

erSchy Environmental, Inc.

June 16, 2006
Project A51-01

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

2006 JUN 22 PM 12:09

Re: Results of the May 2006 Quarterly Groundwater Monitoring Event, Alaska Gasoline Company, Oakland, California, Case #RO0000127

Dear Mr. Chan:

HerSchy Environmental, Inc. 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). Groundwater monitoring was performed on May 5, 2006.

METHODS OF INVESTIGATION

Groundwater Sampling Procedures:

Groundwater samples were collected from five of the seven monitoring and extraction wells on May 5, 2006. Monitoring well MW-4 and extraction well EX-1 were found to have floating product, and therefore were not sampled. All monitoring wells were measured for static water level and total depth using an electric sounder prior to initiating sampling. Depth to groundwater was recorded to the nearest 0.01 feet on field sampling data sheets. The groundwater elevation in the monitoring wells was calculated by subtracting the measured depth to groundwater from the surveyed well elevation. The depth to groundwater, total depth of the well, and well diameter were used to calculate the purge volume.

At least three casing volumes were purged from each well prior to collecting a groundwater sample using a Waterra electric pump and dedicated hoses. 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 three 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 methyl tertiary butyl ether (MTBE). Samples were analyzed using EPA method 8020 for BTEX and MTBE. Groundwater samples were also analyzed for the fuel oxygenates and additives MTBE, di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butanol (TBA), 1,2-dichloroethane (1,2-DCA) and ethylene dibromide (EDB) using EPA method 8260.

RESULTS OF INVESTIGATION

Groundwater Conditions:

Because MW-4 and EX-1 contained floating product, no samples were collected from these wells. Groundwater data from wells with floating product was not used in determining the groundwater flow direction or gradient.

Groundwater was present beneath the site at an average depth of 6.78 feet below the surveyed well elevations during the May 2006 monitoring event. Groundwater elevation during this quarter averaged 29.09 feet above mean sea level. This represents a decrease in average groundwater elevation of about 0.84 feet since the February 2006 monitoring event, based on average depth to groundwater. Groundwater flow direction is approximately South 28 degrees West at a gradient of 0.010. Groundwater conditions are summarized in Table 1 and are presented graphically in Figure 2.

Table 1
Groundwater Conditions, Alaska Gasoline, Oakland

Well Number	Elevation	Depth to GW	GW Elevation
August 15 & 17, 2005			
EX-1	33.28	0.83' free product	-----
MW-1R	36.67	8.55	28.12
MW-2	36.33	7.99	28.34
MW-3	35.12	7.71	27.41
MW-4	34.11	0.5' free product	-----
MW-5	35.17	6.75	28.42
MW-6	36.07	7.91	28.16

Flow Direction = S. 38 W.; Gradient = .013

Table 1
Groundwater Conditions, Alaska Gasoline, Oakland

Well Number	Elevation	Depth to GW	GW Elevation
November 17, 2005			
EX-1	33.28	NS	NS
MW-1R	36.67	8.41	28.26
MW-2	36.33	7.88	28.45
MW-3	35.12	7.56	27.56
MW-4	34.11	0.75' free product	-----
MW-5	35.17	6.47	28.70
MW-6	36.07	7.80	28.27
Flow Direction = S. 35 W.; Gradient = .010			
February 8, 2006			
EX-1*	33.28	4.92*	28.36*
MW-1R	36.67	6.81	29.86
MW-2	36.33	6.24	30.09
MW-3	35.12	6.00	29.12
MW-4	34.11	0.27' free product	-----
MW-5	35.17	5.53	29.64
MW-6	36.07	6.16	29.91
Flow Direction = S. 48 W.; Gradient = .010			
May 5, 2006			
EX-1	33.28	0.81' free product	-----
MW-1R	36.67	7.46	29.21
MW-2	36.33	6.89	29.44
MW-3	35.12	6.65	28.47
MW-4	34.11	0.39' free product	-----
MW-5	35.17	6.10	29.07
MW-6	36.07	6.81	26.26
Flow Direction = S. 28 W.; Gradient = .013			

Elevations in feet

NS = buried and not sounded or sampled

* = Screen drowned, all free product previously extracted during testing on 12/27/05

Based on the data gathered from the site monitoring wells, 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 are summarized in Table 2 below:

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

Well No	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
August 15 and 17, 2005						
EX-1	NA	NA	NA	NA	NA	NA
MW-1R	2,500	64	240	61	210	2,300
MW-2	2,000	66	ND	46	47	2,400
MW-3	110,000	1,500	ND	ND	ND	260,000
MW-4	NA	NA	NA	NA	NA	NA
MW-5	ND	ND	ND	ND	ND	0.88
MW-6	1,800	27	ND	6.0	23	3,800
November 17, 2005						
EX-1	NA	NA	NA	NA	NA	NA
MW-1R	2,500	66	290	75	290	1,300
MW-2	760	19	0.64	15	13	1,000
MW-3	200,000	2,400	ND	ND	ND	580,000
MW-4	NA	NA	NA	NA	NA	NA
MW-5	71	0.81	ND	1.1	ND	1.4
MW-6	1,100	30	ND	4.4	9.0	2,400
February 8, 2006						
EX-1	NA	NA	NA	NA	NA	NA
MW-1R	3,300	100	310	86	470	1,400
MW-2	10,000	1,500	7.6	660	380	4,300
MW-3	470,000	3,800	660	ND	790	490,000
MW-4	NA	NA	NA	NA	NA	NA
MW-5	50	ND	ND	ND	ND	1.0
MW-6	3,600	220	43	66	160	2,700
May 5, 2006						
EX-1	NA	NA	NA	NA	NA	NA
MW-1R	3,400	170	350	97	550	1,100
MW-2	15,000	1,800	ND	1,200	1,200	5,800
MW-3	400,000	3,300	ND	ND	ND	590,000
MW-4	NA	NA	NA	NA	NA	NA
MW-5	ND	ND	ND	ND	ND	0.93
MW-6	1,600	130	21	37	65	1,400

All results presented in parts per billion (ppb)
MTBE results by EPA method 8260

NA= no analysis

Groundwater samples were also analyzed for the fuel additives di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butanol (TBA), 1,2-dichloroethane (1,2-DCA), ethylene dibromide (EDB), methanol, and ethanol. Ethanol and methanol were not detected in any of the groundwater samples during the May 2004 monitoring event and are no longer being included in the laboratory analysis. Laboratory analytical results for the fuel additives and degradation products are presented in Appendix B and are summarized in Table 3 below:

Table 3
Laboratory Analytical Results for Groundwater, Alaska Gasoline, Oakland

Sample	DIPE	ETBE	TAME	TBA	1,2-DCA	EDB	Methanol	Ethanol
August 15 and 17, 2005								
MW-1R	ND	ND	210	ND	ND	ND	NA	NA
MW-2	ND	ND	95	880	ND	ND	NA	NA
MW-3	ND	ND	21,000	25,000	ND	ND	NA	NA
MW-5	ND	ND	ND	ND	ND	ND	NA	NA
MW-6	ND	ND	300	3,500	ND	ND	NA	NA
November 17, 2005								
MW-1R	ND	ND	110	1,600	ND	ND	NA	NA
MW-2	ND	ND	26	810	ND	ND	NA	NA
MW-3	ND	ND	24,000	49,000	ND	ND	NA	NA
MW-5	ND	ND	ND	ND	ND	ND	NA	NA
MW-6	ND	ND	190	9,500	ND	ND	NA	NA
February 8, 2006								
MW-1R	ND	ND	130	1,400	ND	ND	NA	NA
MW-2	ND	ND	120	2,800	ND	ND	NA	NA
MW-3	ND	ND	26,000	49,000	ND	ND	NA	NA
MW-5	ND	ND	ND	ND	ND	ND	NA	NA
MW-6	ND	ND	180	7,800	ND	ND	NA	NA
May 5, 2006								
MW-1R	ND	ND	100	2,400	ND	ND	NA	NA
MW-2	ND	ND	150	4,300	ND	ND	NA	NA
MW-3	ND	ND	21,000	86,000	ND	ND	NA	NA
MW-5	ND	ND	ND	ND	ND	ND	NA	NA
MW-6	ND	ND	53	3,100	ND	ND	NA	NA

ND = below detectable concentrations
All results in parts per billion (ppb)

NA = no analysis
NS = not sampled

No DIPE, ETBE, EDB, or 1,2-DCA was detected in the groundwater samples during the May 2006 monitoring event.

CONCLUSIONS AND RECOMMENDATIONS

Monitoring well MW-5 had no detectable amount of any constituents during the May 2006 monitoring event with the exception of a trace amount of MTBE. All other on-site monitoring wells sampled were impacted, to varying degrees, with gasoline constituents. The highest concentrations detected this quarter are from MW-3, the well that historically has recorded the highest contaminant concentrations of the wells without floating product. The low to non-detect concentrations in MW-5 are likely due to the up-gradient location of MW-5 relative to the USTs. Relatively high concentrations of petroleum hydrocarbons remain in soil and groundwater beneath the subject site. This is clearly evident by the fact that monitoring well MW-4 and extraction well EX-1 continue to contain floating product.

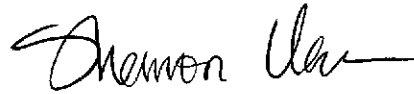
HerSchy Environmental, Inc. previously recommended a second test of free product recovery using a Xitech or similar product pump be conducted when groundwater levels decline. Significant groundwater level fluctuation occurs seasonally in this region in response to changes in rainfall. According to the water level data gathered this quarter, water level appears to be just at the top of screen for EX-1. However, depth to water needs to be below the top of screen in order for the test to be successful. As such, the test may likely be re-attempted within the next quarter if depth to water continues to increase.

Once product pumping has been successfully tested, recommendations can be made concerning ongoing product recovery as an interim remedial solution. At present the free product plume is not fully defined, and as a result the quantity of product cannot be determined. Off-site monitoring wells are intended to be installed near the site; however, permit issues and insurance requirements from the City of Oakland have significantly delayed this work.

Utility connections are expected from PG&E shortly, so that a thermal oxidizer may be installed and operated on-site. We are currently in the process of trying to schedule a site meeting with PG&E during the week of June 19, 2006 to determine the location of the gas supply main in order to complete installation of the site supply line.

If you have any questions or need additional information, please contact the undersigned at the letterhead address or at (559) 641-7320.

With best regards,
HerSchy Environmental, Inc.



Shannon Lodge
Geologist

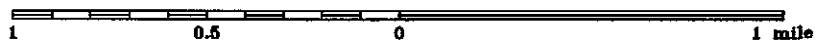


William E. Ackland
Professional Geologist #8171

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



Site Location



HerSchy Environmental, Inc.
Environmental Consulting and Remediation

P. O. Box 229
Bass Lake, California 93604-0229
Tel. (559) 641-7320, Fax (559) 641-7340

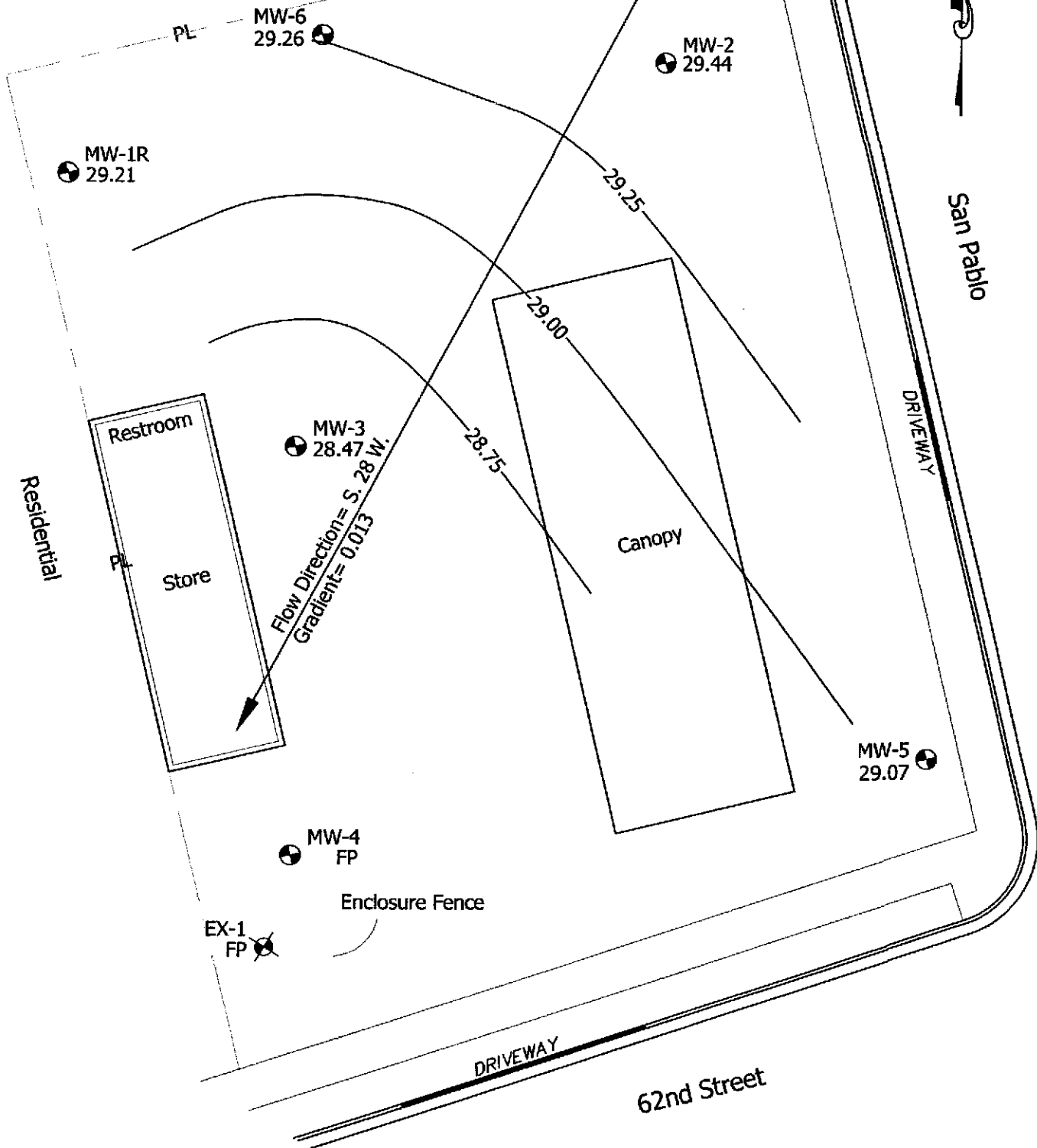
SITE LOCATION MAP
ALASKA GASOLINE COMPANY
6211 San Pablo Avenue, Oakland, California

DATE:
August 2005
FILE NO.:
A51.01
DRAWN BY:
WEA

FIGURE
1



Residential



HerSchy Environmental, Inc.
Environmental Consulting and Remediation

P. O. Box 229
Bass Lake, California 93604-0229
Tel. (559) 641-7320, Fax (559) 641-7340

MAY, 2006 GROUNDWATER CONDITIONS

ALASKA GASOLINE COMPANY

6211 San Pablo Avenue, Oakland, California

DATE: June 2006
FILE NO.: A51-01
DRAWN BY: WEA

FIGURE
2

APPENDIX A

GROUNDWATER FIELD
SAMPLING DATA SHEETS

HerSchy WATER SAMPLE FIELD DATA SHEET
Environmental

Client Name: ALASKA GAS Location: OAKLAND

Purged By: WEST Sampled by: WEST

Sample ID: EX-1 Type: Groundwater Surface Water Other

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

Casing Elevation (feet/MSL): _____ Volume in Casing (gal.): N/A

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

Depth to Water (feet): 5.15 Actual Purge Volume (gal.): _____

Date Purged: N/A Date Sampled: N/A

TIME	VOLUME	pH	E. C.	TEMP.	TURBIDITY

Sheen Y/N?: _____ Odor: _____

Purging Equipment: _____

Sampling Equipment: _____

Remarks: 4.34 TO TOP OF PRODUCT, 5.15 TO WATER
.81 FLOATING PRODUCT
05-05-06

Sampler's Signature: John S. West

HerSchy WATER SAMPLE FIELD DATA SHEET
Environmental

Client Name: ALASKA GAS Location: OAKLAND

Purged By: WEST Sampled by: WEST

Sample ID: MW-1R Type: Groundwater Surface Water Other

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

Casing Elevation (feet/MSL): 36.67 Volume in Casing (gal.): 2.6

Depth of Well (feet): 23.40 Calculate Purge Volume (gal.): 7.8

Depth to Water (feet): 7.46 Actual Purge Volume (gal.): 8+

Date Purged: 05-05-06 Date Sampled: 05-05-06 0725

TIME	VOLUME	pH	E. C.	TEMP.	TURBIDITY
<u>0712</u>	<u>-</u>	<u>6.60</u>	<u>541</u>	<u>63.1</u>	<u>CLOUDY</u>
<u>0723</u>	<u>7.8</u>	<u>6.52</u>	<u>555</u>	<u>63.1</u>	<u>CLOUDY</u>

Sheen Y/N?: N Odor: PETROLUM

Purging Equipment: WATERRA

Sampling Equipment: WATERRA

Remarks: _____

Sampler's Signature: John L. West

HerSchy WATER SAMPLE FIELD DATA SHEET
Environmental

Client Name: ALASKA GAS Location: OAKLAND

Purged By: WEST Sampled by: WEST

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

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

Casing Elevation (feet/MSL): 36.33 Volume in Casing (gal.): 2.3

Depth of Well (feet): 20.90 Calculate Purge Volume (gal.): 6.9

Depth to Water (feet): 6.89 Actual Purge Volume (gal.): 7+

Date Purged: 05-05-06 Date Sampled: 05-05-06 0802

TIME	VOLUME	pH	E. C.	TEMP.	TURBIDITY
<u>0749</u>	<u>1</u>	<u>6.47</u>	<u>951</u>	<u>63.5</u>	<u>CLEAR</u>
<u>0759</u>	<u>7</u>	<u>6.52</u>	<u>959</u>	<u>63.9</u>	<u>CLEAR</u>

Sheen Y/N?: N Odor: PETROLEUM

Purging Equipment: WATERRA

Sampling Equipment: WATERRA

Remarks: _____

Sampler's Signature: John S. West

HerSchy WATER SAMPLE FIELD DATA SHEET
Environmental

Client Name: ALASKA GAS Location: OAKLAND

Purged By: WEST Sampled by: WEST

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

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

Casing Elevation (feet/MSL): 33.12 Volume in Casing (gal.): 2.4

Depth of Well (feet): 21.20 Calculate Purge Volume (gal.): 7.2

Depth to Water (feet): 6.65 Actual Purge Volume (gal.): 7.2+

Date Purged: 05-05-06 Date Sampled: 05-05-06 0705

TIME	VOLUME	pH	E. C.	TEMP.	TURBIDITY
<u>0651</u>	<u>✓</u>	<u>6.46</u>	<u>1061</u>	<u>61.4</u>	<u>Cloudy</u> <small>SIGHT</small>
<u>0702</u>	<u>7.2</u>	<u>6.40</u>	<u>920</u>	<u>64.0</u>	<u>Cloudy</u>

Sheen Y/N?: N Odor: PETROLEUM

Purging Equipment: WATERRA

Sampling Equipment: WATERRA

Remarks: _____

Sampler's Signature: John L. West

HerSchy WATER SAMPLE FIELD DATA SHEET
Environmental

Client Name: ALASKA GAS Location: OAKLAND

Purged By: WEST Sampled by: WEST

Sample ID: MW-4 Type: Groundwater Surface Water Other

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

Casing Elevation (feet/MSL): 34.11 Volume in Casing (gal.): N/A

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

Depth to Water (feet): 5.60 Actual Purge Volume (gal.): _____

Date Purged: _____ Date Sampled: _____

TIME	VOLUME	pH	E. C.	TEMP.	TURBIDITY
_____	_____	<u>N/A</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Sheen Y/N?: _____ Odor: _____

Purging Equipment: _____

Sampling Equipment: _____

Remarks: 5.21 TO TOP OF PRODUCT 5.60 TO WATER
1.39 OF FLOATING PRODUCT
05-05-06

Sampler's Signature: John L. West

HerSchy WATER SAMPLE FIELD DATA SHEET
Environmental

Client Name: ALASKA GAS Location: OAKLAND

Purged By: WEST Sampled by: WEST

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

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

Casing Elevation (feet/MSL): 35.17 Volume in Casing (gal.): 3.1

Depth of Well (feet): 24.90 Calculate Purge Volume (gal.): 9.2

Depth to Water (feet): 6.10 Actual Purge Volume (gal.): 9.2+

Date Purged: 05-05-05 Date Sampled: 05-05-05 0824

TIME	VOLUME	pH	E. C.	TEMP.	TURBIDITY
<u>0808</u>	<u>1</u>	<u>6.79</u>	<u>799</u>	<u>65.1</u>	<u>Muddy</u>
<u>0821</u>	<u>9.2</u>	<u>6.60</u>	<u>759</u>	<u>65.4</u>	<u>CLOUDY</u>

Sheen Y/N?: N Odor: PETROLEUM

Purging Equipment: WATERRA

Sampling Equipment: WATERRA

Remarks: _____

Sampler's Signature: John L. West

HerSchy WATER SAMPLE FIELD DATA SHEET
Environmental

Client Name: ALASKA GAS Location: OAKLAND

Purged By: WEST Sampled by: WEST

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

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

Casing Elevation (feet/MSL): 36.07 Volume in Casing (gal.): 2.7

Depth of Well (feet): 23.10 Calculate Purge Volume (gal.): 8.0

Depth to Water (feet): 6.81 Actual Purge Volume (gal.): 8+

Date Purged: 05-05-06 Date Sampled: 05-05-06 0743

TIME	VOLUME	pH	E. C.	TEMP.	TURBIDITY
<u>0731</u>	<u>-</u>	<u>6.73</u>	<u>548</u>	<u>63.0</u>	<u>Cloudy</u>
<u>0740</u>	<u>8</u>	<u>6.75</u>	<u>569</u>	<u>63.2</u>	<u>Cloudy^{less}</u>

Sheen Y/N?: N Odor: PETROLEUM

Purging Equipment: WATERRA

Sampling Equipment: WATERRA

Remarks: _____

Sampler's Signature: John S. West

APPENDIX B

CERTIFIED ANALYTICAL REPORTS

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
P.O. Box 229
Bass Lake, CA 93604
Attn: William Ackland

Client Project ID: Alaska Gas - Oakland
Reference Number: 9116
Sample Description: Water
Sample Prep/Analysis Method: EPA 5030/8015M, 8020
Lab Numbers: 9116-1W, 2W, 3W, 4W, 5W

Sampled: 05-05-06
Received: 05-05-06
Extracted: 05-09-06
Analyzed: 05-09-06
Reported: 05-17-06

TOTAL PETROLEUM HYDROCARBONS - GASOLINE WITH BTEX DISTINCTION

ANALYTE	REPORTING LIMIT µg/L	SAMPLE ID	SAMPLE ID	SAMPLE ID	SAMPLE ID	SAMPLE ID
		MW-1R (µg/L)	MW-2 (µg/L)	MW-3 (µg/L)	MW-5 (µg/L)	MW-6 (µg/L)
MTBE	0.50	1100	5700	440000	1.1	1200
BENZENE	0.50	170	1800	3300	ND	130
TOLUENE	0.50	350	ND	ND	ND	21
ETHYLBENZENE	0.50	97	1200	ND	ND	37
TOTAL XYLENES	0.50	550	1200	ND	ND	65
GASOLINE RANGE HYDROCARBONS	50	3400	15000	400000	ND	1600
Report Limit Multiplication Factor:		5	100	1000	1	5
Report Limit Multiplication Factor for MTBE only:		100	200	10000		500
Report Limit Multiplication Factor for Toluene only:		100				

Surrogate % Recovery:

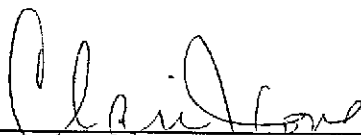
FID: 138% / PID: 113% FID: 118% / PID: 111% FID: 104% / PID: 109% FID: 101% / PID: 105% FID: 113% / PID: 113%

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

APPROVED BY:


James C. Phillips / Laboratory Director or
Clari J. Cone / Laboratory Manager

CASTLE ANALYTICAL LABORATORY

Environmental Testing Services
Certificate # 2480

2333 Shuttle Drive, Atwater, CA 95301

Phone: (209) 384-2930
Fax: (209) 384-1507

HerSchy Environmental
P.O. Box 229
Bass Lake, CA 93604
Attn: William Ackland

Client Project ID: Alaska Gas - Oakland
Reference Number: 9116
Sample Description: Water
Analyst: Jim Phillips


Method: EPA 5030/8015M,8020
Instrument ID: Var-GC1
Extracted: 05-09-06
Analyzed: 05-09-06
Reported: 05-17-06

QUALITY CONTROL DATA REPORT

ANALYTE	Gasoline	MTBE	Benzene	Toluene	Ethyl Benzene	Total Xylenes
Spike Concentration:	110	1.56	1.06	9.18	1.84	10.58
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
LCS Batch #:	VW-5096	VW-5096	VW-5096	VW-5096	VW-5096	VW-5096
LCS % Recovery:	85.7%	107%	120%	97.4%	93.4%	94.9%
Surrogate Recovery:	100%	105%	105%	105%	105%	105%
Control Limits:	70-130 %	70-130 %	70-130 %	70-130 %	70-130 %	70-130 %
MS/MSD Batch #:	VW-5096	VW-5096	VW-5096	VW-5096	VW-5096	VW-5096
Spike Concentration:	110	1.56	1.06	9.18	1.84	10.58
MS % Recovery:	85.1%	106%	122%	97.8%	97.7%	96.7%
Surrogate Recovery:	104%	108%	108%	108%	108%	108%
MSD % Recovery:	86.8%	117%	128%	101%	100%	101%
Surrogate Recovery:	110%	114%	114%	114%	114%	114%
Relative % Difference:	1.98%	9.01%	4.88%	3.43%	2.66%	4.59%
Method Blank :	ND	ND	ND	ND	ND	ND
Surrogate Recovery:	98.3%	121%	121%	121%	121%	121%

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.

APPROVED BY:


James C. Phillips / Laboratory Director or
Clari J. Cone / Laboratory Manager

CASTLE ANALYTICAL LABORATORY

Environmental Testing Services
Certificate #2480

2333 Shuttle Drive, Atwater, CA 95301

Phone: (209) 384-2930
Fax: (209) 384-1507

HerSchy Environmental P.O. Box 229 Bass Lake, CA 93604 Attn: William Ackland	Client Project ID: Alaska Gas - Oakland Lab Reference Number: 9116 Sample Description: Water Sample Prep/Analysis Method: EPA 5030/8260 Lab Numbers: 9116-1W, 2W, 3W, 4W, 5W	Sampled: 05-05-06 Received: 05-05-06 Extracted: 05-09-06 Analyzed: 05-09-06 Reported: 05-17-06
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GASOLINE ADDITIVES BY EPA METHOD 8260 GC/MS

ANALYTE	REPORTING LIMIT (µg/L)	SAMPLE ID MW-1R (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)
FUEL OXYGENATES						
Methyl tert-Butyl Ether (MTBE)	0.50	1100	5800	590000	0.93	1400
Di-isopropyl Ether (DIPE)	0.50	ND	ND	ND	ND	ND
Ethyl tert-Butyl Ether (ETBE)	0.50	ND	ND	ND	ND	ND
tert-Amyl Methyl Ether (TAME)	0.50	100	150	21000	ND	53
tert-Butanol (TBA)	20	2400	4300	86000	ND	3100
VOLATILE HALOCARBONS						
1,2-Dichloroethane (1,2-DCA)	0.50	ND	ND	ND	ND	ND
Ethylene Dibromide (EDB)	0.50	ND	ND	ND	ND	ND
Report Limit Multiplication Factor:		10*	10*	2000*	1	20*
Report Limit Multiplication Factor for MTBE:		100	200	20000		200

* Report limit raised due to matrix interference


Surrogate Recoveries						
1,2-Dichloroethane-d4		111%	111%	108%	107%	105%
Toluene-d8		103%	97.8%	103%	103%	101%

Instrument ID: HP 5972 MS & Varian 2100T

Analytes reported as ND were not detected or below the Practical Quantitation Limit

Practical Quantitation Limit = Reporting Limit x Report Limit Multiplication Factor

(µg/L) = micrograms per liter or parts per billion (ppb)

APPROVED BY: 
James C. Phillips / Laboratory Director or
Clari J. Cone / Laboratory Manager

CASTLE ANALYTICAL LABORATORY

Environmental Testing Services
Certificate #2480

2333 Shuttle Drive, Atwater, CA 95301

Phone: (209) 384-2930
Fax: (209) 384-1507

HerSchy Environmental P.O. Box 229 Bass Lake, CA 93604 Attn: William Ackland	Client Project ID: Alaska Gas - Oakland Lab Reference Number: 9116 Sample Description: Water Analyst: Scott Foster	Method: EPA 5030/8260 Instrument ID: Varian 2100T Prepared: 05-09-06 Analyzed: 05-09-06 Reported: 05-17-06
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QUALITY CONTROL DATA REPORT

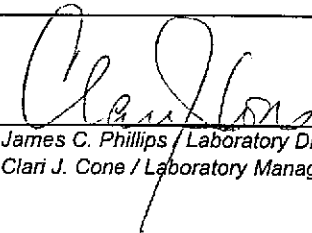
SPIKE ID: VWMS-5096V2

COMPOUNDS	Reporting Limit µg/L	BLANK Result µg/L	Spiking Level µg/L	Control Spike %R	%R Limits
t-Butyl Alcohol (t-BA)	20	ND	75.0	85.6%	57.6-163
Methyl t-butyl ether (MTBE)	0.50	ND	2.50	113%	64.7-134
Diisopropyl ether (DIPE)	0.50	ND	2.50	104%	58.2-135
Ethyl t-Butyl ether (ETBE)	0.50	ND	2.50	117%	65.0-132
t-Amyl methyl ether (TAME)	0.50	ND	2.50	118%	61.0-139
1,2-Dichloroethane (1,2-DCA)	0.50	ND	2.50	98.8%	70.1-145
Ethylene dibromide (EDB)	0.50	ND	2.50	106%	55.0-156
Surrogates:					
1,2-Dichloroethane-d4	1.0	102%	10.0	102%	80.0-118
Toluene-d8	1.0	110%	10.0	106%	74.1-129

COMPOUNDS	Spiking Level µg/L	MATRIX SPIKE %R	MATRIX SPIKE DUP %R	%R Limits	%RPD
t-Butyl Alcohol (t-BA)	75.0	74.5%	81.4%	39.7-178	7.67%
Methyl t-butyl ether (MTBE)	2.50	103%	109%	55.3-144	5.28%
Diisopropyl ether (DIPE)	2.50	96.8%	104%	54.9-135	7.17%
Ethyl t-Butyl ether (ETBE)	2.50	109%	108%	54.0-136	0.738%
t-Amyl methyl ether (TAME)	2.50	98.0%	104%	39.6-131	6.20%
1,2-Dichloroethane (1,2-DCA)	2.50	89.2%	91.6%	73.9-147	2.48%
Ethylene dibromide (EDB)	2.50	116%	110%	63.3-141	5.65%
Surrogate:					
1,2-Dichloroethane-d4	10.0	103%	97.0%	68.9-128	6.29%
Toluene-d8	10.0	115%	96.3%	68.0-128	17.3%

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.

APPROVED BY:


James C. Phillips / Laboratory Director or
Clari J. Cone / Laboratory Manager

CASTLE ANALYTICAL LABORATORY

CHAIN OF CUSTODY

Location: 2333 Shuttle Drive, Bldg 908/909, Atwater, CA 95301

Certificate No. 2480

Mailing Address: 2333 Shuttle Drive, Atwater, CA 95301

PAGE 1 OF 1

Phone: (209) 384-2930 - Fax: (209) 384-1507

Customer: ALASKA GAS
 Address: _____
 City/State/ZIP: OAKLAND
 Phone / FAX: _____
 Proj # / P.O. #: _____
 Report Attention: BILL
 Sampler Signature: John S. West
 Printed: JOHN S. WEST

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							Electronic Deliverables (EDF)	NUMBER OF CONTAINERS	Method of Shipment: Notes:
							BTEX/TPH-GAS	MTBE	TPH-DIESEL	TRPH 418.1M	Oxy's / EDB / DCA by 8260	8260				
<u>11W-1W</u>	<u>MW-1R</u>	<u>05-05</u>	<u>0725</u>		<u>G</u>	<u>L</u>	<u>X</u>	<u>X</u>		<u>X</u>				<u>3</u>	OBSERVATIONS/REMARKS	
<u>-2W</u>	<u>MW-2</u>		<u>0802</u>													
<u>-3W</u>	<u>MW-3</u>		<u>0705</u>													
<u>-4W</u>	<u>MW-5</u>		<u>0824</u>													
<u>-5W</u>	<u>MW-6</u>		<u>0743</u>													

Signature	Printed Name	Date	Time	Company Name	15	Total number of containers submitted to the laboratory
Relinquished by: <u>John S. West</u>	<u>JOHN S. WEST</u>	<u>05-05</u>		<u>HERSCHY ENV</u>		
Received by:					Note: All special requests (e.g. quick turn times) must be cleared through authorized laboratory personnel.	
Relinquished by:						
Received by:					RESULTS DUE: _____ <input type="checkbox"/> VERBAL <input type="checkbox"/> WRITTEN	
Relinquished by: <u>Fredrick Ambriz</u>	<u>Yuridia Ambriz</u>	<u>5/05/06</u>	<u>1200</u>	<u>Castle Analytical</u>		