	34.70	8.09	26.61
MW-2	34.94	7.75	27.19
MW-3	33.74	7.18	26.56
MW-4	32.38	5.75	26.63
MW-5	33.75	6.22	27.53
MW-6	34.68	7.19	27.49
Flow Direction = S. 50 W.; Gradient = .0091			

Table 1
(continued)

Well Number	Elevation	Depth to GW	GW Elevation
March 31, 2002:			
MW-1	34.70	7.18	27.52
MW-2	34.94	6.68	28.26
MW-3	33.74	6.27	27.47
MW-4	32.38	5.40	26.98
MW-5	33.75	6.35	27.40
MW-6	34.68	6.58	28.10
Flow Direction = S. 26 W.; Gradient = .0108			
September 9, 2003:			
MW-1	34.70	8.54	26.16
MW-2	34.94	8.26	26.68
MW-3	33.74	7.52	26.22
MW-4	32.38	0.51'free product	-----
MW-5	33.75	7.08	26.67
MW-6	34.68	8.21	26.47
Flow Direction = S. 50 W; Gradient = .0031			

The groundwater flow direction is toward San Francisco Bay, located approximately 0.75 miles southwest of the site. Regional groundwater flow appears to parallel the surface grade in the area. It should be noted that during the September, 2003 monitoring event, groundwater was at the lowest observed elevation since monitoring began.

Groundwater Quality:

Groundwater samples were submitted to the laboratory and analyzed for the above-mentioned fuel constituents. Certified analytical reports and chain-of-custody documentation are presented in Appendix B and summarized in Table 2 below:

Table 2
Laboratory Analytical Results for Groundwater, Alaska Gasoline, Oakland

Well No.	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
March 8, 2001:						
MW-1	17,000	480	150	52	170	38,000
MW-2	41,000	8,100	870	2,000	4,100	26,000
MW-3	90,000	1,800	ND	ND	ND	210,000

Table 2
(continued)

Well No.	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
November 17, 2001:						
MW-1	10,000	230	210	60	250	22,000
MW-2	18,000	3,700	180	610	640	16,000
MW-3	110,000	1,600	ND	ND	ND	300,000
MW-4	64,000	960	1,400	360	1,600	140,000
MW-5	210	15	12	11	23	4.8
MW-6	3,500	160	260	95	420	1,500
March 31, 2002:						
MW-1	12,000	61	ND	ND	29	35,000
MW-2	32,000	6,500	270	1,700	2,700	19,000
MW-3	130,000	2,400	670	300	390	300,000
MW-4	78,000	4,400	4,700	690	2,700	150,000
MW-5	120	11	7.4	6.1	16	4.2
MW-6	3,200	410	170	82	280	3,000
September 9, 2003:						
MW-1	19,000	ND	ND	ND	ND	50,000
MW-2	24,000	4,600	ND	1200	440	19,000
MW-3	190,000	1,600	ND	ND	ND	420,000
MW-4	NA	NA	NA	NA	NA	NA — FP
MW-5	ND	1.5	ND	ND	ND	1.7
MW-6	800	49	ND	7.4	ND	1,700

All results presented in parts per billion (ppb)
NA= no analysis
ND= below detectable limits

All of the site monitoring wells are impacted with gasoline constituents. No sample was taken from MW-4 because 0.51 feet of floating product was detected. Other than MW-4, concentrations are highest in down gradient well MW-3. Concentrations are significantly lower in MW-5 than any of the other wells, reflecting its distance from, and up gradient location relative to, the USTs.

CONCLUSTIONS AND RECOMMENDATIONS

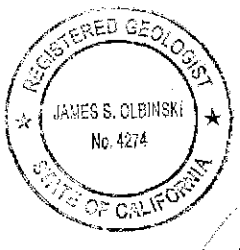
Significant levels of petroleum hydrocarbons remain at the site. Based on the laboratory results and observed groundwater conditions, it appears that the bulk of contamination is migrating to the southwest. This is evidenced by the increase in concentrations observed in MW-3 and floating product in MW-4.

It is recommended that we proceed with the installation of the remediation system as proposed in the "*Results of Well Installation, Quarterly Groundwater Monitoring and Interim Remedial Action Plan, Alaska Gasoline Company, Oakland, California*" report submitted by

HerSchy Environmental on June 17, 2002. The interim remedial action (IRA) work plan was conditionally approved by Alameda County Environmental Health Services in correspondence dated August 13, 2003. We are currently awaiting notice of tank removal activities in order to schedule the implementation of the approved remediation system.

The next quarterly monitoring event is currently scheduled for mid December, 2003. If you have any questions or need additional information, please contact me at the letterhead address or at (559) 641-7320.

With best regards,
HerSchy Environmental, Inc.



Joshua Teves
Geologist

James S. Olbinski
Registered Geologist #4274

pc: Mr. Pritpaul Sappal
Mr. Syed Nawab, Alaska Gasoline Company
Mr. Hernan Gomez, Oakland Fire Services Agency
Mrs. Susan M. Torrence, Deputy District Attorney

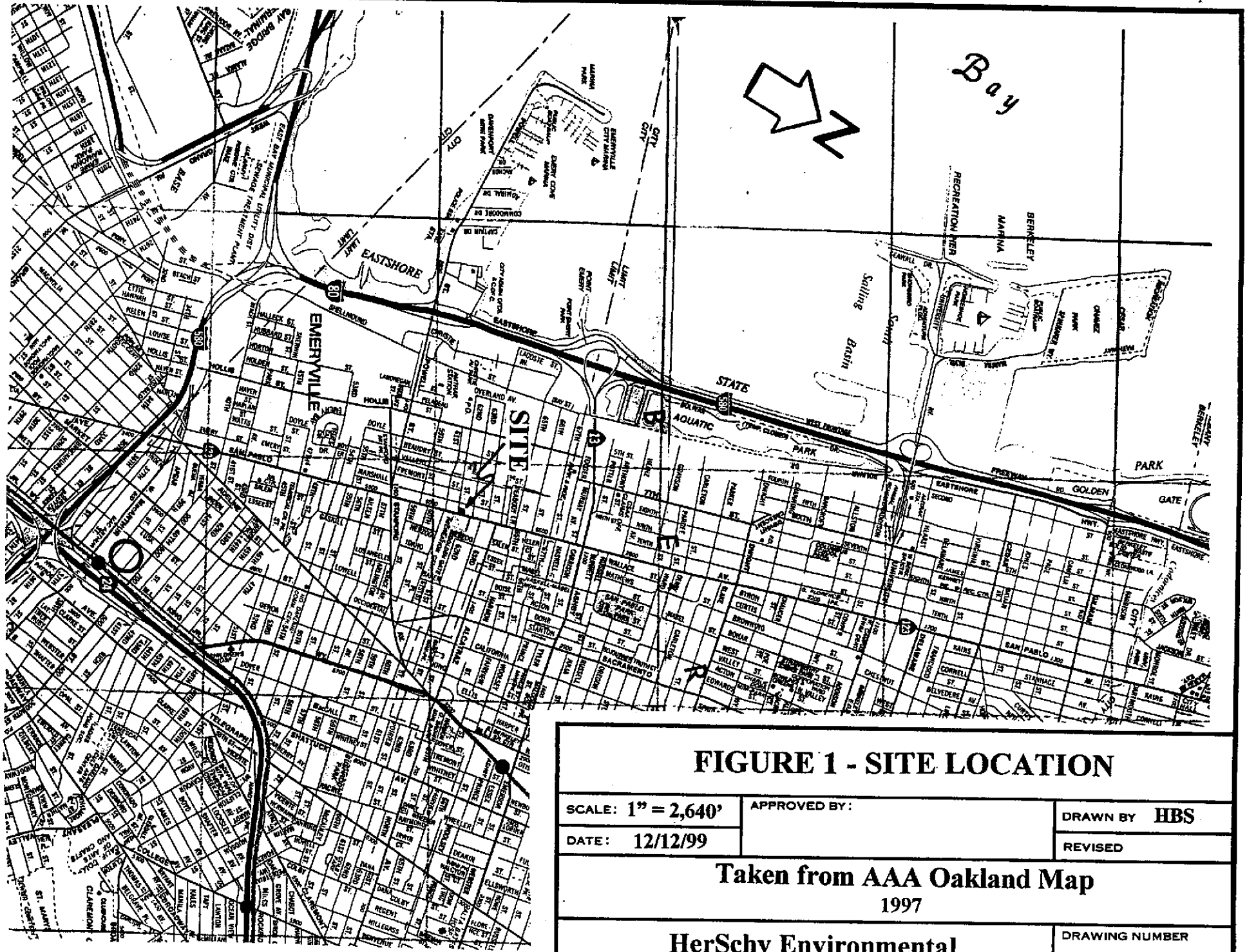


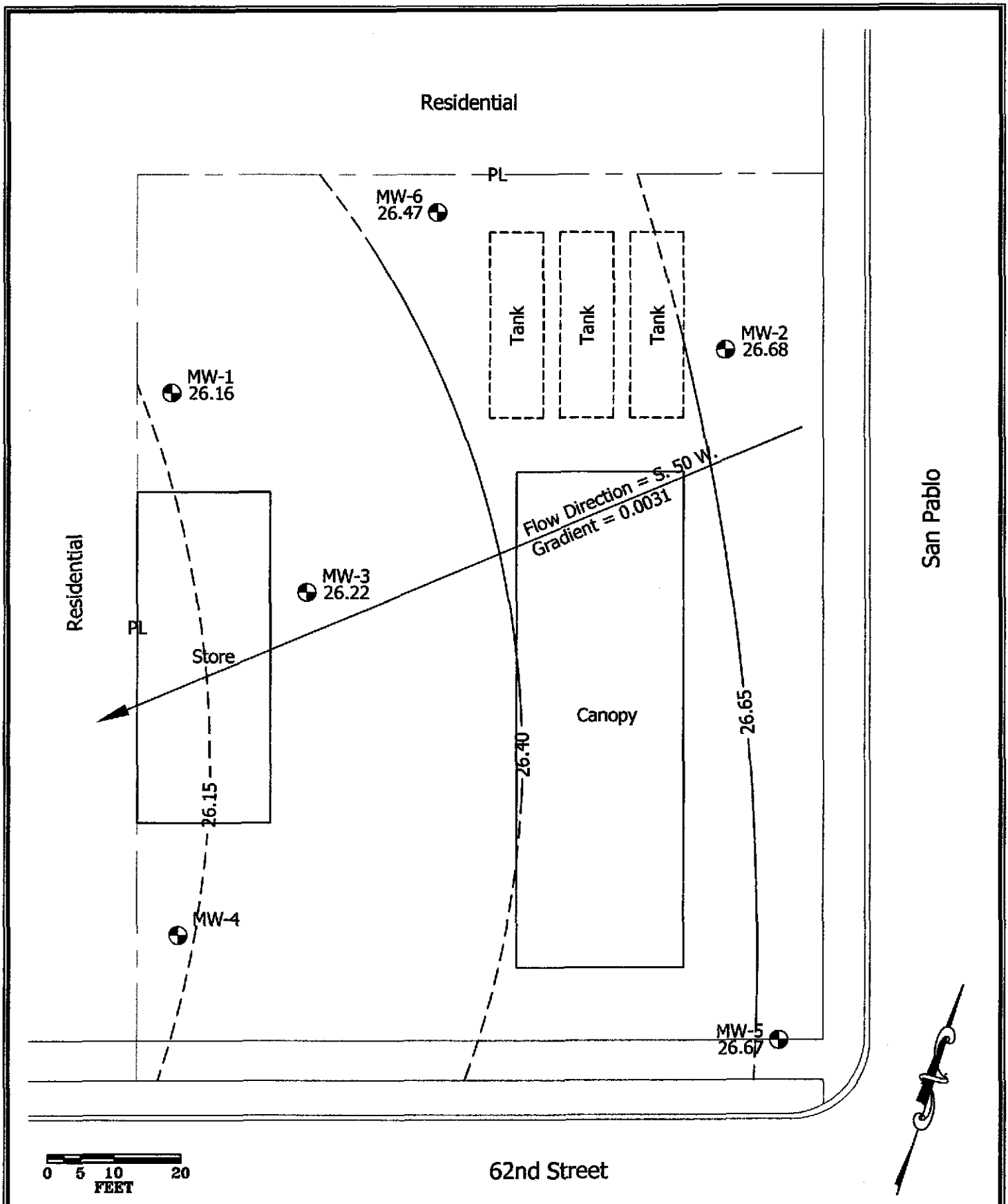
FIGURE 1 - SITE LOCATION

SCALE: 1" = 2,640'	APPROVED BY:	DRAWN BY HBS
DATE: 12/12/99		REVISED

Taken from AAA Oakland Map
1997

HerSchy Environmental

DRAWING NUMBER



HerSchy Environmental, Inc.
Environmental Consulting and Remediation
P. O. Box 229
Bass Lake, California 93604-0229
Tel. (559) 641-7320, Fax (559) 641-7340

September, 2003 GROUNDWATER CONDITIONS

ALASKA GASOLINE COMPANY

6211 San Pablo Avenue, Oakland, California

DATE: December, 2003

FILE NO.: A51-01.02

DRAWN BY: JSO

FIGURE 2

APPENDIX A

GROUNDWATER SAMPLING

FIELD DATA SHEETS

HerSchy Environmental

WATER SAMPLE FIELD DATA SHEET

Client Name: Alaska Gasoline Location: Oakland

Purged By: Josh Tevis Sampled by: Josh Tevis

Sample ID: MW-1 Type: Groundwater X Surface Water ____ Other ____

Casing Diameter (inches): 2 X 3 ____ 4 ____ 5 ____ 6 ____ Other ____

Casing Elevation (feet/MSL): 34.70 Volume in Casing (gal.): 1.95

Depth of Well (feet): 20.50 Calculate Purge Volume (gal.): 5.85

Depth to Water (feet): 8.54 Actual Purge Volume (gal.): 16.0

Date Purged: 9/9/03 Date Sampled: 9/9/03

TIME	VOLUME	pH	E. C.	TEMP.	TURBIDITY
1505	—	6.90	780	22.4°C	clear
1520	16.0	6.93	730	20.1°C	murky

Other Observations: ____ Odor: H_2S (strong)

Purging Equipment: Dedicated Bailer

Sampling Equipment: ____

Remarks: ____

Sampler's Signature: Josh Tevis

/Water Sample Sheet.wpd

HerSchy Environmental

WATER SAMPLE FIELD DATA SHEET

Client Name: Alaska Gasoline Location: Oakland

Purged By: Josh Teves Sampled by: Josh Teves

Sample ID: MW-2 Type: Groundwater x Surface Water ____ Other ____

Casing Diameter (inches): 2 x 3 ____ 4 ____ 5 ____ 6 ____ Other ____

Casing Elevation (feet/MSL): 34.94 Volume in Casing (gal.): 2.03

Depth of Well (feet): 20.70 Calculate Purge Volume (gal.): 6.08

Depth to Water (feet): 8.26 Actual Purge Volume (gal.): +7.5

Date Purged: 9/9/03 Date Sampled: 9/9/03

TIME	VOLUME	pH	E. C.	TEMP.	TURBIDITY
1426	—	6.74	950	21.3°C	Clear
1432	+7.5	6.71	950	21.5°C	"

Other Observations: ____ Odor: H_2S (strong)

Purging Equipment: water

Sampling Equipment: "

Remarks: ____

Sampler's Signature: [signature]

/Water Sample Sheet.wpd

HerSchy Environmental

WATER SAMPLE FIELD DATA SHEET

Client Name: Alaska Gasoline Location: Oakland

Purged By: Josh Teves Sampled by: Josh Teves

Sample ID: MW-3 Type: Groundwater X Surface Water ____ Other ____

Casing Diameter (inches): 2 X 3 ____ 4 ____ 5 ____ 6 ____ Other ____

Casing Elevation (feet/MSL): 33.74 Volume in Casing (gal.): 2.19

Depth of Well (feet): 20.95 Calculate Purge Volume (gal.): 6.57

Depth to Water (feet): 7.52 Actual Purge Volume (gal.): ____

Date Purged: 9/9/03 Date Sampled: 9/9/03

TIME	VOLUME	pH	E. C.	TEMP.	TURBIDITY
1338	-	6.88	990	20.9°C	moderate
1344	+7.5	6.76	980	21.0°C	〃

Other Observations: ____ Odor: H_2S (strong)

Purging Equipment: waterra

Sampling Equipment: 〃

Remarks: ____

Sampler's Signature: [signature]

/Water Sample Sheet.wpd

HerSchy Environmental

WATER SAMPLE FIELD DATA SHEET

Client Name: Alaska Gasoline Location: Oakland

Purged By: Josh Teves Sampled by: Josh Teves

Sample ID: mw-4 Type: Groundwater x Surface Water ____ Other ____

Casing Diameter (inches): 2 x 3 ____ 4 ____ 5 ____ 6 ____ Other ____

Casing Elevation (feet/MSL): 32.38 Volume in Casing (gal.): 2.20

Depth of Well (feet): 19.40 Calculate Purge Volume (gal.): 6.60

Depth to Water (feet): 5.90 Actual Purge Volume (gal.): ____

Date Purged: ____ Date Sampled: ____

TIME	VOLUME	pH	E. C.	TEMP.	TURBIDITY

Other Observations: ____ Odor: ____

Purging Equipment: waterra

Sampling Equipment:) r

Remarks: 0.51' floating product

Sampler's Signature: ____

/Water Sample Sheet.wpd

HerSchy Environmental

WATER SAMPLE FIELD DATA SHEET

Client Name: Alaska Gasoline Location: Oakland

Purged By: Josh Teves Sampled by: Josh Teves

Sample ID: MW-5 Type: Groundwater X Surface Water ____ Other ____

Casing Diameter (inches): 2 X 3 ____ 4 ____ 5 ____ 6 ____ Other ____

Casing Elevation (feet/MSL): 33.75 Volume in Casing (gal.): 2.86

Depth of Well (feet): 24.65 Calculate Purge Volume (gal.): 8.59

Depth to Water (feet): 7.08 Actual Purge Volume (gal.): +9.0

Date Purged: 9/9/03 Date Sampled: 9/9/03

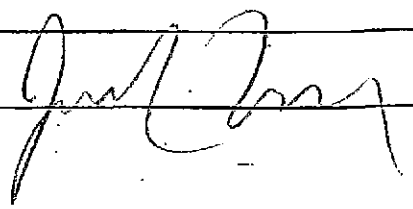
TIME	VOLUME	pH	E. C.	TEMP.	TURBIDITY
1447	—	7.26	760	20.4°C	muddy
1452	+9.0	7.03	710	20.4°C	>C

Other Observations: ____ Odor: none

Purging Equipment: waterra

Sampling Equipment: "

Remarks: ____

Sampler's Signature: 

/Water Sample Sheet.wpd

HerSchy Environmental

WATER SAMPLE FIELD DATA SHEET

Client Name: Alaska Gasoline Location: Oakland

Purged By: Josh Teves Sampled by: Josh Teves

Sample ID: MW-6 Type: Groundwater X Surface Water ____ Other ____

Casing Diameter (inches): 2 X 3 ____ 4 ____ 5 ____ 6 ____ Other ____

Casing Elevation (feet/MSL): 34.68 Volume in Casing (gal.): 2.53

Depth of Well (feet): 23.75 Calculate Purge Volume (gal.): 7.60

Depth to Water (feet): 8.21 Actual Purge Volume (gal.): +8.0

Date Purged: 9/9/03 Date Sampled: 9/9/03

TIME	VOLUME	pH	E. C.	TEMP.	TURBIDITY
1403	—	7.19	670	19.8°C	murky
1408	+8.0	7.02	600	19.5°C	〃

Other Observations: ____ Odor: H_2S (strong)

Purging Equipment: waterra

Sampling Equipment: 〃

Remarks: ____

Sampler's Signature: [signature]

/Water Sample Sheet.wpd

APPENDIX B

CERTIFIED ANALYTICAL RESULTS

WITH CHAIN OF CUSTODY

CASTLE ANALYTICAL LABORATORY

Environmental Testing Services
Certificate #2480
2333 Shuttle Drive, Atwater, CA 95301
Phone: (209) 384-2930
Fax: (209) 384-1507

HerSchy Environmental	Client Project ID: Alaska Gasoline - Oakland	Sampled: 09-09-03
P.O. Box 229	Reference Number: 6069	Received: 09-10-03
Bass Lake, CA 93604	Sample Description: Water	Extracted: 09-11-03
Attn: Herman Schymiczek	Sample Prep/Analysis Method: EPA 5030/8015M, 8020	Analyzed: 09-11-03
	Lab Numbers: 6069-1W, 2W, 3W, 4W, 5W	Reported: 09-18-03

TOTAL PETROLEUM HYDROCARBONS - GASOLINE WITH BTEX DISTINCTION

ANALYTE	REPORTING LIMIT µg/L	SAMPLE ID MW - 1 (µg/L)	SAMPLE ID MW - 2 (µg/L)	SAMPLE ID MW - 3 (µg/L)	SAMPLE ID MW - 5 (µg/L)	SAMPLE ID MW - 6 (µg/L)
MTBE	0.50	50000	19000	420000	1.7	1700
BENZENE	0.50	ND	4600	1600	1.5	49
TOLUENE	0.50	ND	ND	ND	ND	ND
ETHYLBENZENE	0.50	ND	1200	ND	ND	7.4
TOTAL XYLENES	0.50	ND	440	ND	ND	ND
GASOLINE RANGE HYDROCARBONS	50	19000	24000	190000	ND	800
Report Limit Multiplication Factor:		50	100	1000	1	10
Report Limit Multiplication Factor for MTBE only:		2000	1000	20000		100

Surrogate % Recovery:	FID: 91.4% / PID: 93.3%	FID: 103% / PID: 98.1%	FID: 90.7% / PID: 92.0%	FID: 96.5% / PID: 98.5%	FID: 96.7% / PID: 98.3%
Instrument ID:	VAR-GC1	VAR-GC1	VAR-GC1	VAR-GC1	VAR-GC1

Analytes reported as ND were not detected or below the Practical Quantitation Limit
Practical Quantitation Limit = Reporting Limit x Report Limit Multiplication Factor

ANALYST: Clari J. Cone

APPROVED BY: James C. Phillips
Laboratory Director

CASTLE ANALYTICAL LABORATORY

Environmental Testing Services
Certificate # 2480
2333 Shuttle Drive, Atwater, CA 95301
Phone: (209) 384-2930
Fax: (209) 384-1507

HerSchy Environmental	Client Project ID: Alaska Gasoline - Oakland	Method: EPA 5030/8015M,8020
P.O. Box 229	Reference Number: 6069	Instrument ID: Var-GC1
Bass Lake, CA 93604	Sample Description: Water	Extracted: 09-11-03
Attn: Herman Schymiczek	Analyst: Jim Phillips	Analyzed: 09-11-03
		Reported: 09-18-03

QUALITY CONTROL DATA REPORT

ANALYTE	Gasoline	MTBE	Benzene	Toluene	Ethyl Benzene	Total Xylenes
Spike Concentration:	110	2.10	1.32	7.94	1.84	9.22
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
LCS Batch #:	VW-9113	VW-9113	VW-9113	VW-9113	VW-9113	VW-9113
LCS % Recovery:	97.5%	91.7%	88.3%	97.5%	112%	108%
Surrogate Recovery:	107%	106%	106%	106%	106%	106%
Control Limits:	70-130 %	70-130 %	70-130 %	70-130 %	70-130 %	70-130 %
MS/MSD Batch #:	VW-9113	VW-9113	VW-9113	VW-9113	VW-9113	VW-9113
Spike Concentration:	110	2.10	1.32	7.94	1.84	9.22
MS % Recovery:	88.9%	85.1%	83.2%	91.4%	104%	102%
Surrogate Recovery:	101%	100%	100%	100%	100%	100%
MSD % Recovery:	78.6%	83.1%	79.6%	90.7%	105%	103%
Surrogate Recovery:	103%	101%	101%	101%	101%	101%
Relative % Difference:	11.9%	2.10%	4.48%	0.718%	0.373%	0.689%
Methanol Blank :	ND	ND	ND	ND	ND	ND
Surrogate Recovery:	102%	118%	118%	118%	118%	118%

The LCS (Laboratory Check Sample) is a control sample of known, interferent free matrix that is fortified with representative analytes and analyzed using the same reagents, preparation and analytical methods employed for the samples. The LCS % recovery is used for validation of sample batch results. Due to matrix effects, the QC limits and recoveries for MS/MSD's are advisory only and are not used to accept or reject batch results.

ANALYST: *Clari J. Cone*

APPROVED BY: *James C. Phillips*
Laboratory Director

CASTLE ANALYTICAL LABORATORY

CHAIN OF CUSTODY

Location: 2333 Shuttle Drive, Bldg 908/909, Atwater, CA 95301
Mailing Address: 2333 Shuttle Drive, Atwater, CA 95301
Phone: (209) 384-2930 - Fax: (209) 384-1507

Certificate No. 2480

PAGE_____OF_____

Customer: Alaska Gasoline
Address:
City/State/ZIP: Oakland
Phone / FAX:
Proj # / P.O. #:
Report Attention: Herman
Sampler Signature:
Printed: Josh Teves

Lab ID#	SAMPLE ID	DATE	TIME	DESCRIPTION/LOCATION	SAMPLE TYPE (g) grab (c) composite (d) discrete	SAMPLE MATRIX (s) solid (l) liquid (o) other	REQUESTED ANALYSES: BTEX/TPH-GAS	MTBE	TPH-DIESEL	TRPH 418.1M	Oxy's / EDB / DCA by 8260	8260	Electronic Deliverables (EDF)	NUMBER OF CONTAINERS	OBSERVATIONS/REMARKS
6088-1SW	MW-1	9/9/03	1520		g	l	X	X						3	
-2SW	MW-2	"	1432		"	"	"	"						"	
-3W	MW-3	"	1344		"	"	"	"						"	
-4W	MW-5	"	1452		"	"	"	"						"	
-5W	MW-6	"	1408		"	"	"	"						"	

Method of Shipment:

Notes: E-mail results to Bill Ackland

	Signature	Printed Name	Date	Time	Company Name
Relinquished by:		Josh Teves	9/10/03	1050	Her Schy
Received by:		James Phillips	9/10/03	1050	Castle Analytical
Relinquished by:					
Received by:					
Relinquished by:					
Received by:					

15 Total number of containers submitted to the laboratory

Note: All special requests (e.g. quick turn times) must be cleared through authorized laboratory personnel.

RESULTS DUE :_____

☐ VERBAL ☐ WRITTEN