# HerSchy Environmental, Inc.

January 23, 2004
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 December, 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.

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 6.88 feet below the surveyed well elevations during the December 9, 2003 monitoring event. During this event, the elevation of groundwater averaged 27.48 feet above mean sea level. The groundwater elevation increased approximately 1.04 feet since the September, 2003 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 56 degrees West at a gradient of .0075 during the December 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 |
|---|---|---|---|
| **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 | | | |
| **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 | | | |

**Table 1**
**(continued)**

| Well Number | Elevation | Depth to GW | GW Elevation |
|---|---|---|---|
| **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 | | | |
| **December 9, 2003:** | | | |
| MW-1 | 34.70 | 7.50 | 27.20 |
| MW-2 | 34.94 | 7.20 | 27.74 |
| MW-3 | 33.74 | 6.45 | 27.29 |
| MW-4 | 32.38 | 0.25'free product | ------ |
| MW-5 | 33.75 | 6.13 | 27.62 |
| MW-6 | 34.68 | 7.11 | 27.57 |
| Flow Direction = S. 56 W; Gradient = .0075 | | | |

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.

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 |
|---|---|---|---|---|---|---|
| **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 |

**Table 2**
**(Continued)**

| Well No. | TPHg | Benzene | Toluene | Ethylbenzene | Xylenes | MTBE |
|---|---|---|---|---|---|---|
| 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 |
| MW-5 | ND | 1.5 | ND | ND | ND | 1.7 |
| MW-6 | 800 | 49 | ND | 7.4 | ND | 1,700 |
| **December 9, 2003:** | | | | | | |
| MW-1 | 22,000 | 150 | ND | ND | ND | 66,000 |
| MW-2 | 31,000 | 6,200 | 170 | 1,600 | 2,700 | 19,000 |
| MW-3 | 170,000 | 2,000 | ND | ND | ND | 4,500,000 |
| MW-4 | NA | NA | NA | NA | NA | NA — FP |
| MW-5 | 130 | 32 | ND | 2.6 | 0.57 | 5.0 |
| MW-6 | 970 | 150 | 9.9 | 31 | 83 | 1,200 |

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

All of the on-site monitoring wells are impacted with gasoline constituents. No sample was taken from MW-4 because 0.25 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. Due to the presence of floating product in the most down-gradient well (MW-4), it is apparent that the extent of the groundwater contaminant plume in this direction is not fully established.

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 has been initiated. The vapor extraction, groundwater extraction, and air sparge wells have been drilled and installed, however, horizontal piping and thermal oxidation equipment

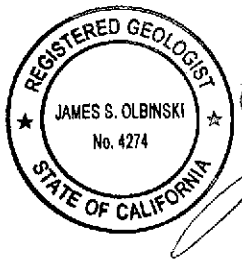
will not be installed until tank removal activities are complete. One soil sample was collected from the capillary fringe from each borehole before the wells were installed.

The soil vapor extraction system (SVES), as outlined in the interim remedial action (IRA) work plan that was conditionally approved by Alameda County Environmental Health Services in correspondence dated August 13, 2003, is anticipated to be operational sometime during the first quarter of 2004. Upon completion of tank removal activities and installation of the SVES, a report will be prepared detailing the results of the investigation and summarizing the installation procedures.

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.

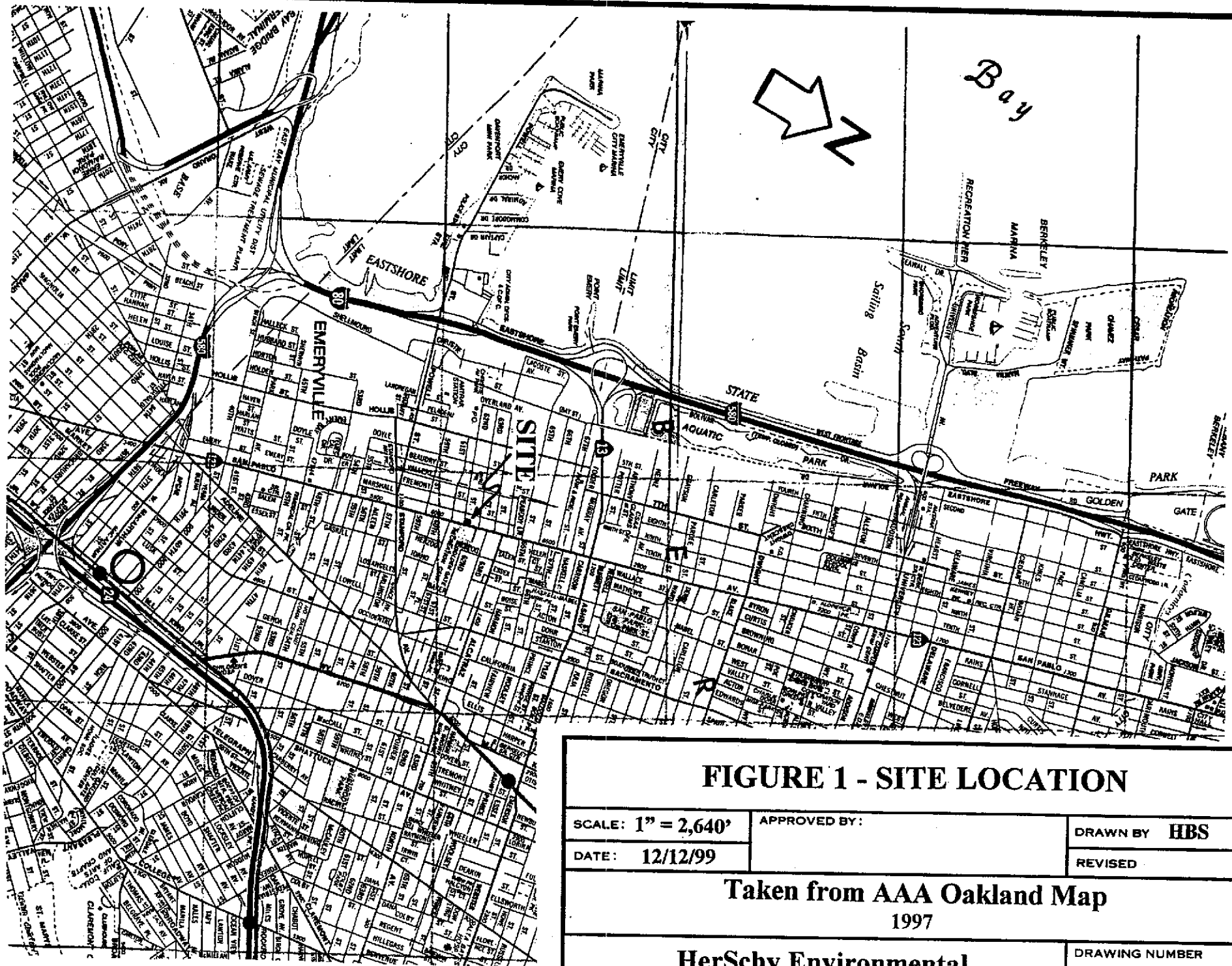
With best regards,
HerSchy Environmental, Inc.

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



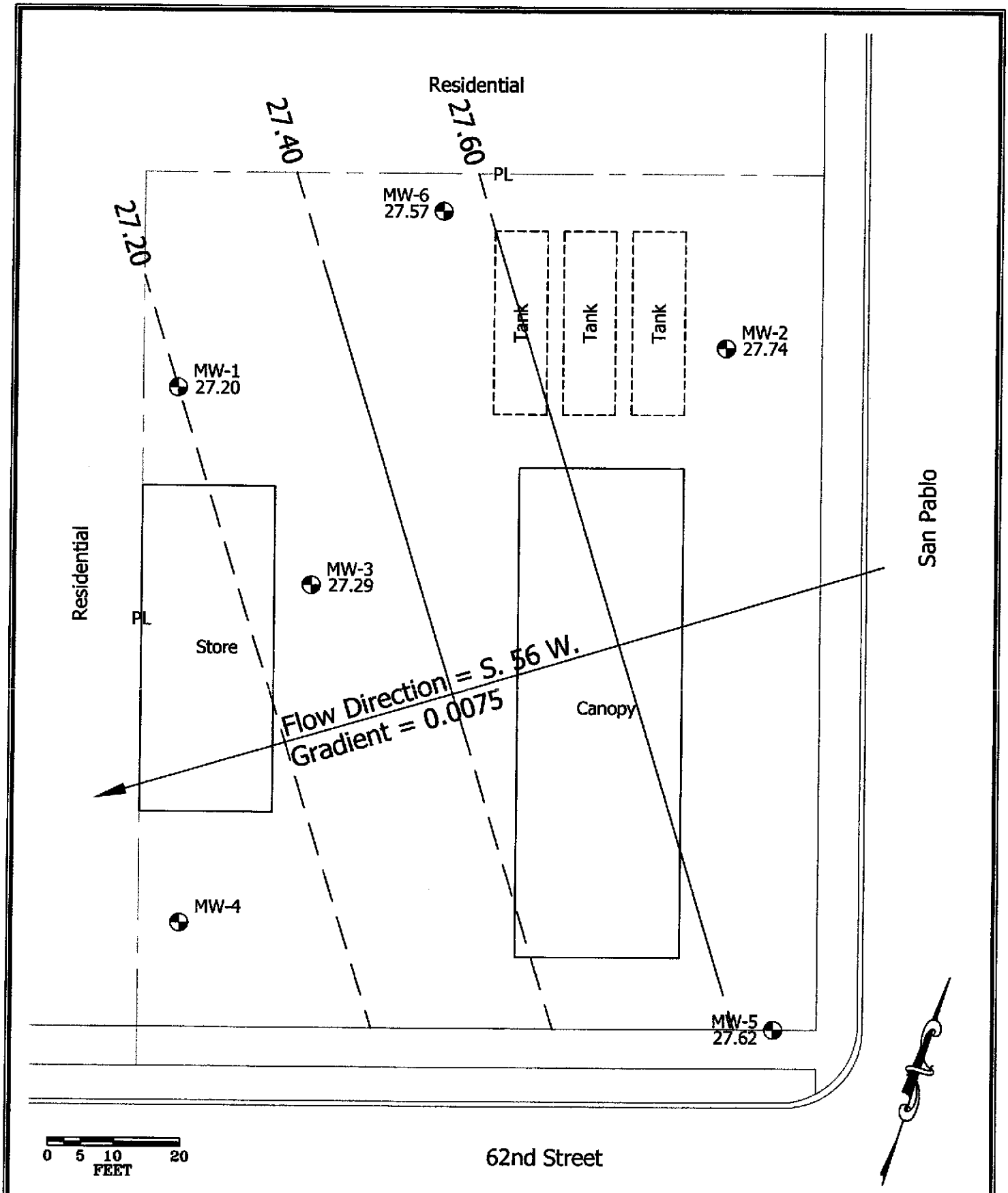

# FIGURE 1 - SITE LOCATION

| | | |
|---|---|---|
| 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


DEC., 2003 GROUNDWATER CONDITIONS

ALASKA GASOLINE COMPANY

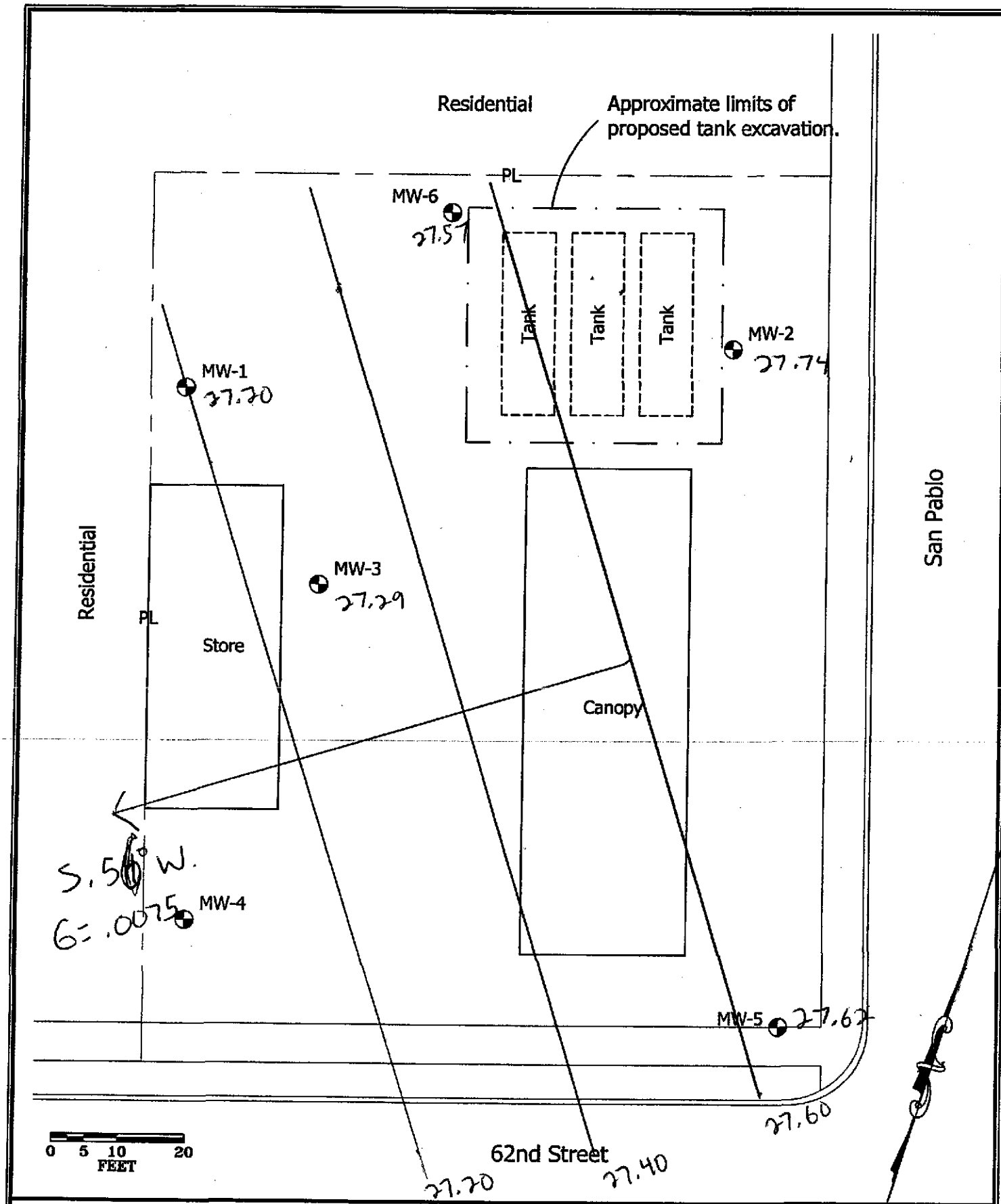
6211 San Pablo Avenue, Oakland, California

DATE: January 2004

FILE NO.: A51-01.02

DRAWN BY: JSO

FIGURE 2




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

APPROXIMATE LIMITS OF TANK REMOVAL

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 Gas Location: Oakland

Purged By: Josh Teves Sampled by: Josh Teves

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

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

Casing Elevation (feet/MSL): ____ Volume in Casing (gal.): 2.09

Depth of Well (feet): 20.32 Calculate Purge Volume (gal.): 6.27

Depth to Water (feet): 7.50 Actual Purge Volume (gal.): ~7.0

Date Purged: 12/9/03 Date Sampled: 12/9/03

| TIME | VOLUME | pH | E. C. | TEMP. | TURBIDITY |
|---|---|---|---|---|---|
| 1715 | — | 7.41 | 809 | 66.7 | murky |
| 1722 | ~7 | 7.02 | 731 | 68.2 | " |
| | | | | | |
| | | | | | |

Other Observations: ____ Odor: $H_2S$ (strong)

Purging Equipment: Bailer

Sampling Equipment: "

Remarks: ____

Sampler's Signature: [signature]

/Water Sample Sheet.wpd

HerSchy Environmental

# WATER SAMPLE FIELD DATA SHEET

Client Name: Alaska Gas Location: Oakland

Purged By: Josh Teves Sampled by: Josh Teves

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

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

Casing Elevation (feet/MSL): ____ Volume in Casing (gal.): 2.17

Depth of Well (feet): 20.51 Calculate Purge Volume (gal.): 6.51

Depth to Water (feet): 7.20 Actual Purge Volume (gal.): +7.0

Date Purged: 12/9/03 Date Sampled: 12/9/03

| TIME | VOLUME | pH | E. C. | TEMP. | TURBIDITY |
|---|---|---|---|---|---|
| 1627 | — | 6.76 | 1042 | 66.8 | murky |
| 1634 | +7 | 6.75 | 1070 | 69.1 | " |
| | | | | | |
| | | | | | |

Other Observations: ____ Odor: $H_2S$ (med.)

Purging Equipment: Waterra

Sampling Equipment: "

Remarks: ____

Sampler's Signature: [signature]

/Water Sample Sheet.wpd

HerSchy Environmental

# WATER SAMPLE FIELD DATA SHEET

Client Name: Alaska Gas 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): ____ Volume in Casing (gal.): 2.32

Depth of Well (feet): 20.65 Calculate Purge Volume (gal.): 6.94

Depth to Water (feet): 6.45 Actual Purge Volume (gal.): +7.0

Date Purged: 12/9/03 Date Sampled: 12/9/03

| TIME | VOLUME | pH | E. C. | TEMP. | TURBIDITY |
|---|---|---|---|---|---|
| 1640 | — | 6.78 | 1087 | 67.8 | murky/grey |
| 1648 | +7 | 6.76 | 1077 | 69.2 | 〃 〃 |
| | | | | | |
| | | | | | |

Other Observations: ____ Odor: $H_2S$ strong

Purging Equipment: waterra

Sampling Equipment: 〃

Remarks: ____

Sampler's Signature: Josh L. Teves

/Water Sample Sheet.wpd

HerSchy Environmental

# WATER SAMPLE FIELD DATA SHEET

Client Name: Alaska Gas 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): ____ Volume in Casing (gal.): ____

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

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

Date Purged: 12/9/03 Date Sampled: 12/9/03

| TIME | VOLUME | pH | E. C. | TEMP. | TURBIDITY |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Other Observations: ____ Odor: ____

Purging Equipment: Waterra

Sampling Equipment: "

Remarks: 3" floating product ; no Sample taken

Sampler's Signature: [signature]

/Water Sample Sheet.wpd

HerSchy
Environmental

# WATER SAMPLE FIELD DATA SHEET

Client Name: Alaska Gas 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): ____ Volume in Casing (gal.): 2.96

Depth of Well (feet): 24.31 Calculate Purge Volume (gal.): 8.89

Depth to Water (feet): 6.13 Actual Purge Volume (gal.): +9.0

Date Purged: 12/9/03 Date Sampled: 12/9/03

| TIME | VOLUME | pH | E. C. | TEMP. | TURBIDITY |
|---|---|---|---|---|---|
| 1654 | - | 7.05 | 837 | 67.7 | [illegible] |
| 1703 | +9 | 6.92 | 803 | 69.3 | [illegible] |
| | | | | | |
| | | | | | |

Other Observations: ____ Odor: none

Purging Equipment: Waterra

Sampling Equipment: PC

Remarks: ____

Sampler's Signature: [signature]

/Water Sample Sheet.wpd

HerSchy Environmental

# WATER SAMPLE FIELD DATA SHEET

Client Name: Alaska Gas 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): ____ Volume in Casing (gal.): 2.66

Depth of Well (feet): 23.43 Calculate Purge Volume (gal.): 7.98

Depth to Water (feet): 7.11 Actual Purge Volume (gal.): +8.0

Date Purged: 12/9/03 Date Sampled: 12/9/03

| TIME | VOLUME | pH | E. C. | TEMP. | TURBIDITY |
|---|---|---|---|---|---|
| 1614 | – | 7.06 | 655 | 66.4 | muddy grey |
| 1622 | +8 | 7.00 | 649 | 67.9 | 〃 〃 |
| | | | | | |
| | | | | | |

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 Gas - Oakland | Sampled: 12-09-03 |
| P.O. Box 229 | Reference Number: 6418 | Received: 12-11-03 |
| Bass Lake, CA 93604 | Sample Description: Water | Extracted: 12-15-03 |
| Attn: Joshua Teves | Sample Prep/Analysis Method: EPA 5030/8015M, 8020 ✓ | Analyzed: 12-15-03 |
| | Lab Numbers: 6418-1W, 2W, 3W, 4W, 5W | Reported: 12-29-03 |

## 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 | 66000 | 19000 | 4500000 | 5.0 | 1200 |
| BENZENE | 0.50 | 150 | 6200 | 2000 | 32 | 150 |
| TOLUENE | 0.50 | ND | 170 | ND | ND | 9.9 |
| ETHYLBENZENE | 0.50 | ND | 1600 | ND | 2.6 | 31 |
| TOTAL XYLENES | 0.50 | ND | 2700 | ND | 0.57 | 83 |
| GASOLINE RANGE HYDROCARBONS | 50 | 22000 | 31000 | 170000 | 130 | 970 |
| Report Limit Multiplication Factor: | | 50 | 100 | 500 | 1 | 5 |
| Report Limit Multiplication Factor for MTBE only: | | 2000 | 1000 | 20000 | | 100 |

| | | | | | |
|---|---|---|---|---|---|
| Surrogate % Recovery: | FID: 109% / PID: 107% | FID: 134% / PID: 123% | FID: 123% / PID: 121% | FID: 113% / PID: 108% | FID: 124% / PID: 119% |
| 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: _____ APPROVED BY: _____
*Clari J. Cone*
*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 Gas - Oakland | Method: EPA 5030/8015M,8020 |
| P.O. Box 229 | Reference Number: 6418 | Instrument ID: Var-GC1 |
| Bass Lake, CA 93604 | Sample Description: Water | Extracted: 12-15-03 |
| Attn: Joshua Teves | Analyst: Jim Phillips | Analyzed: 12-15-03 |
| | | Reported: 12-29-03 |

## 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-D153 | VW-D153 | VW-D153 | VW-D153 | VW-D153 | VW-D153 |
| LCS % Recovery: | 107% | 105% | 104% | 100% | 107% | 105% |
| Surrogate Recovery: | 128% | 125% | 125% | 125% | 125% | 125% |
| Control Limits: | 70-130 % | 70-130 % | 70-130 % | 70-130 % | 70-130 % | 70-130 % |
| MS/MSD Batch #: | VW-D153 | VW-D153 | VW-D153 | VW-D153 | VW-D153 | VW-D153 |
| Spike Concentration: | 110 | 2.10 | 1.32 | 7.94 | 1.84 | 9.22 |
| MS % Recovery: | 98.3% | 144% | NA* | 95.1% | 92.1% | 97.8% |
| Surrogate Recovery: | 112% | 105% | 105% | 105% | 105% | 105% |
| MSD % Recovery: | 89.7% | 164% | NA* | 87.3% | 91.9% | 97.5% |
| Surrogate Recovery: | 114% | 106% | 106% | 106% | 106% | 106% |
| Relative % Difference: | 4.09% | 4.91% | NA* | 8.55% | 0.096% | 0.271% |
| Methanol Blank : | ND | ND | ND | ND | ND | ND |
| Surrogate Recovery: | 118% | 120% | 120% | 120% | 120% | 120% |

**Recoveries not calculated due to matrix interference.*

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 Gas
Address:
City/State/ZIP: Oakland
Phone / FAX:
Proj # / P.O. #:
Report Attention: Joshua Teves
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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 04184W | mw-1 | 12/9/03 | 1727 | | g | l | X | X | | | | | | | | | 2 | |
| -2W | mw-2 | | 1634 | | | | | | | | | | | | | | 2 | |
| -3W | mw-3 | | 1648 | | | | | | | | | | | | | | 2 | |
| -4W | mw-5 | | 1703 | | | | | | | | | | | | | | 2 | |
| -5W | mw-6 | ↓ | 1622 | | ↓ | ↓ | ↓ | ↓ | | | | | | | | | 2 | |

Method of Shipment:

Notes:

| | Signature | Printed Name | Date | Time | Company Name |
|---|---|---|---|---|---|
| Relinquished by: | | Josh Teves | | | Iter Schy |
| Received by: | | | | | |
| Relinquished by: | | | | | |
| Received by: | | | | | |
| Relinquished by: | | | | | |
| Received by: | | Lucia Ambriz | 12/11/03 | 1055 | Castle Analytical |

10 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

# 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: [illegible]
Address:
City/State/ZIP:
Phone / FAX:
Proj # / P.O. #:
Report Attention:
Sampler Signature:
Printed:

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MW-1 | 12/9/03 | 1222 | | g | l | X | X | | | | | | | | | 3 | |
| | MW-2 | ↓ | 1234 | | ↓ | ↓ | ↓ | ↓ | | | | | | | | | 2 | |
| | MW-3 | | 1248 | | | | | | | | | | | | | | 2 | |
| | MW-4 | | 1303 | | | | | | | | | | | | | | 2 | |
| | MW-5 | ↓ | 1322 | | ↓ | ↓ | ↓ | ↓ | | | | | | | | | 2 | |

Method of Shipment:

Notes:

| | Signature | Printed Name | Date | Time | Company Name |
|---|---|---|---|---|---|
| Relinquished by: | [illegible] | Josh Torres | | | [illegible] |
| Received by: | | | | | |
| Relinquished by: | | | | | |
| Received by: | | | | | |
| Relinquished by: | | | | | |
| Received by: | [illegible] | [illegible] | [illegible] | [illegible] | Castle Analytical |

10 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