aqua science engineers inc.

PE

10/20/97 Can reduce TPH + BTEX to 2X/qr cont. VOCs on 4X. Will send letter when # comes in

July 31, 1997

QUARTERLY GROUNDWATER MONITORING REPORT JULY 8, 1997 SAMPLING

for

Custom Alloy Scrap Sales
2711 Union Street
Oakland, California

STID 269

~~2730 Peralta~~

~~STID 2367~~

97 AUG -4 AM 8:01
ENVIRONMENTAL PROTECTION

Prepared by:
AQUA SCIENCE ENGINEERS, INC.
2411 Old Crow Canyon Road, #4
San Ramon, CA 94583
(510) 820-9391

REGISTERED PROFESSIONAL ENGINEER
DAVID M. SCHULTZ
No. 38738
Exp. 4-98
CIVIL
STATE OF CALIFORNIA

1.0 INTRODUCTION

This report details the quarterly groundwater sampling for the subject site as required by the Alameda County Health Care Services Agency (ACHCSA) and the Regional Water Quality Control Board (RWQCB). Aqua Science Engineers, Inc. (ASE) has prepared this report on behalf of Mr. Eugene Teasley of Gardiner Manufacturing, owner of the property.

2.0 SITE BACKGROUND

The site was previously occupied by Gardiner Manufacturing as a machining and press operation. Beginning in 1985, Custom Alloy Scrap Sales occupied the property as a metal scrap recycling operation. Custom Alloy Scrap Sales is currently the tenant on the property.

In August 1990, MacKinnon Environmental Consulting of Walnut Creek, California conducted a limited soil assessment at the site. Up to 4,000 parts per million (ppm) oil and grease (O&G) and 2,600 ppm total petroleum hydrocarbons as diesel (TPH-D) were detected in the soil samples collected during the assessment.

In March 1996, ASE drilled ten soil borings at the site. Up to 4,300 ppm TPH-D, 4,500 ppm O&G, 0.01 ppm toluene, 0.0092 ppm ethylbenzene, 0.011 ppm total xylenes, 0.055 ppm cis-1,2-dichloroethene (cis-1,2-DCE), 0.018 ppm trans-1,2-dichloroethene (trans-1,2-DCE) and 0.052 ppm trichloroethene (TCE) were detected in the soil samples collected during this assessment. None of these volatile organic compound (VOC) concentrations, nor any of the metal concentrations detected, exceeded US EPA Region IX Preliminary Remediation Goals (PRGs) for Industrial Soil. Up to 7,100 parts per billion (ppb) O&G, 43 ppb vinyl chloride, 2.1 ppb 1,1-dichloroethene, 22 ppb 1,1-dichloroethane, 78 ppb cis-1,2-DCE, 15 ppb trans-1,2-DCE, 100 ppb TCE, 1 ppb tetrachloroethene (PCE), 21 ppb chlorobenzene, and 39 ppb 1,2-dichlorobenzene were detected in groundwater samples collected from the site. Several of these VOC concentrations exceeded California Department of Toxic Substances Control (DTSC) maximum contaminant levels (MCLs) for drinking water.

In September 1996, ASE drilled four soil borings at the site and installed groundwater monitoring wells MW-1 through MW-4 in the borings. Up to 350 ppm TPH-D were detected in the soil samples collected from borings MW-2 and MW-4, although the chromatogram pattern on these samples did not resemble the diesel standard. Motor

oil range hydrocarbons were detected in the soil samples collected from boring MW-4. 0.048 ppm flourene was detected in the soil sample collected from 6.0-feet bgs in boring MW-4. Relatively high VOC concentrations were detected in groundwater samples collected from all four site monitoring wells. Up to 2,200 ppb TCE was detected in groundwater samples collected at the site. In addition, PCE, benzene, vinyl chloride, cis-1,2-DCE, trans-1,2-DCE and chlorobenzene were detected in groundwater samples collected at the site at concentrations exceeding DTSC MCLs, especially in groundwater samples collected from monitoring well MW-2.

3.0 GROUNDWATER GRADIENT AND DIRECTION

ASE surveyed the top of casing elevation of each well relative to a site datum on October 3, 1996. An assumed site datum elevation of 15-feet above mean sea level (msl) was interpolated from the USGS Oakland West, California 7.5 Minute Quadrangle (1980). The top of casing elevation of monitoring well MW-1 was set at 15-feet, and the top of casing elevations of monitoring wells MW-2, MW-3 and MW-4 were surveyed relative to monitoring well MW-1. The depth to groundwater was measured in each well prior to sampling on July 8, 1997 with an electric water level sounder. Depth to groundwater measurements are presented in Table One, and groundwater elevation contours are plotted on Figure 2. Groundwater elevations in the sites wells have dropped approximately 0.5-feet since last quarter. **Groundwater appears to flow** to the west beneath the site at a gradient of 0.017-feet/foot.

4.0 GROUND WATER SAMPLE COLLECTION AND CHEMICAL ANALYSIS

On July 8, 1997, ASE environmental specialist Scott Ferriman arrived on-site. After measuring and recording the depths to groundwater in monitoring wells MW-1, MW-2, MW-3, and MW-4, ASE purged four well casing volumes of groundwater from each well using pre-cleaned, dedicated polyethylene bailers. No free-floating hydrocarbons or sheen was encountered in any of the wells. The pH, temperature and conductivity of the purge water were monitored during evacuation, and samples were not collected until these parameters stabilized. Groundwater samples were collected from the wells using dedicated polyethylene bailers. Groundwater samples were decanted from the bailers into 40-ml volatile organic analysis (VOA) vials and 1-liter amber glass bottles. All samples were preserved with hydrochloric acid

as appropriate, labeled, placed in protective foam sleeves and placed on ice for transport to Chromalab of Pleasanton, California (ELAP# 1094) under chain-of-custody. The analytical report and chain-of-custody are included in Appendix A. Well Sampling Field Logs are attached in Appendix B. Well purge water was placed in a 55-gallon steel DOT 17H drum and stored on-site pending analytical results.

The groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) by EPA Method 5030/8015M, TPH-D by EPA Method 3510/8015M, benzene, toluene, ethylbenzene and total xylenes (BTEX) and MTBE by EPA Method 8020, VOCs by EPA Method 8010 and polynuclear aromatic hydrocarbons (PNAs) by EPA Method 8310. The results are tabulated below in Tables Two and Three. No PNAs were detected in any of the groundwater samples analyzed; therefore, PNAs were not included in the tables.

5.0 CONCLUSIONS

Relatively high VOC concentrations, above California Department of Toxic Substances Control (DTSC) maximum contaminant levels (MCLs) for drinking water, continue to be detected in groundwater samples collected from all four monitoring wells. The highest concentration of PCE at the site, 1,800 ppb, was detected in groundwater samples collected from upgradient monitoring well MW-3, and may indicate an off-site source. TCE concentrations ranged from 24 ppb to 2,600 ppb. Vinyl chloride, trans-1,2-DCE, cis-1,2-DCE, 1,1-DCA, TCE, PCE and chlorobenzene were detected in groundwater samples collected at the site at concentrations exceeding DTSC MCLs. Although relativily consistant with previous results, many of the VOC concentrations detected this quarter are at a historic high.

6.0 RECOMMENDATIONS

ASE recommends that a risk assessment be performed to determine whether the site is suitable for closure.

7.0 REPORT LIMITATIONS

The results of this assessment represent conditions at the time of the groundwater sampling for the specific parameters analyzed by the laboratory. It does not fully characterize the site for parameters not analyzed by the laboratory. All of the laboratory work cited in this

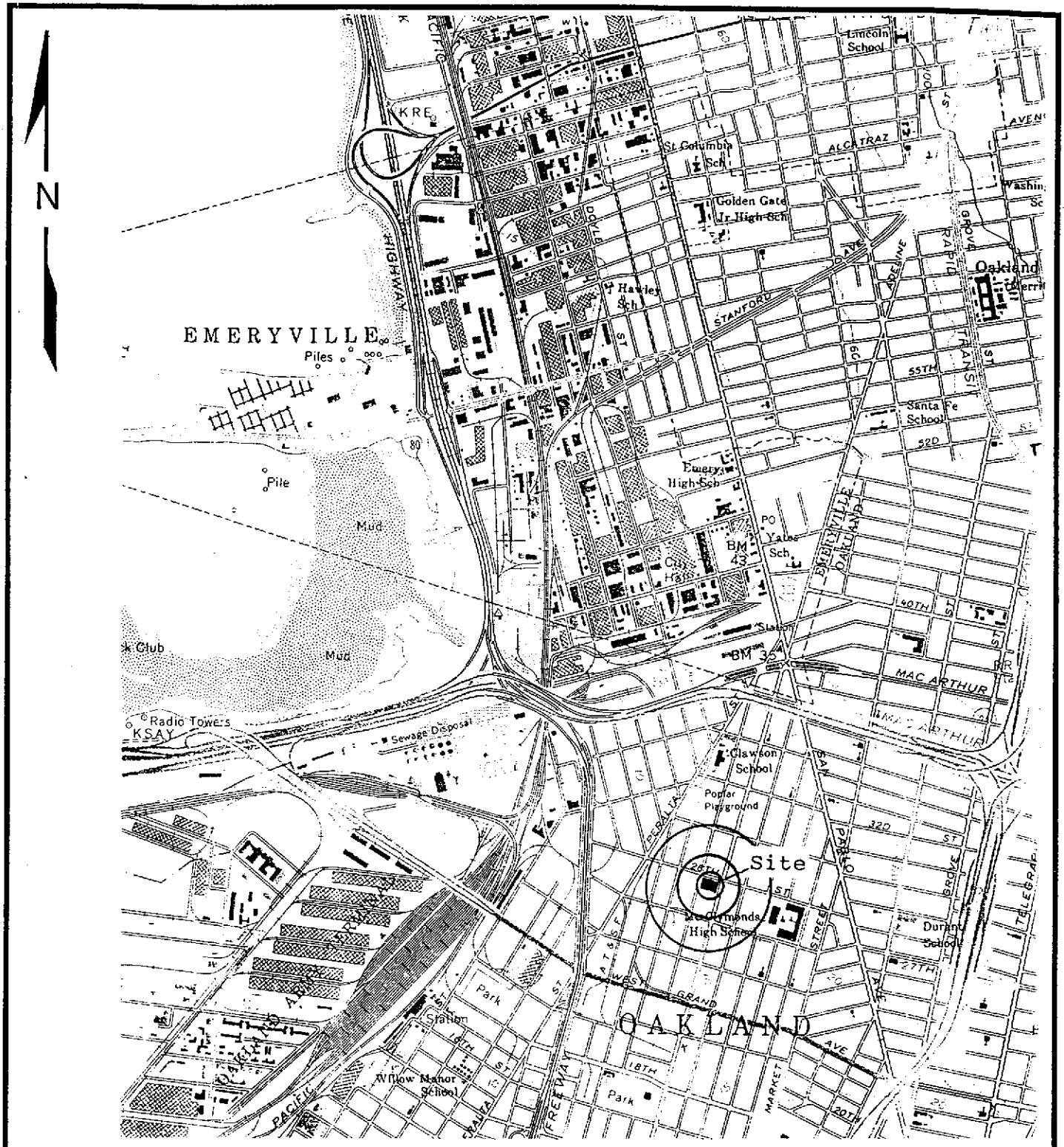
report was prepared under the direction of independent CAL-EPA certified laboratory. The independent laboratory is solely responsible for the contents and conclusions of the chemical analysis data.

Aqua Science Engineers appreciates the opportunity to continue providing environmental services for this project. Should you have any questions or comments, please feel free to call us at (510) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

Scott Ferriman
Environmental Specialist

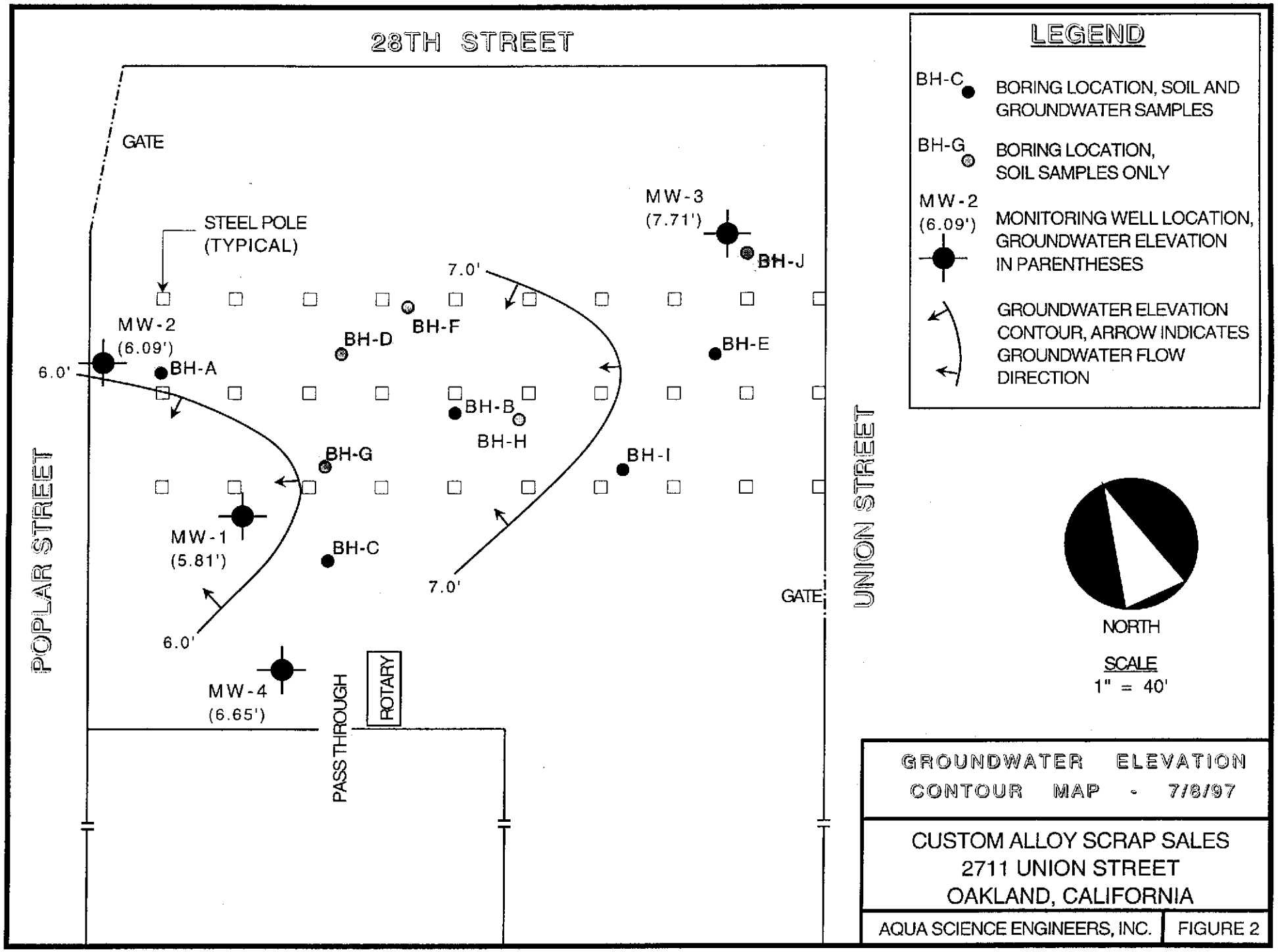


SITE LOCATION MAP

Custom Alloy Scrap Sales
Poplar and 28th Street
Oakland, California

Aqua Science Engineers, Inc. | Figure 1

BASE: USGS Oakland West 7.5 minute quadrangle topographic map, dated 1980, scale 1:24,000.



GROUNDWATER ELEVATION CONTOUR MAP - 7/8/97

CUSTOM ALLOY SCRAP SALES
2711 UNION STREET
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC. | FIGURE 2

TABLE ONE

Summary of Groundwater Well Survey Data

Well I.D.	Date of Measurement	Top of Casing Elevation (relative to project datum)	Depth to Water (feet)	Groundwater Elevation (project data)
MW-1	10-03-96	15.00	9.52	5.48
	01-07-97		6.74	8.26
	04-01-97		8.73	6.27
	07-08-97		9.19	5.81
MW-2	10-03-96	15.44	9.75	5.69
	01-07-97		6.90	8.54
	04-01-97		8.96	6.48
	07-08-97		9.35	6.09
MW-3	10-03-96	14.92	7.75	7.17
	01-07-97		4.27	10.65
	04-01-97		6.65	8.27
	07-08-97		7.21	7.71
MW-4	10-03-96	14.98	8.73	6.25
	01-07-97		5.28	9.70
	04-01-97		7.64	7.34
	07-08-97		8.33	6.65

TABLE TWO
Summary of Chemical Analysis of **WATER** Samples
TPH-G, TPH-D, BTEX and MTBE
(All Results are in **parts per billion**)

Sample I.D.	TPH-G	TPH-D	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE
MW-1							
10/03/96	83	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
01/07/97	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
04/01/97	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
07/08/97	< 500	< 50	< 5	< 5	< 5	< 5	< 50
MW-2							
10/03/96	210	2,000*	1.1	< 0.5	< 0.5	< 0.5	130
01/07/97	320	3,200*	2.0	0.86	< 0.5	< 0.5	< 50
04/01/97	< 50	850*	1.1	< 0.5	< 0.5	0.52	< 5
07/08/97	< 2,500	740*	< 25	< 25	< 25	< 25	< 25
MW-3							
10/03/96	200	53	< 0.5	1.4	< 0.5	< 0.5	< 5
01/07/97	< 50	< 50	< 0.5	0.68	< 0.5	< 0.5	< 5
04/01/97	< 50	< 50	< 0.5	0.61	< 0.5	< 0.5	< 5
07/08/97	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
MW-4							
10/03/96	120	1,400*	< 0.5	3.8	< 0.5	< 0.5	< 5
01/07/97	< 50	2,100*	< 0.5	0.91	< 0.5	< 0.5	< 5
04/01/97	< 50	750*	< 0.5	< 0.5	< 0.5	< 0.5	< 5
07/08/97	< 1,000	590*	< 10	< 10	< 10	< 10	< 100
DTSC MCLs	NE	NE	1	100*	680	1,750	NE
EPA METHOD	5030/ 8015M	3510/ 8015M	8020	8020	8020	8020	8020

Notes:
DTSC MCL = California Department of Toxic Substance Control maximum contaminant level for drinking water.
NE = DTSC MCLs and RALs not established
* = Chromatogram pattern does not resemble diesel fuel; hydrocarbons in motor oil range detected.
** = DTSC recommended action level (RAL); MCL not established

TABLE THREE
Summary of Chemical Analysis of **WATER** Samples
Volatile Organic Compounds (VOC's)
EPA Method 8240 or 8010
(All Results are in parts per billion)

Sample I.D.	VC	1,1-DCE	trans-1,2-DCE	cis-1,2-DCE	1,1-DCA	1,1,1-TCA	TCE	PCE	CB	1,3-DCB	1,4-DCB	1,2-DCB
MW-1												
10/03/96	< 20	< 20	< 20	61	< 20	< 20	2,200	< 20	< 20	< 20	< 20	< 20
01/07/97	2.0	0.70	2.7	73	< 0.5	1.8	1,500	18	< 0.5	< 0.5	< 0.5	< 0.5
04/01/97	< 10	< 10	< 10	71	< 10	< 10	1,500	18	< 10	< 10	< 10	< 10
07/08/97	< 40	< 40	< 40	43	< 40	< 40	2,600	< 40	< 40	< 40	< 40	< 40
MW-2												
10/03/96	160	< 20	47	200	< 20	< 20	220	< 20	32	< 20	< 20	< 20
01/07/97	95	4.5	42	290	4.7	< 0.5	270	18	74	0.90	4.8	35
04/01/97	120	5.3	53	240	4.7	< 0.5	200	16	97	1.4	7.4	64
07/08/97	170	< 5.0	53	440	5.8	< 5.0	440	26	75	< 5.0	< 5.0	33
MW-3												
10/03/96	< 20	< 20	< 20	< 20	< 20	< 20	120	520	< 20	< 20	< 20	< 20
01/07/97	< 20	< 20	< 20	< 20	< 20	< 20	300	1,700	< 20	< 20	< 20	< 20
04/01/97	< 20	< 20	< 20	< 20	< 20	< 20	190	910	< 20	< 20	< 20	< 20
07/08/97	< 20	< 20	< 20	< 20	< 20	< 20	330	1,800	< 20	< 20	< 20	< 20
MW-4												
10/03/96	< 20	< 20	< 20	28	< 20	< 20	270	< 20	< 20	< 20	< 20	< 20
01/07/97	1.7	< 0.5	< 0.5	58	< 0.5	< 0.5	18	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
04/01/97	25	1.5	6.2	100	1.1	< 0.5	18	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
07/08/97	34	< 2.0	7.2	160	< 2.0	< 2.0	24	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
DTSC MCL	0.5	6	10	6	5	200	5	5	30	NE	5	NE

Notes:
NE = DTSC MCL not established
VC = vinyl chloride
1,1-DCE = 1,1-dichloroethene
trans 1,2-DCE = trans-1,2-dichloroethene
cis 1,2-DCE = cis-1,2-dichloroethene
1,1-DCA = 1,1-dichloroethane
1,1,1-TCA = 1,1,1-trichlororethane
TCE = trichloroethene
PCE = tetrachloroethene
CB = chlorobenzene
1,3-DCB = 1,3-dichlorobenzene
1,4-DCB = 1,4-dichlorobenzene
1,2-DCB = 1,2-dichlorobenzene

APPENDIX A

California EPA Certified Laboratory
Report of Groundwater Samples
and
Chain of Custody Record

CHROMALAB, INC.

Environmental Services (SDB)

July 15, 1997 *Submission #:* 9707124

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: CUSTOM ALLEY SCRAP SALES *Project#:* 2971
Received: July 9, 1997

re: 4 samples for TPH - Diesel analysis.
Method: *EPA 8015M*

Matrix: WATER *Extracted:* July 10, 1997
Sampled: July 8, 1997 *Run#:* 7706 *Analyzed:* July 10, 1997

Spl#	CLIENT SPL ID	DIESEL (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
139042	MW-1	N.D.	50	N.D.	93.5	1
139043	MW-2	740	50	N.D.	93.5	1
	Note: Hydrocarbon reported does not match the pattern of our Diesel standard.					
139044	MW-3	N.D.	50	N.D.	93.5	1
139045	MW-4	590	50	N.D.	93.5	1
	Note: Hydrocarbon reported does not match the pattern of our Diesel standard.					

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

510-837-4853 MV 07/16

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

July 16, 1997 *Submission #:* 9707124

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: CUSTOM ALLEY SCRAP SALES *Project#:* 2971
Received: July 9, 1997

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **MW-1**
Spl#: 139042 *Matrix:* WATER %
Sampled: July 8, 1997 *Run#:* 7773 *Analyzed:* July 15, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	500	N.D.	77	10
MTBE	N.D.	50	N.D.	111	10
BENZENE	N.D.	5.0	N.D.	101	10
TOLUENE	N.D.	5.0	N.D.	96	10
ETHYL BENZENE	N.D.	5.0	N.D.	97	10
XYLENES	N.D.	5.0	N.D.	95	10

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile. If quantified using Gasoline's response factor, concentration would equal 940ug/L.

Kayvan Kimyai
Chemist

For Marianne Alexander
Gas/BTEX Supervisor

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CHROMALAB, INC.

Environmental Services (SDB)

July 16, 1997 *Submission #:* 9707124

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: CUSTOM ALLEY SCRAP SALES *Project#:* 2971
Received: July 9, 1997

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW-2
Spl#: 139043 *Matrix:* WATER %
Sampled: July 8, 1997 *Run#:* 7773 *Analyzed:* July 15, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	2500	N.D.	77	50
MTBE	N.D.	250	N.D.	111	50
BENZENE	N.D.	25	N.D.	101	50
TOLUENE	N.D.	25	N.D.	96	50
ETHYL BENZENE	N.D.	25	N.D.	97	50
XYLENES	N.D.	25	N.D.	95	50

Kayvan Kimyai
Chemist

For Marianne Alexander
Gas/BTEX Supervisor

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Federal ID #68-0140157

MV V132 O:BTEXQC02
KAYVAN

CHROMALAB, INC.

Environmental Services (SDB)

July 16, 1997 *Submission #:* 9707124

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: CUSTOM ALLEY SCRAP SALES *Project#:* 2971
Received: July 9, 1997

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW-3
Spl#: 139044 *Matrix:* WATER
Sampled: July 8, 1997 *Run#:* 7773 *Analyzed:* July 14, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	50	N.D.	77	1
MTBE	N.D.	5.0	N.D.	111	1
BENZENE	N.D.	0.50	N.D.	101	1
TOLUENE	N.D.	0.50	N.D.	96	1
ETHYL BENZENE	N.D.	0.50	N.D.	97	1
XYLENES	N.D.	0.50	N.D.	95	1

Kayvan Kimyai
Chemist

For Marianne Alexander
Gas/BTEX Supervisor

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Federal ID #68-0140157

MV V132 O:BTEXQC02
KAYVAN 14

CHROMALAB, INC.

Environmental Services (SDB)

July 16, 1997 *Submission #:* 9707124

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: CUSTOM ALLEY SCRAP SALES *Project#:* 2971
Received: July 9, 1997

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW-4
Spl#: 139045 *Matrix:* WATER %
Sampled: July 8, 1997 *Run#:* 7773 *Analyzed:* July 14, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1000	N.D.	77	20
MTBE	N.D.	100	N.D.	111	20
BENZENE	N.D.	10	N.D.	101	20
TOLUENE	N.D.	10	N.D.	96	20
ETHYL BENZENE	N.D.	10	N.D.	97	20
XYLENES	N.D.	10	N.D.	95	20

Note: Reporting Limits Increased Due To Sample Interference.

Kayvan Kimyai
Chemist

for Marianne Alexander
Gas/BTEX Supervisor

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Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

July 16, 1997 *Submission #:* 9707124

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: CUSTOM ALLEY SCRAP SALES *Project#:* 2971
Received: July 9, 1997

re: One sample for Volatile Halogenated Organics analysis.
Method: *SW846 Method 8010A July 1992*

Client Sample ID: MW-1
Spl#: 139042 *Matrix:* WATER
Sampled: July 8, 1997 *Run#:* 7795 *Analyzed:* July 14, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
VINYL CHLORIDE	N.D.	40	N.D.	--	80
CHLOROETHANE	N.D.	40	N.D.	--	80
TRICHLOROFLUOROMETHANE	N.D.	40	N.D.	--	80
1,1-DICHLOROETHENE	N.D.	40	N.D.	97.0	80
METHYLENE CHLORIDE	N.D.	400	N.D.	--	80
TRANS-1,2-DICHLOROETHENE	N.D.	40	N.D.	--	80
CIS-1,2-DICHLOROETHENE	43	40	N.D.	--	80
1,1-DICHLOROETHANE	N.D.	40	N.D.	--	80
CHLOROFORM	N.D.	240	N.D.	--	80
1,1,1-TRICHLOROETHANE	N.D.	40	N.D.	--	80
CARBON TETRACHLORIDE	N.D.	40	N.D.	--	80
1,2-DICHLOROETHANE	N.D.	40	N.D.	--	80
TRICHLOROETHENE	2600	40	N.D.	91.0	80
1,2-DICHLOROPROPANE	N.D.	40	N.D.	--	80
BROMODICHLOROMETHANE	N.D.	40	N.D.	--	80
2-CHLOROETHYL VINYL ETHER	N.D.	40	N.D.	--	80
TRANS-1,3-DICHLOROPROPENE	N.D.	40	N.D.	--	80
CIS-1,3-DICHLOROPROPENE	N.D.	40	N.D.	--	80
1,1,2-TRICHLOROETHANE	N.D.	40	N.D.	--	80
TETRACHLOROETHENE	N.D.	40	N.D.	--	80
DIBROMOCHLOROMETHANE	N.D.	40	N.D.	--	80
CHLOROBENZENE	N.D.	40	N.D.	95.0	80
BROMOFORM	N.D.	160	N.D.	--	80
1,1,2,2-TETRACHLOROETHANE	N.D.	40	N.D.	--	80
1,3-DICHLOROBENZENE	N.D.	40	N.D.	--	80
1,4-DICHLOROBENZENE	N.D.	40	N.D.	--	80
1,2-DICHLOROBENZENE	N.D.	40	N.D.	--	80
TRICHLOROTRIFLUOROETHANE	N.D.	40	N.D.	--	80
CHLOROMETHANE	N.D.	80	N.D.	--	80
BROMOMETHANE	N.D.	80	N.D.	--	80

Note: SAMPLE WAS ANALYZED USING EPA METHOD 8240

Oleg Nemtsov
Chemist

Chip Poalinelli
Operations Manager

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Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

July 16, 1997 *Submission #:* 9707124

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: CUSTOM ALLEY SCRAP SALES *Project#:* 2971
Received: July 9, 1997

re: One sample for Volatile Halogenated Organics analysis.
Method: *SW846 Method 8010A July 1992*

Client Sample ID: MW-2
Spl#: 139043 *Matrix:* WATER
Sampled: July 8, 1997 *Run#:* 7795 *Analyzed:* July 14, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
VINYL CHLORIDE	170	5.0	N.D.	--	10
CHLOROETHANE	N.D.	5.0	N.D.	--	10
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	10
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	97.0	10
METHYLENE CHLORIDE	N.D.	50	N.D.	--	10
TRANS-1,2-DICHLOROETHENE	53	5.0	N.D.	--	10
CIS-1,2-DICHLOROETHENE	440	5.0	N.D.	--	10
1,1-DICHLOROETHANE	5.8	5.0	N.D.	--	10
CHLOROFORM	N.D.	30	N.D.	--	10
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	10
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	10
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	10
TRICHLOROETHENE	440	5.0	N.D.	91.0	10
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	10
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	10
2-CHLOROETHYL VINYL ETHER	N.D.	5.0	N.D.	--	10
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	10
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	10
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	10
TETRACHLOROETHENE	26	5.0	N.D.	--	10
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	10
CHLOROBENZENE	75	5.0	N.D.	95.0	10
BROMOFORM	N.D.	20	N.D.	--	10
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	10
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	10
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	10
1,2-DICHLOROBENZENE	33	5.0	N.D.	--	10
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	10
CHLOROMETHANE	N.D.	10	N.D.	--	10
BROMOMETHANE	N.D.	10	N.D.	--	10

Note: SAMPLE WAS ANALYZED USING EPA METHOD 8240

Oleg Nemtsov
Chemist

Chip Poalinelli
Operations Manager

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Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

July 16, 1997 *Submission #:* 9707124

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: CUSTOM ALLEY SCRAP SALES *Project#:* 2971
Received: July 9, 1997

re: One sample for Volatile Halogenated Organics analysis.
Method: *SW846 Method 8010A July 1992*

Client Sample ID: **MW-3**
Spl#: 139044 *Matrix:* WATER
Sampled: July 8, 1997 *Run#:* 7795 *Analyzed:* July 14, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
VINYL CHLORIDE	N.D.	20	N.D.	--	40
CHLOROETHANE	N.D.	20	N.D.	--	40
TRICHLOROFLUOROMETHANE	N.D.	20	N.D.	--	40
1,1-DICHLOROETHENE	N.D.	20	N.D.	97.0	40
METHYLENE CHLORIDE	N.D.	200	N.D.	--	40
TRANS-1,2-DICHLOROETHENE	N.D.	20	N.D.	--	40
CIS-1,2-DICHLOROETHENE	N.D.	20	N.D.	--	40
1,1-DICHLOROETHANE	N.D.	20	N.D.	--	40
CHLOROFORM	N.D.	120	N.D.	--	40
1,1,1-TRICHLOROETHANE	N.D.	20	N.D.	--	40
CARBON TETRACHLORIDE	N.D.	20	N.D.	--	40
1,2-DICHLOROETHANE	N.D.	20	N.D.	--	40
TRICHLOROETHENE	330	20	N.D.	91.0	40
1,2-DICHLOROPROPANE	N.D.	20	N.D.	--	40
BROMODICHLOROMETHANE	N.D.	20	N.D.	--	40
2-CHLOROETHYL VINYL ETHER	N.D.	20	N.D.	--	40
TRANS-1,3-DICHLOROPROPENE	N.D.	20	N.D.	--	40
CIS-1,3-DICHLOROPROPENE	N.D.	20	N.D.	--	40
1,1,2-TRICHLOROETHANE	N.D.	20	N.D.	--	40
TETRACHLOROETHENE	1800	20	N.D.	--	40
DIBROMOCHLOROMETHANE	N.D.	20	N.D.	--	40
CHLOROBENZENE	N.D.	20	N.D.	95.0	40
BROMOFORM	N.D.	80	N.D.	--	40
1,1,2,2-TETRACHLOROETHANE	N.D.	20	N.D.	--	40
1,3-DICHLOROBENZENE	N.D.	20	N.D.	--	40
1,4-DICHLOROBENZENE	N.D.	20	N.D.	--	40
1,2-DICHLOROBENZENE	N.D.	20	N.D.	--	40
TRICHLOROTRIFLUOROETHANE	N.D.	20	N.D.	--	40
CHLOROMETHANE	N.D.	40	N.D.	--	40
BROMOMETHANE	N.D.	40	N.D.	--	40

Note: SAMPLE WAS ANALYZED USING EPA METHOD 8240

Oleg Nemtsov
Chemist

Chip Poalinelli
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

July 16, 1997 *Submission #:* 9707124

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: CUSTOM ALLEY SCRAP SALES *Project#:* 2971
Received: July 9, 1997

re: One sample for Volatile Halogenated Organics analysis.
Method: *SW846 Method 8010A July 1992*

Client Sample ID: **MW-4**
Spl#: 139045 *Matrix:* WATER
Sampled: July 8, 1997 *Run#:* 7795 *Analyzed:* July 14, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
VINYL CHLORIDE	34	2.0	N.D.	--	4
CHLOROETHANE	N.D.	2.0	N.D.	--	4
TRICHLOROFLUOROMETHANE	N.D.	2.0	N.D.	--	4
1,1-DICHLOROETHENE	N.D.	2.0	N.D.	97.0	4
METHYLENE CHLORIDE	N.D.	20	N.D.	--	4
TRANS-1,2-DICHLOROETHENE	7.2	2.0	N.D.	--	4
CIS-1,2-DICHLOROETHENE	160	2.0	N.D.	--	4
1,1-DICHLOROETHANE	N.D.	2.0	N.D.	--	4
CHLOROFORM	N.D.	12	N.D.	--	4
1,1,1-TRICHLOROETHANE	N.D.	2.0	N.D.	--	4
CARBON TETRACHLORIDE	N.D.	2.0	N.D.	--	4
1,2-DICHLOROETHANE	N.D.	2.0	N.D.	--	4
TRICHLOROETHENE	24	2.0	N.D.	91.0	4
1,2-DICHLOROPROPANE	N.D.	2.0	N.D.	--	4
BROMODICHLOROMETHANE	N.D.	2.0	N.D.	--	4
2-CHLOROETHYL VINYL ETHER	N.D.	2.0	N.D.	--	4
TRANS-1,3-DICHLOROPROPENE	N.D.	2.0	N.D.	--	4
CIS-1,3-DICHLOROPROPENE	N.D.	2.0	N.D.	--	4
1,1,2-TRICHLOROETHANE	N.D.	2.0	N.D.	--	4
TETRACHLOROETHENE	N.D.	2.0	N.D.	--	4
DIBROMOCHLOROMETHANE	N.D.	2.0	N.D.	--	4
CHLOROBENZENE	N.D.	2.0	N.D.	95.0	4
BROMOFORM	N.D.	8.0	N.D.	--	4
1,1,2,2-TETRACHLOROETHANE	N.D.	2.0	N.D.	--	4
1,3-DICHLOROBENZENE	N.D.	2.0	N.D.	--	4
1,4-DICHLOROBENZENE	N.D.	2.0	N.D.	--	4
1,2-DICHLOROBENZENE	N.D.	2.0	N.D.	--	4
TRICHLOROTRIFLUOROETHANE	N.D.	2.0	N.D.	--	4
CHLOROMETHANE	N.D.	4.0	N.D.	--	4
BROMOMETHANE	N.D.	4.0	N.D.	--	4

Note: *SAMPLE WAS ANALYZED USING EPA METHOD 8240*

Oleg Nemtsov
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CHROMALAB, INC.

Environmental Services (SDB)

July 16, 1997 *Submission #:* 9707124

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: CUSTOM ALLEY SCRAP SALES *Project#:* 2971
Received: July 9, 1997

re: One sample for Polynuclear Aromatics (PNAs) analysis.
Method: *SW846 Method 8310 Sept 1986*

Client Sample ID: **MW-1**
Spl#: 139042 *Matrix:* WATER *Extracted:* July 15, 1997
Sampled: July 8, 1997 *Run#:* 7768 *Analyzed:* July 16, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
NAPHTHALENE	N.D.	2.1	N.D.	58.2	1
ACENAPHTHENE	N.D.	3.7	N.D.	--	1
ACENAPHTHYLENE	N.D.	1.8	N.D.	--	1
FLUORENE	N.D.	0.32	N.D.	--	1
PHENANTHRENE	N.D.	0.16	N.D.	93.2	1
ANTHRACENE	N.D.	0.074	N.D.	--	1
FLUORANTHENE	N.D.	0.16	N.D.	--	1
PYRENE	N.D.	0.34	N.D.	108	1
BENZO(A)ANTHRACENE	N.D.	0.16	N.D.	--	1
CHRYSENE	N.D.	0.37	N.D.	116	1
BENZO(B)FLUORANTHENE	N.D.	0.053	N.D.	--	1
BENZO(K)FLUORANTHENE	N.D.	0.053	N.D.	--	1
BENZO(A)PYRENE	N.D.	0.16	N.D.	107	1
INDENO(1,2,3-CD)PYRENE	N.D.	0.17	N.D.	--	1
DIBENZO(A,H)ANTHRACENE	N.D.	4.8	N.D.	--	1
BENZO(G,H,I)PERYLENE	N.D.	0.70	N.D.	--	1

Michael Lee
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CHROMALAB, INC.

Environmental Services (SDB)

July 16, 1997 *Submission #:* 9707124

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: CUSTOM ALLEY SCRAP SALES *Project#:* 2971
Received: July 9, 1997

re: One sample for Polynuclear Aromatics (PNAs) analysis.
Method: *SW846 Method 8310 Sept 1986*

Client Sample ID: MW-2
Spl#: 139043 *Matrix:* WATER *Extracted:* July 15, 1997
Sampled: July 8, 1997 *Run#:* 7768 *Analyzed:* July 16, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
NAPHTHALENE	N.D.	2.0	N.D.	58.2	1
ACENAPHTHENE	N.D.	3.6	N.D.	--	1
ACENAPHTHYLENE	N.D.	1.7	N.D.	--	1
FLUORENE	N.D.	0.31	N.D.	--	1
PHENANTHRENE	N.D.	0.15	N.D.	93.2	1
ANTHRACENE	N.D.	0.072	N.D.	--	1
FLUORANTHENE	N.D.	0.15	N.D.	--	1
PYRENE	N.D.	0.33	N.D.	108	1
BENZO(A)ANTHRACENE	N.D.	0.15	N.D.	--	1
CHRYSENE	N.D.	0.36	N.D.	116	1
BENZO(B)FLUORANTHENE	N.D.	0.051	N.D.	--	1
BENZO(K)FLUORANTHENE	N.D.	0.051	N.D.	--	1
BENZO(A)PYRENE	N.D.	0.15	N.D.	107	1
INDENO(1,2,3-CD)PYRENE	N.D.	0.16	N.D.	--	1
DIBENZO(A,H)ANTHRACENE	N.D.	4.7	N.D.	--	1
BENZO(G,H,I)PERYLENE	N.D.	0.69	N.D.	--	1

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July 16, 1997 *Submission #:* 9707124

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: CUSTOM ALLEY SCRAP SALES *Project#:* 2971
Received: July 9, 1997

re: One sample for Polynuclear Aromatics (PNAs) analysis.
Method: *SW846 Method 8310 Sept 1986*

Client Sample ID: **MW-3**
Spl#: 139044 *Matrix:* WATER *Extracted:* July 15, 1997
Sampled: July 8, 1997 *Run#:* 7768 *Analyzed:* July 16, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
NAPHTHALENE	N.D.	2.0	N.D.	58.2	1
ACENAPHTHENE	N.D.	3.5	N.D.	--	1
ACENAPHTHYLENE	N.D.	1.7	N.D.	--	1
FLUORENE	N.D.	0.30	N.D.	--	1
PHENANTHRENE	N.D.	0.15	N.D.	93.2	1
ANTHRACENE	N.D.	0.070	N.D.	--	1
FLUORANTHENE	N.D.	0.15	N.D.	--	1
PYRENE	N.D.	0.32	N.D.	108	1
BENZO(A)ANTHRACENE	N.D.	0.15	N.D.	--	1
CHRYSENE	N.D.	0.35	N.D.	116	1
BENZO(B)FLUORANTHENE	N.D.	0.050	N.D.	--	1
BENZO(K)FLUORANTHENE	N.D.	0.050	N.D.	--	1
BENZO(A)PYRENE	N.D.	0.15	N.D.	107	1
INDENO(1,2,3-CD)PYRENE	N.D.	0.16	N.D.	--	1
DIBENZO(A,H)ANTHRACENE	N.D.	4.6	N.D.	--	1
BENZO(G,H,I)PERYLENE	N.D.	0.67	N.D.	--	1

Michael Lee
Chemist

Chip Poalinelli for
Operations Manager

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CHROMALAB, INC.

Environmental Services (SDB)

July 16, 1997 *Submission #:* 9707124

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: CUSTOM ALLEY SCRAP SALES *Project#:* 2971
Received: July 9, 1997

re: One sample for Polynuclear Aromatics (PNAs) analysis.
Method: *SW846 Method 8310 Sept 1986*

Client Sample ID: **MW-4**
Spl#: 139045 *Matrix:* WATER *Extracted:* July 15, 1997
Sampled: July 8, 1997 *Run#:* 7768 *Analyzed:* July 16, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
NAPHTHALENE	N.D.	2.0	N.D.	58.2	1
ACENAPHTHENE	N.D.	3.6	N.D.	--	1
ACENAPHTHYLENE	N.D.	1.7	N.D.	--	1
FLUORENE	N.D.	0.31	N.D.	--	1
PHENANTHRENE	N.D.	0.15	N.D.	93.2	1
ANTHRACENE	N.D.	0.072	N.D.	--	1
FLUORANTHENE	N.D.	0.15	N.D.	--	1
PYRENE	N.D.	0.33	N.D.	108	1
BENZO(A)ANTHRACENE	N.D.	0.15	N.D.	--	1
CHRYSENE	N.D.	0.36	N.D.	116	1
BENZO(B)FLUORANTHENE	N.D.	0.051	N.D.	--	1
BENZO(K)FLUORANTHENE	N.D.	0.051	N.D.	--	1
BENZO(A)PYRENE	N.D.	0.15	N.D.	107	1
INDENO(1,2,3-CD)PYRENE	N.D.	0.16	N.D.	--	1
DIBENZO(A,H)ANTHRACENE	N.D.	4.7	N.D.	--	1
BENZO(G,H,I)PERYLENE	N.D.	0.69	N.D.	--	1

Michael Lee
Chemist

Chip Poalinelli
Operations Manager

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34564

Aqua Science Engineers, Inc.
2411 Old Crow Canyon Road, #4,
San Ramon, CA 94583
(510) 820-9391 - FAX (510) 837-4853

Chain of Custody

DATE 7-8-97 PAGE 1 OF 1

SAMPLERS (SIGNATURE) (PHONE NO.)
Scott T. [illegible] 510-820-9391

PROJECT NAME Custom Alloy Scrap Sales NO. 2971
ADDRESS 2711 Union Street, Oakland CA

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:
5 Day

SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH: GASOLINE (EPA 5030/8015)	TPH: GASOLINE/BTEX (EPA 5030/8015-8020)	TPH: DIESEL (EPA 3510/8015)	PURGABLE AROMATICS (EPA 602/8020)	PURGABLE HALOCARBONS (EPA 601/8010)	VOLATILE ORGANICS (EPA 624/8240)	BASE/NUETRALS, ACIDS (EPA 625/8270)	OIL & GREASE (EPA 5520 E&F or B&F)	LUFT METALS (5) (EPA 6010+7000)	TITLE 22 (CAM 17) (EPA 6010+7000)	TCLP (EPA 1311/1310)	STLC- CAM WET (EPA 1311/1310)	REACTIVITY CORROSIVITY IGNITABILITY	8310
MW-1	7-8-97	11:15	water	6		X	X		X									X
MW-2	"	11:55	"	"		X	X		X									X
MW-3	"	12:35	"	"		X	X		X									X
MW-4	"	13:40	"	"		X	X		X									X

JOB #: 9707124 REP: MV
CLIENT: ASE
DATE: 07/16/97
SF #:34564

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
(signature) (time)	(signature) (time)	(signature) (time)	(signature) (time)	
Scott T. Ferriman 7/8/97			7-9-97	
(printed name) (date)	(printed name) (date)	(printed name) (date)	(printed name) (date)	
Company- ASE, Inc	Company-	Company-	Company-	

APPENDIX B

Well Sampling Field Logs

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Custom Alloy Scrap Sales, Oakland, CA
Job #: 2971 Date of sampling: 7-8-97
Well Name: MW-1 Sampled by: SF
Total depth of well (feet): 24.73 Well diameter (inches): 2"
Depth to water before sampling (feet): 9.19
Thickness of floating product if any: none
Depth of well casing in water (feet): 15.54
Number of gallons per well casing volume (gallons): 2.6
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 10
Equipment used to purge the well: Dedicated Poly Bailer
Time Evacuation Began: 10:40 Time Evacuation Finished: 11:10
Approximate volume of groundwater purged: 10
Did the well go dry?: no After how many gallons: —
Time samples were collected: 11:15
Depth to water at time of sampling: 9.39
Percent recovery at time of sampling: 98%
Samples collected with: Dedicated Poly Bailer
Sample color: Cloudy Odor: none
Description of sediment in sample: Small amount of Tan Silt

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	64.7	8.31	803
2	63.7	8.12	791
3	63.2	8.09	786
4	63.2	8.05	792

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-1	2	40 ml VOAs	HCl	Yes	TPHg/BTEX/MTBE
	2	40 ml VOAs			8010
	1	1 L Amber			TPHD
	1	1 L Amber	no		8310

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Custom Alloy Scrap Sales, Oakland, CA
Job #: 2971 Date of sampling: 7-8-97
Well Name: MW-2 Sampled by: ST
Total depth of well (feet): 19.23 Well diameter (inches): 2"
Depth to water before sampling (feet): 9.35
Thickness of floating product if any: ~~#~~ none
Depth of well casing in water (feet): 9.88
Number of gallons per well casing volume (gallons): 1.7
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 7
Equipment used to purge the well: Dedicated Poly Bailer
Time Evacuation Began: 11:20 Time Evacuation Finished: 11:50
Approximate volume of groundwater purged: 7
Did the well go dry?: no After how many gallons: -
Time samples were collected: 11:55
Depth to water at time of sampling: 9.51
Percent recovery at time of sampling: 98%
Samples collected with: Dedicated Poly Bailer
Sample color: Cloudy Odor: none
Description of sediment in sample: Small amount of Tan silt

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	65.2	8.41	1044
2	64.4	8.22	1057
3	63.6	8.19	1061
4	63.3	8.21	1058

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-2	2	40 ml VOAs	HCl	Yes	TPH-g/BTEX/MTBE
	2	40 ml VOAs			8010
	1	1 l Amber			TPH-d
	1	1 l Amber	no		8310

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Custom Alloy Scrap Sales Oakland CA
Job #: 2971 Date of sampling: 7-8-97
Well Name: MW-3 Sampled by: SF
Total depth of well (feet): 24.78 Well diameter (inches): 2
Depth to water before sampling (feet): 7.21
Thickness of floating product if any: none
Depth of well casing in water (feet): 17.57
Number of gallons per well casing volume (gallons): 3
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 12
Equipment used to purge the well: Dedicated Poly Bailer
Time Evacuation Began: 12:00 Time Evacuation Finished: 12:30
Approximate volume of groundwater purged: 12
Did the well go dry?: no After how many gallons: -
Time samples were collected: 12:35
Depth to water at time of sampling: 7.36
Percent recovery at time of sampling: 99%
Samples collected with: Dedicated Poly Bailer
Sample color: clear Odor: none
Description of sediment in sample: none

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	66.1	9.16	1011
2	63.4	8.62	988
3	62.7	8.59	990
4	62.5	8.56	996

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-3	2	40 ml VOAs	HCl	Yes	TPHg/BTEX/MTBE
	2	40 ml VOAs			8010
	1	1L Amber			TPH-D
	1	1L Amber	HNO3		8310

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WELL SAMPLING FIELD LOG

Project Name and Address: Custom Alloy Scrap Sales, Oakland, CA
Job #: 2971 Date of sampling: 7-8-97
Well Name: MW-4 Sampled by: SC
Total depth of well (feet): 21.26 Well diameter (inches): 2"
Depth to water before sampling (feet): 8.33
Thickness of floating product if any: none
Depth of well casing in water (feet): 12.93
Number of gallons per well casing volume (gallons): 2.2
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 9
Equipment used to purge the well: Dedicated Poly Bailer
Time Evacuation Began: 12:50 Time Evacuation Finished: 13:20
Approximate volume of groundwater purged: 9
Did the well go dry?: No After how many gallons: -
Time samples were collected: 13:40
Depth to water at time of sampling: 8.51
Percent recovery at time of sampling: 98%
Samples collected with: Dedicated Poly bailer
Sample color: clear Odor: none
Description of sediment in sample: none

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	64.5	8.26	1559
2	63.8	8.18	1618
3	63.2	8.09	1622
4	63.1	8.12	1621

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-4	2	40 ml VOAs	HCl	Yes	TPH/BTEX/MTBE
↓	2	40 ml VOAs	↓	↓	8010
	1	1 L Amber			TPHD
	1	1 L Amber	no		8310

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WELL SAMPLING FIELD LOG

Project Name and Address: Custom Alloy Scrap Sales, Oakland, CA
Job #: 2971 Date of sampling: 4-1-97
Well Name: MW-4 Sampled by: SC
Total depth of well (feet): 21.26 Well diameter (inches): 2"
Depth to water before sampling (feet): 7.64
Thickness of floating product if any: none
Depth of well casing in water (feet): 13.62
Number of gallons per well casing volume (gallons): 2.3
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 9
Equipment used to purge the well: Dedicated Poly Bailer
Time Evacuation Began: 12:50 Time Evacuation Finished: 13:20
Approximate volume of groundwater purged: 9
Did the well go dry?: no After how many gallons: —
Time samples were collected: 13:30
Depth to water at time of sampling: 8.01
Percent recovery at time of sampling: 97%
Samples collected with: Dedicated Poly Bailer
Sample color: Clear Odor: none
Description of sediment in sample: none

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	62.1	8.19	1624
2	62.0	8.24	1630
3	61.6	8.36	1641
4	61.5	8.38	1644

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-4	2	40 ml VOAs	HCl	yes	TPHg/BTEX/MTBE
↓	2	40 ml VOAs	↓	↓	8010
↓	1	1 l Amber	↓	↓	TPHD
↓	1	1 l Amber	↓	↓	8310

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