aqua science engineers inc.

April 23, 1996

ENVIRONMENTAL PROTECTION
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REPORT
of
SOIL AND GROUNDWATER ASSESSMENT
ASE JOB NO. 2971
at
Custom Alloy Scrap Sales
Poplar and 28th Street
Oakland, California

Apr 1996

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

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1.0 INTRODUCTION

This report outlines the methods and findings of Aqua Science Engineers, Inc. (ASE)'s soil and groundwater assessment at Custom Alloy Scrap Sales located at Poplar and 28th Streets in Oakland, California *(Figures 1 and 2)*. The site assessment activities were initiated by Mr. James Cherry, attorney for Gardiner Manufacturing, to determine the extent of soil and groundwater contamination prior to a potential transfer of the property to Custom Alloy Scrap Sales.

2.0 SITE HISTORY

The site was previously used 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 and 2,600 ppm total petroleum hydrocarbons as diesel (TPH-D) were detected in the soil samples collected during the assessment.

Due to the limited scope of the 1990 assessment, further definition of the extent of contamination was desired by Gardiner Manufacturing and Custom Alloy Scrap Sales in order to determine whether remediation would be required, and if so, to determine the cost of any required remediation.

3.0 SCOPE OF WORK (SOW)

Based on the site history, the 1990 assessment performed by MacKinnon Environmental Consulting and input from Mr. James Cherry and Mr. William Wasko, attorneys for Gardiner Manufacturing; Ms. Christine Noma, attorney for Custom Alloy Scrap Sales; and Mr. Patrick O'Brien of Custom Alloy Scrap Sales, ASE's SOW was as follows:

1) Obtain a subsurface drilling permit from the Alameda County Flood Control and Water Conservation District (Zone 7).

2) Drill a core through the concrete at each borehole location (Figure 2).

3) Drill ten soil borings at the site. Five soil borings to be drilled to approximately 5-feet below ground surface (bgs) with a hand auger, and five soil borings to be drilled into groundwater (approximately 10-feet bgs) using a Geoprobe or similar hydraulic sampling rig. The location of these borings to be determined by the client as the most likely areas of suspect contamination.

4) Collect soil samples from each boring.

5) Collect groundwater samples from each boring drilled into groundwater.

6) Analyze one (1) soil sample from each boring at a CA-EPA certified analytical laboratory for total petroleum hydrocarbons as gasoline (TPH-G) by modified EPA Method 5030/8015, total petroleum hydrocarbons as diesel (TPH-D) by modified EPA Method 3550/8015, oil and grease (O&G) by Standard Method 5520, benzene, toluene, ethylbenzene and total xylenes (BTEX) by EPA Method 8020, and volatile organic compounds (VOCs) by EPA Method 8010. In addition, analyze five of the samples for cadmium, chromium, lead, zinc and nickel.

7) Analyze each groundwater sample for TPH-G by modified EPA Method 5030/8015, TPH-D by modified EPA Method 3510/8015, O&G by Standard Method 5520, BTEX by EPA Method 8020, VOCs by EPA Method 8010, and cadmium, chromium, lead, zinc and nickel.

8) Backfill the borings with neat cement to the ground surface.

9) Prepare a report presenting the methods and findings of this assessment.

Details of the assessment are presented below.

4.0 DRILL SOIL BORINGS AND COLLECT SAMPLES

Prior to drilling, ASE obtained Alameda County Flood Control and Water Conservation District (Zone 7) drilling permit #96239 (Appendix A).

On March 28, 1996, Gregg Drilling of Martinez, California drilled soil borings BH-A, BH-B, BH-C, BH-D, BH-E and BH-I at the site using a Geoprobe hydraulic sampling rig. Borings BH-F, BH-G, BH-H and BH-J were

drilled by ASE environmental specialist Scott Ferriman using a hand auger. The drilling was directed by ASE project geologist Robert E. Kitay.

Soil samples were collected continuously from each boring for lithologic and hydrogeologic description and for possible chemical analysis. The soil samples were collected by driving a sampler lined with acetate liners ahead of the boring using hydraulic direct-push methods. Selective soil samples were immediately trimmed, sealed with Teflon tape, plastic end caps and duct tape, labeled, sealed in plastic bags and stored on ice for transport to Curtis & Tompkins, Ltd. Analytical Laboratories (C&T) of Berkeley, California (ELAP #1459) under chain of custody. Soil from the remaining tubes was described by the site geologist using the Unified Soil Classification System and was screened for volatile compounds using an Organic Vapor Meter (OVM). The soil was screened by emptying soil from one of the sample tubes into a plastic bag. The bag was then sealed and placed in the sun for approximately 10 minutes. After the VOCs were allowed to volatilize, the OVM measured the vapor in the bag through a small hole punched in the bag. OVM readings are used as a screening tool only, since the procedures are not as rigorous as those used in the laboratory. Soil samples collected from the borings drilled with the hand auger were contained in laboratory supplied glass jars, sealed, labeled and stored on ice for transport to C&T with the other samples.

A temporary PVC well casing was driven into place in borings BH-A, BH-B, BH-C, BH-D, BH-E and BH-I for the collection of groundwater samples. Groundwater samples were collected from the boring with a pre-cleaned stainless steel bailer. Groundwater samples to be analyzed for TPH-G, BTEX and VOCs were contained in 40-ml volatile organic analysis (VOA) vials and preserved with hydrochloric acid. Samples to be analyzed for TPH-D, O&G and metals were contained in 1-liter amber glass bottles. The samples collected for metal analyses were filtered and preserved by C&T upon their receipt. All samples were labeled, placed in protective foam sleeves as necessary, and stored on ice for transport to C&T under chain of custody. Boring BH-D did not produce sufficient water to allow for the collection of groundwater samples. In addition, boring BH-E did not produce enough water to allow for the collection of samples for TPH-D, O&G and metal analyses. Boring BH-B did not produce enough water to allow for the collection of samples for metal analyses.

Drilling equipment was cleaned with a TSP solution between sampling intervals and between borings to prevent potential cross-contamination.

Sediments encountered during drilling generally consisted of silty clay and clayey silt to the total depth explored of 21-feet below ground surface (bgs). Groundwater was generally encountered at approximately 7-feet bgs. Boring logs for each boring drilled into groundwater are included in Appendix B.

5.0 ANALYTICAL RESULTS FOR SOIL

The soil samples collected from 3.5-feet bgs in each boring, except for boring BH-C where the soil sample was collected from 5.0-feet bgs, were analyzed for TPH-G by modified EPA Method 5030/8015 (GCFID), TPH-D by modified EPA Method 3510/8015 (GCFID), O&G by Standard Method 5520 EF, BTEX by EPA Method 8020, VOCs by EPA Method 8010 and cadmium, chromium, lead, nickel and zinc by EPA Method 6010A. Excluding the soil sample from boring BH-C, all soil samples collected below 3.5-feet were placed on hold at the laboratory and were not analyzed. The analytical results are tabulated in Table One, and the certified analytical report and chain of custody forms are included in Appendix C.

TPH-D and/or oil and grease concentrations greater than 1,000 parts per million (ppm) were detected in soil samples collected from borings BH-A, BH-E, BH-F and BH-H. Hydrocarbon concentrations in soil greater than 1,000 ppm may require overexcavation or other forms of remediation. No VOCs or metals were detected in soil samples at concentrations exceeding the US EPA Region IX Preliminary Remediation Goals (PRGs) for Industrial Soil. Since none of the (PRGs) were exceeded in the soil, it is very possible that no soil remediation will be required even though total hydrocarbon concentrations exceed 1,000 ppm since there appears to be little risk to human health related to exposure to soils at these concentrations.

6.0 ANALYTICAL RESULTS FOR GROUNDWATER

The groundwater samples were analyzed by C&T for TPH-G by modified EPA Method 5030/8015 (GCFID), TPH-D by modified EPA Method 3510/8015 (GCFID), O&G by Standard Method 5520 EF, BTEX by EPA Method 8020, VOCs by EPA Method 8010 and cadmium, chromium, lead, nickel and zinc by EPA Method 6010A. The analytical results are tabulated in Table Two, and the certified analytical report and chain of custody forms are included in Appendix D.

TPH-D was detected in groundwater samples collected from borings BH-A, BH-B, BH-C and BH-I at concentrations exceeding 1,000 parts per billion (ppb). The California Department of Toxic Substances Control (DTSC) has

TABLE ONE
Summary of Chemical Analysis of **SOIL** Samples
All results are in **parts per million**

COMPOUND	BH-A 3.5'	BH-B 3.5'	BH-C 5.0'	BH-D 3.5'	BH-E 3.5'	BH-F 3.5'	BH-G 3.5'	BH-H 3.5'	BH-I 3.5'	BH-J 3.5'	PRG (Industrial)
TPH-G	7.6*	<1	<1	<1	1.6*	<1	<1	1.8	<1	<1	NE
TPH-D	**1,700***	<1	<1	<1	**2,100***	150*	69*	**4,300***	42*	<1	NE
Oil & Grease	<50	<50	<50	<50	**3,900**	**4,500**	<50	**2,300**	<50	<50	NE
Toluene	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	<0.005	<0.005	<0.005	<0.005	2,800
Ethylbenzene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0092	<0.005	<0.005	690
Total xylenes	0.016	<0.01	<0.01	<0.01	0.01	0.006	<0.01	0.011	<0.01	<0.01	990
cis-1,2-DCE	<0.005	<0.005	<0.005	<0.005	<0.005	0.055	<0.005	<0.005	<0.005	<0.005	200
trans-1,2-DCE	<0.005	<0.005	<0.005	<0.005	<0.005	0.018	<0.005	<0.005	<0.005	<0.005	600
TCE	<0.005	<0.005	<0.005	0.0093	<0.005	0.052	<0.005	<0.005	<0.005	<0.005	17
Other VOCs	<0.005-<0.02	<0.005-<0.02	<0.005-<0.02	<0.005-<0.02	<0.005-<0.02	<0.005-<0.02	<0.005-<0.02	<0.005-<0.02	<0.005-<0.02	<0.005-<0.02	V
Cadmium	0.34	0.30	0.34	0.25	1.1	0.29	0.27	0.65	0.34	0.31	850
Chromium	24	24	46	36	26	34	35	37	27	43	450
Lead	4.4	13	4.6	4.2	66	4.5	6.4	150	8.6	5.4	1,000
Nickel	20	21	24	19	23	21	15	24	21	22	150
Zinc	15	23	23	18	62	19	24	120	22	24	100,000

EXPLANATION FOR TABLE ONE

Abbreviations:

TPH-G = Total petroleum hydrocarbons as gasoline
TPH-D = Total petroleum hydrocarbons as diesel
DCE = Dichloroethene
TCE = Trichloroethene
VOCs = Volatile organic compounds by EPA Method 8010
PRG = US EPA Region IX Preliminary Remediation Goal
NE = Not established
V = Varies; PRG depends on the compound

Notes:

* = Chromatogram pattern does not resemble standard.

Non-detectable concentrations noted by the less than symbol (<) followed by the detection limit.

Concentrations in **bold** exceed the PRG for individual compounds or 100 parts per million for TPH or oil and grease concentrations.

TABLE TWO
Summary of Chemical Analysis of **GROUNDWATER** Samples
All results are in **parts per billion**

COMPOUND	BH-A	BH-B	BH-C	BH-E	BH-I	MCL
TPH-G	95*	<50	51*	<50	<50	NE
TPH-D	**3,800***	**7,100***	**2,600***	---	**2,000***	NE
Oil & Grease	<5,000	<8,000	<5,000	---	<5,000	NE
Ethylbenzene	<0.5	<0.5	<0.5	0.9	<0.5	680
Total xylenes	1.3	<1	<1	1.3	<1	1,750
Vinyl Chloride	**8.3**	**2.4**	**10**	**43**	<1	0.5
1,1-DCE	2.1	<1	<1	<1	<1	6
1,1-DCA	<1	**22**	1.5	<1	<1	5
cis-1,2-DCE	**55**	3.4	**78**	**75**	1.3	6
trans-1,2-DCE	**15**	<1	3.3	6.7	<1	10
TCE	**34**	<1	**100**	**9.1**	<1	5
PCE	1	<1	1	<1	<1	5
Chlorobenzene	**21**	<1	<1	<1	<1	NE
1,2-Dichlorobenzene	39	<5	<5	<5	<5	130**
Other VOCs	<1-<20	<1-<20	<1-<20	<1-<20	<1-<20	V
Cadmium	<2	---	<2	---	2.3	10
Chromium	<10	---	<10	---	<10	50
Lead	<3	---	<3	---	<3	50
Nickel	240	---	130	---	1,000	NE
Zinc	<20	---	<20	---	<20	NE

EXPLANATION FOR TABLE TWO

Abbreviations:

TPH-G	=	Total petroleum hydrocarbons as gasoline
TPH-D	=	Total petroleum hydrocarbons as diesel
1,1-DCE	=	Dichloroethene
1,1-DCA	=	Dichloroethane
TCE	=	Trichloroethene
PCE	=	Tetrachloroethene
VOCs	=	Volatile organic compounds by EPA Method 8010
MCL	=	California Department of Toxic Substances Control Maximum Contaminant Level for Drinking Water
---	=	Not analyzed
NE	=	Not established
V	=	Varies; MCL depends on the compound

Notes:

*	=	Chromatogram pattern does not resemble standard
**	=	Recommended action level

Non-detectable concentrations noted by the less than symbol (<) followed by the detection limit.

Concentrations in **bold** exceed the MCL for individual compounds or 100 parts per billion for TPH or oil and grease concentrations.

not established a maximum contaminant level (MCL) for drinking water for TPH-D. The vinyl chloride, 1,1-dichloroethane (1,1-DCA), cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), trichloroethene (TCE) and chlorobenzene concentrations exceeded the DTSC MCL for drinking water in one or more of the following borings: BH-A, BH-B, BH-C and BH-E.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Hydrocarbon concentrations greater than 1,000 ppm were detected in soil samples collected from borings BH-A, BH-E, BH-F and BH-H. Hydrocarbon concentrations in soil greater than 1,000 ppm may require overexcavation or other forms of remediation. However, in the current regulatory climate, very little remediation is required on soil contaminated with extractable range (oil, grease, diesel, etc.) hydrocarbons in the absence of either free-phase hydrocarbon or VOCs and/or metals exceeding the US EPA Region IX Preliminary Remediation Goals (PRGs). No VOCs or metals were detected in soil samples at concentrations exceeding the US EPA Region IX Preliminary Remediation Goals (PRGs) for Industrial Soil. Since none of the (PRGs) were exceeded in the soil, it is very possible that no soil remediation will be required, even though total hydrocarbon concentrations exceed 1,000 ppm, since there appears to be little risk to human health related to exposure to soils at these concentrations.

Although VOC concentrations exceeded the DTSC MCLs for drinking water, groundwater is not used for drinking water in the site vicinity. In areas where groundwater is not used for consumption, sites can often be closed with VOC concentrations greater than the DTSC MCLs for drinking water. ASE recommends that this report be submitted to the Alameda County Health Care Services Agency (ACHCSA) to review for closure. If closure is not granted, the ACHCSA will likely require the installation of groundwater monitoring wells at the site to determine the plume boundaries and groundwater flow direction. If such wells are installed it is most likely that the ACHCSA will require, at a minimum, one year of quarterly groundwater monitoring of the wells. Upon completion of one year of quarterly monitoring, a request for closure could once again be made. At that time, ASE may recommend that a formal "Risk Assessment" be performed to determine the risk to human health and the environment caused by the remaining VOCs in groundwater. If such a study verifies the risk to be insignificant, it could be used to support and gain closure at the site. In the event that the quarterly monitoring data and/or a risk assessment study do not appear favorable for obtaining closure, some form of remediation could ultimately be necessary.

8.0 REPORT LIMITATIONS

The results of this assessment represent conditions at the time of the soil and groundwater sampling, at the specific locations at which the samples were collected, and for the specific parameters analyzed by the laboratory.

This report does not fully characterize the site for contamination resulting from unknown sources or for parameters not analyzed by the laboratory. All of the laboratory work cited in this report was prepared under the direction of an independent CA-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 provide environmental consulting services for this project. Should you have any questions or comments, please feel free to call us at (510) 820-9391.

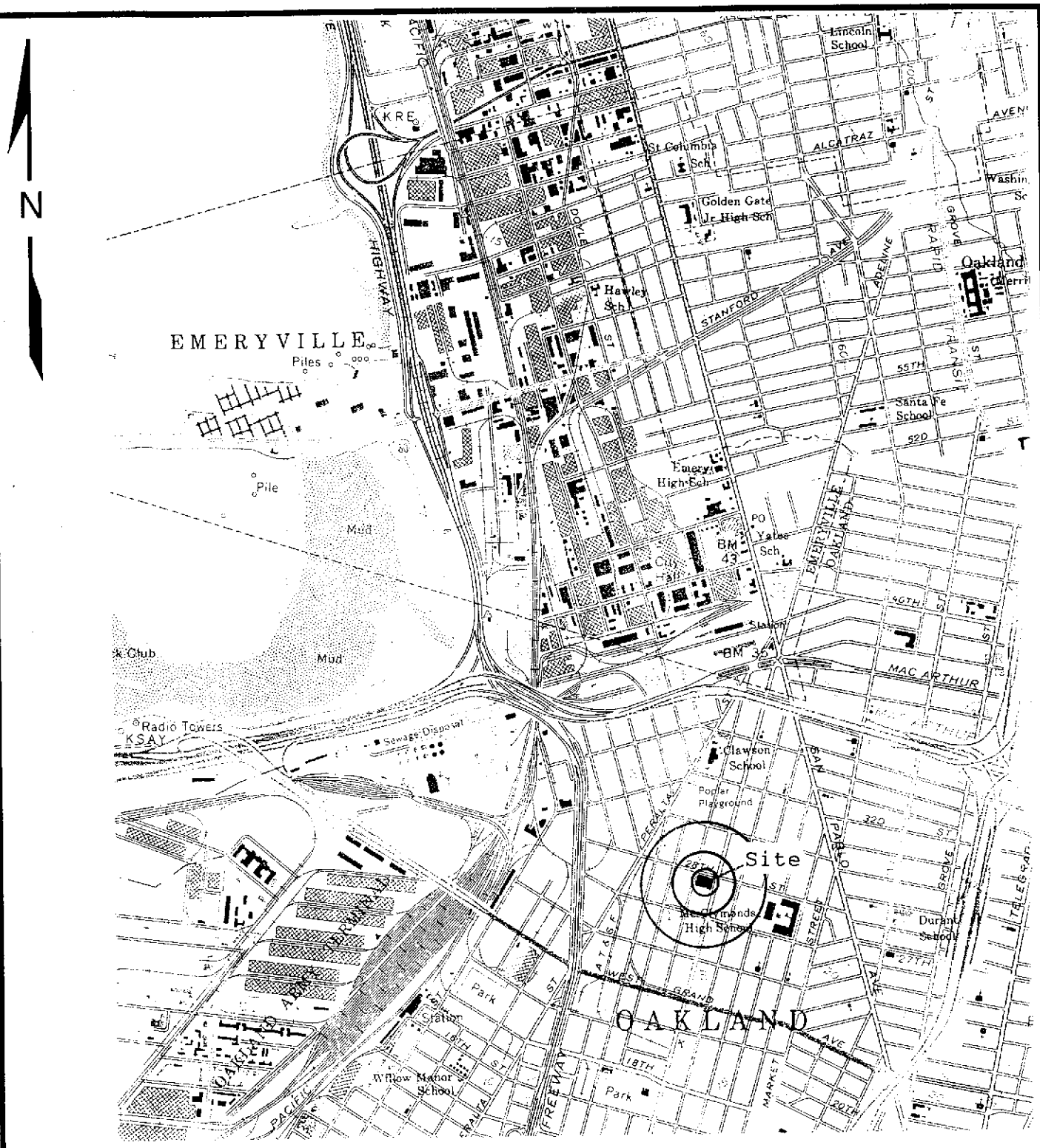
Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

Robert E. Kitay

Robert E. Kitay, R.E.A.
Project Geologist

Attachments: Figures 1 and 2
Appendices A through D

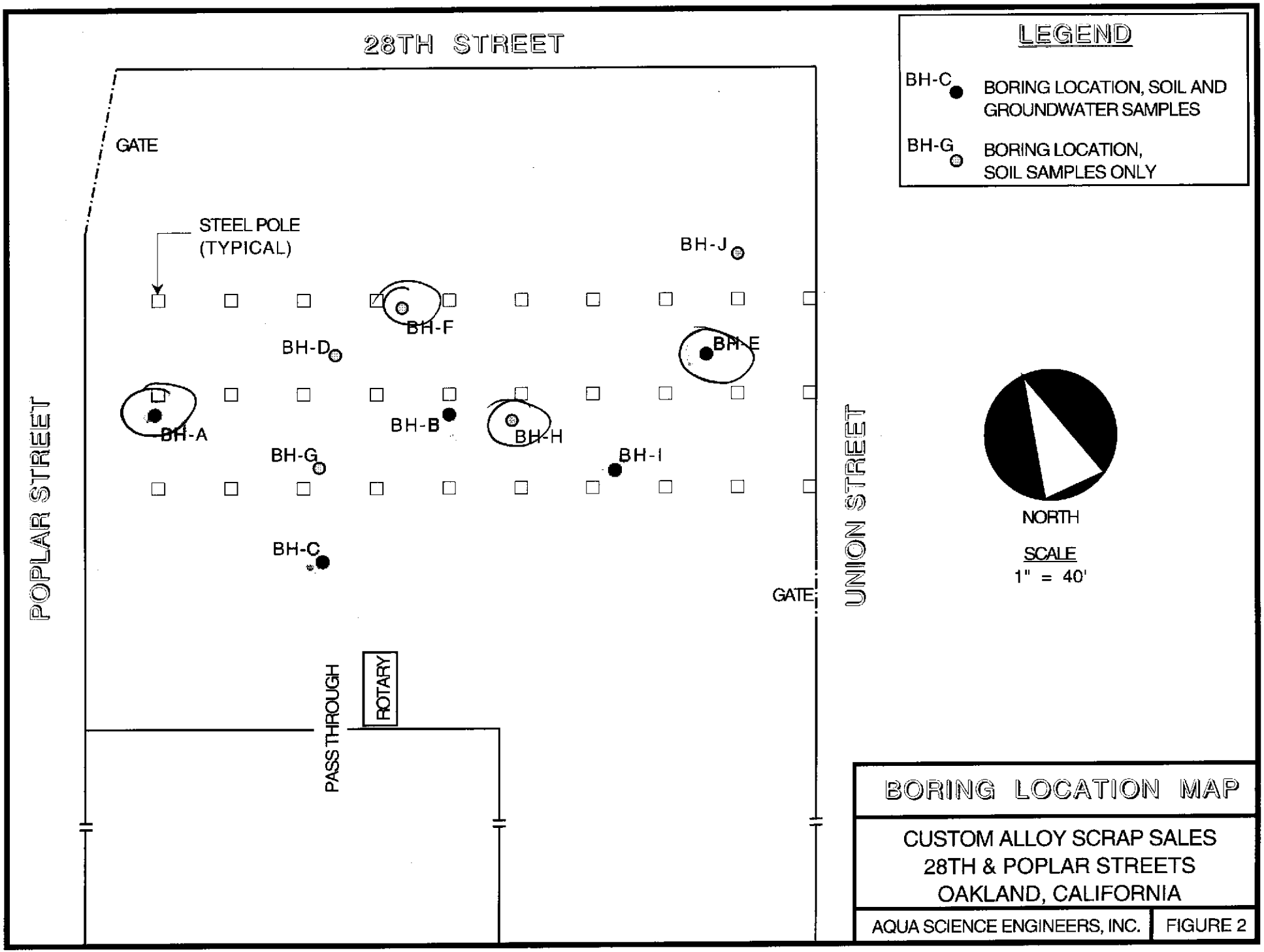


BASE: USGS Oakland West 7.5 minute quadrangle topographic map, dated 1980, scale 1:24,000.

SITE LOCATION MAP

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

Aqua Science Engineers, Inc. | Figure 1



BORING LOCATION MAP

CUSTOM ALLOY SCRAP SALES
28TH & POPLAR STREETS
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC. | FIGURE 2

APPENDIX A

Permit

ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94588 VOICE (510) 484-2600
FAX (510) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT Custom Alloy Scrap Sales
Poplar and 28th Street, Oakland, CA

CLIENT
Name Gardinier Mfg. Co. c/o Law Offices of James Cherry
Address 2030 Franklin St, Ste 500 Voice 510-444-4022
City Oakland, CA Zip 94612

APPLICANT
Name Aqua Science Engineers, Inc.
Attn: Robert Kitay Fax 510-837-4853
Address 2411 Old Crow Canyon Rd. #4 Voice 510-820-9391
City San Ramon, CA Zip 94583

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	___	General	___
Water Supply	___	Contamination	X
Monitoring	___	Well Destruction	___

PROPOSED WATER SUPPLY WELL USE
Domestic ___ Industrial ___ Other ___
Municipal ___ Irrigation ___

DRILLING METHOD:
Mud Rotary ___ Air Rotary ___ Auger ___
Cable ___ Other Geoprobe & Hand Auger

DRILLER'S LICENSE NO. C-57 487000

WELL PROJECTS

Drill Hole Diameter	___	in.	Maximum		
Casing Diameter	___	in.	Depth	___	ft.
Surface Seal Depth	___	ft.	Number	___	

GEOTECHNICAL PROJECTS

Number of Borings	10		Maximum		
Hole Diameter	2.5	in.	Depth	15	ft.

ESTIMATED STARTING DATE 3-26-96
ESTIMATED COMPLETION DATE 3-27-96

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Robert C. Kitay Date 3-21-96

FOR OFFICE USE

PERMIT NUMBER 96239
LOCATION NUMBER ___

PERMIT CONDITIONS

Circled Permit Requirements Apply

A. GENERAL
(1.) A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well Projects, or drilling logs and location sketch for geotechnical projects.
(3.) Permit is void if project not begun within 90 days of approval date.

B. WATER-WELLS, INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

(C.) GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

D. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

E. WELL DESTRUCTION. See attached.

Approved Wyman Hong Date 28 Mar 96
Wyman Hong

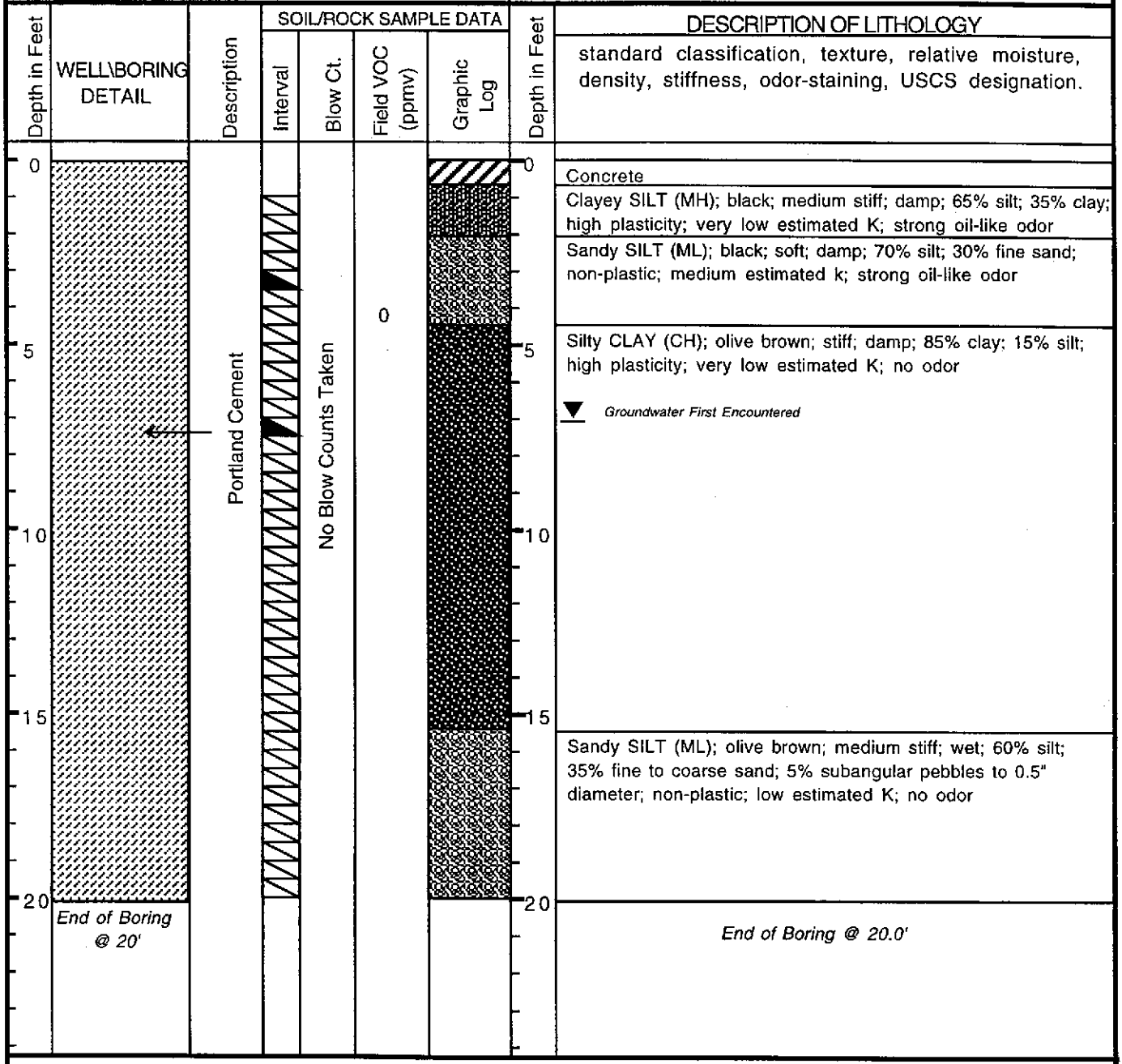
91992

APPENDIX B

Boring Logs

SOIL BORING LOG AND COMPLETION DETAILS		BORING NO.: BH-A
Project Name: Custom Alloy Scrap Sales	Project Location: Oakland, CA	Page 1 of 1
Driller: Gregg Drilling	Type of Rig: Geoprobe	Type and Size of Auger: Direct push
Logged By: Robert Kitay	Date Drilled: 3/28/96	Checked By: Michael Marello, R.G.

WATER AND WELL DATA	
Depth of Water First Encountered: 7.0'	Total Depth of Well Completed: NA
Static Depth of Water in Well: NA	Well Screen Type and Diameter: NA
Total Depth of Boring: 20'	Well Screen Slot Size: NA
	Type and Size of Soil Sampler: 1.5" Diameter Sampler



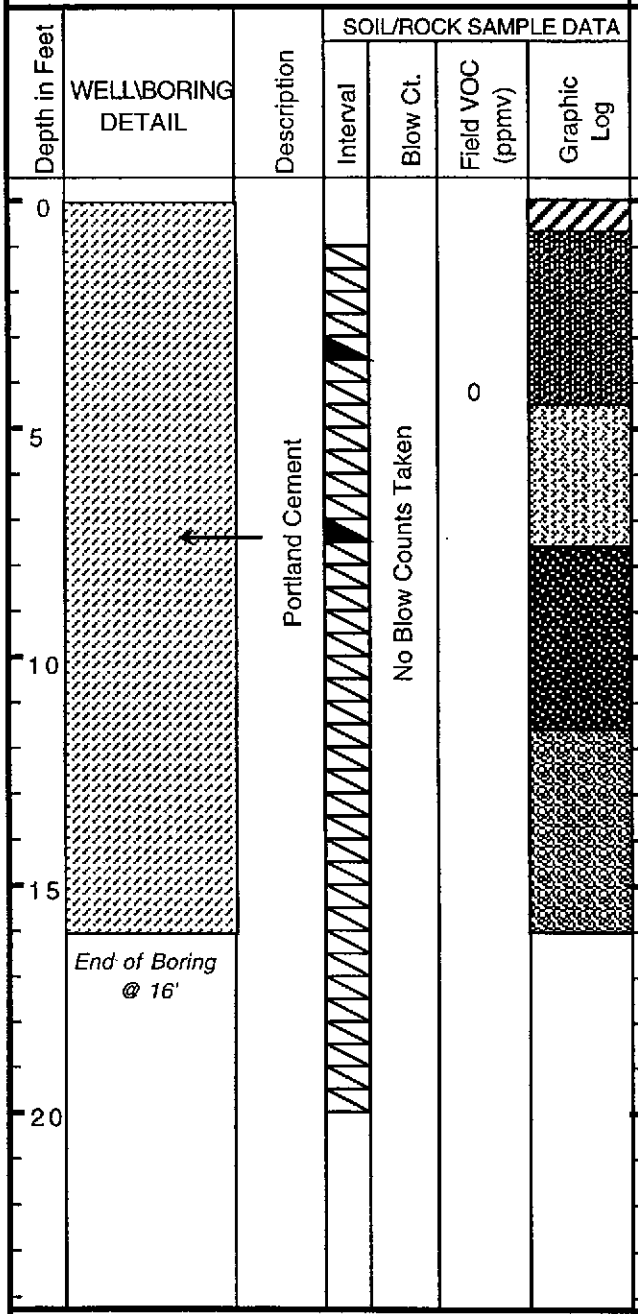
SOIL BORING LOG AND COMPLETION DETAILS

BORING NO.: BH-B

Project Name: Custom Alloy Scrap Sales	Project Location: Oakland, CA	Page 1 of 1
Driller: Gregg Drilling	Type of Rig: Geoprobe	Type and Size of Auger: Direct push
Logged By: Robert Kitay	Date Drilled: 3/28/96	Checked By: Michael Marello, R.G.

WATER AND WELL DATA

Depth of Water First Encountered: 7.5'	Total Depth of Well Completed: NA
Static Depth of Water in Well: NA	Well Screen Type and Diameter: NA
Total Depth of Boring: 16'	Well Screen Slot Size: NA
	Type and Size of Soil Sampler: 1.5" Diameter Sampler



Depth in Feet	DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
0	Concrete
	Clayey SILT (MH); dark yellow brown; stiff; damp; 60% silt; 40% clay; high plasticity; very low estimated K; no odor
5	Silty SAND (SM); yellow brown; medium dense; damp; 85% fine to coarse sand; 15% silt; non-plastic; medium estimated K; no odor
	▼ *Groundwater First Encountered*
10	Silty CLAY (CH); yellow brown; medium stiff; damp; 85% clay; 15% silt; high plasticity; very low estimated K; no odor
	Clayey SILT (MH); yellow brown; medium stiff; wet; 85% silt; 15% clay; high plasticity; low estimated K; no odor
15	*End of Boring @ 16.0'*
20	

AQUA SCIENCE ENGINEERS, INC.

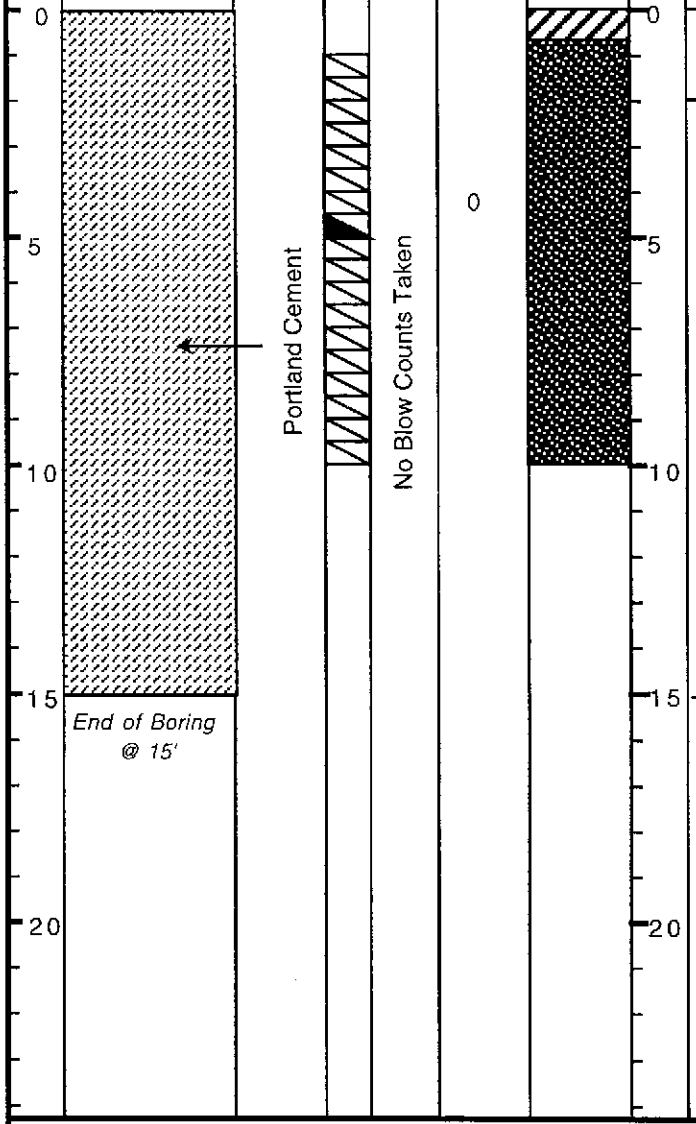
SOIL BORING LOG AND COMPLETION DETAILS

BORING NO.: BH-C

Project Name: Custom Alloy Scrap Sales	Project Location: Oakland, CA	Page 1 of 1
Driller: Gregg Drilling	Type of Rig: Geoprobe	Type and Size of Auger: Direct push
Logged By: Robert Kitay	Date Drilled: 3/28/96	Checked By: Michael Marello, R.G.

WATER AND WELL DATA

Depth of Water First Encountered: 5.0'	Total Depth of Well Completed: NA
Static Depth of Water in Well: NA	Well Screen Type and Diameter: NA
Total Depth of Boring: 15'	Well Screen Slot Size: NA
	Type and Size of Soil Sampler: 1.5" Diameter Sampler



DESCRIPTION OF LITHOLOGY

standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.

Concrete

Silty CLAY (CL); black; medium stiff; moist; 60% clay; 40% silt; medium plasticity; very low estimated K; strong oil-like odor from 2-3'; slight odor below 3'

▼ *Groundwater First Encountered*

No recovery below 10'

End of Boring @ 15.0'

ASE Form 20A

AQUA SCIENCE ENGINEERS, INC.

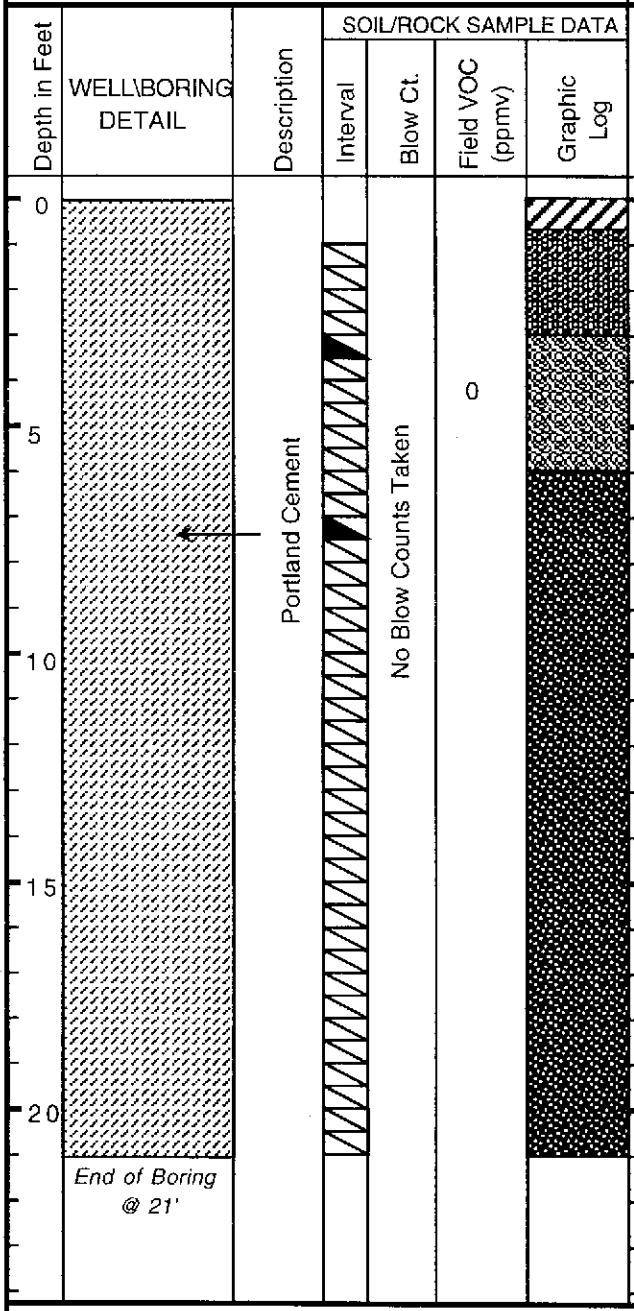
SOIL BORING LOG AND COMPLETION DETAILS

BORING NO.: BH-D

Project Name: Custom Alloy Scrap Sales	Project Location: Oakland, CA	Page 1 of 1
Driller: Gregg Drilling	Type of Rig: Geoprobe	Type and Size of Auger: Direct push
Logged By: Robert Kitay	Date Drilled: 3/28/96	Checked By: Michael Marello, R.G.

WATER AND WELL DATA

Depth of Water First Encountered: Not encountered	Total Depth of Well Completed: NA
Static Depth of Water in Well: NA	Well Screen Type and Diameter: NA
Total Depth of Boring: 21'	Well Screen Slot Size: NA
	Type and Size of Soil Sampler: 1.5" Diameter Sampler



DESCRIPTION OF LITHOLOGY

standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.

0 Concrete

Clayey SILT (MH); olive brown; medium stiff; damp; 90% silt; 10% clay; moderate plasticity; very low estimated K; no odor

5 Sandy SILT (ML); olive brown; medium stiff; damp; 70% silt; 25% medium to coarse sand; 5% clay; slight plasticity; low estimated k; no odor

Silty CLAY (CH); yellow brown; stiff; damp; 90% clay; 10% silt; high plasticity; very low estimated K; no odor

10

15

20

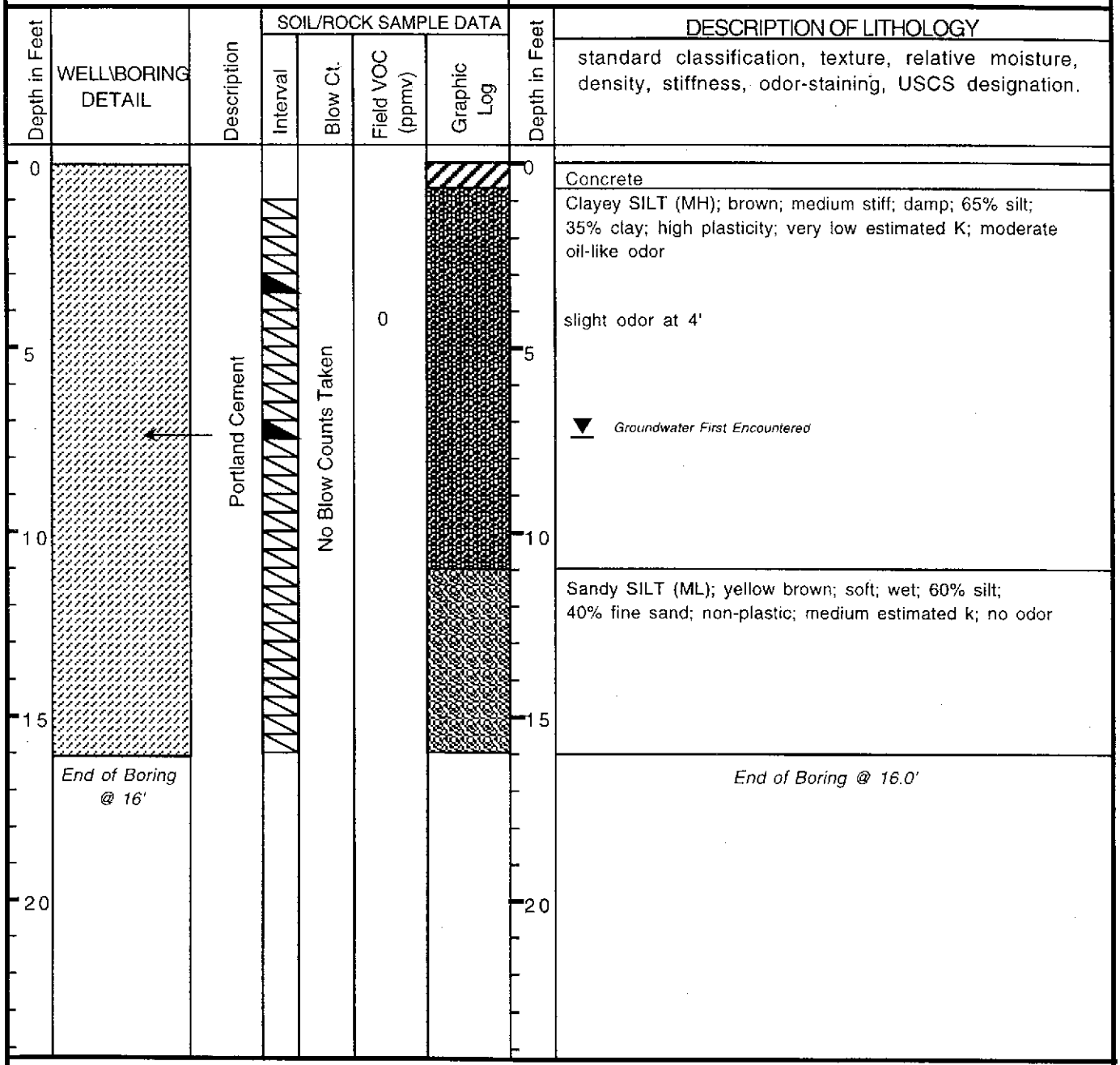
End of Boring @ 21.0'

ASE Form 20A

AQUA SCIENCE ENGINEERS, INC.

SOIL BORING LOG AND COMPLETION DETAILS		BORING NO.: BH-I
Project Name: Custom Alloy Scrap Sales	Project Location: Oakland, CA	Page 1 of 1
Driller: Gregg Drilling	Type of Rig: Geoprobe	Type and Size of Auger: Direct push
Logged By: Robert Kitay	Date Drilled: 3/28/96	Checked By: Michael Marello, R.G.

WATER AND WELL DATA	
Depth of Water First Encountered: 7.5'	Total Depth of Well Completed: NA
Static Depth of Water in Well: NA	Well Screen Type and Diameter: NA
Total Depth of Boring: 16'	Well Screen Slot Size: NA
	Type and Size of Soil Sampler: 1.5" Diameter Sampler



APPENDIX C

Analytical Report and Chain of Custody Forms
For Soil Samples

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710. Phone (510) 486-0900

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

Prepared for:

Aqua Science Engineers, Inc.
2411 Old Crow Canyon Rd
Suite 4
San Ramon, CA 94583

Date: 08-APR-96
Lab Job Number: 125038
Project ID: 2971
Location: Custom Alloy Scrap Sales

Reviewed by: _____

Reviewed by: _____

This package may be reproduced only in its entirety.

TVH-Total Volatile Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
125038-001	BH-A 3.5'	26874	03/28/96	04/09/96	04/09/96	
125038-003	BH-B 3.5'	26874	03/28/96	04/08/96	04/08/96	
125038-005	BH-C 5.0'	26874	03/28/96	04/09/96	04/09/96	
125038-006	BH-D 3.5'	26874	03/28/96	04/09/96	04/09/96	

Analyte Diln Fac:	Units	125038-001 1	125038-003 1	125038-005 1	125038-006 1
Gasoline	mg/Kg	7.6Y	<1	<1	<1
Surrogate					
Trifluorotoluene	%REC	102	97	97	97
Bromobenzene	%REC	98	93	92	92

**: Not reported due to overlapping hydrocarbon ranges
Y: Sample exhibits fuel pattern which does not resemble standard

TVH-Total Volatile Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
125038-008	BH-E 3.5'	26874	03/28/96	04/09/96	04/09/96	
125038-010	BH-F 3.5'	26874	03/28/96	04/09/96	04/09/96	
125038-011	BH-G 3.5'	26874	03/28/96	04/09/96	04/09/96	
125038-012	BH-H 3.5'	26874	03/28/96	04/09/96	04/09/96	

Analyte Diln Fac:	Units	125038-008 1	125038-010 1	125038-011 1	125038-012 1
Gasoline	mg/Kg	1.6YH	<1	<1	1.8
Surrogate					
Trifluorotoluene	%REC	98	97	99	96
Bromobenzene	%REC	93	90	93	89

**: Not reported due to overlapping hydrocarbon ranges
Y: Sample exhibits fuel pattern which does not resemble standard
H: Heavier hydrocarbons than indicated standard

TVH-Total Volatile Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
125038-013	BH-I 3.5'	26874	03/28/96	04/09/96	04/09/96	
125038-015	BH-J 3.5	26874	03/28/96	04/09/96	04/09/96	

Analyte	Units	125038-013	125038-015
Diln Fac:		1	1
Gasoline	mg/Kg	<1	<1
Surrogate			
Trifluorotoluene	%REC	99	100
Bromobenzene	%REC	95	96

**: Not reported due to overlapping hydrocarbon ranges
H: Heavier hydrocarbons than indicated standard

Curtis & Tompkins, Ltd.

Lab #: 125038 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 26874
Units: mg/Kg
Diln Fac: 1

Prep Date: 04/08/96
Analysis Date: 04/08/96

MB Lab ID: QC18826

Analyte	Result	
Gasoline	<1.0	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	98	52-127
Bromobenzene	94	47-112

Curtis & Tompkins, Ltd.

Lab #: 125038 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 26874
Units: mg/Kg
Diln Fac: 1

Prep Date: 04/08/96
Analysis Date: 04/08/96

LCS Lab ID: QC18824

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	10.4	10	104	80-120
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	109	52-127		
Bromobenzene	114	47-112		

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

BTXE

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
125038-001	BH-A 3.5'	26874	03/28/96	04/09/96	04/09/96	
125038-003	BH-B 3.5'	26874	03/28/96	04/08/96	04/08/96	
125038-005	BH-C 5.0'	26874	03/28/96	04/09/96	04/09/96	
125038-006	BH-D 3.5'	26874	03/28/96	04/09/96	04/09/96	

Analyte Diln Fac:	Units	125038-001 1	125038-003 1	125038-005 1	125038-006 1
Benzene	ug/Kg	<5	<5	<5	<5
Toluene	ug/Kg	<5	<5	<5	<5
Ethylbenzene	ug/Kg	<5	<5	<5	<5
m,p-Xylenes	ug/Kg	<5	<5	<5	<5
o-Xylene	ug/Kg	16	<5	<5	<5
Surrogate					
Trifluorotoluene	%REC	94	90	89	91
Bromobenzene	%REC	95	87	86	86

**: Not reported due to overlapping hydrocarbon ranges

BTXE

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
125038-008	BH-E 3.5'	26874	03/28/96	04/09/96	04/09/96	
125038-010	BH-F 3.5'	26874	03/28/96	04/09/96	04/09/96	
125038-011	BH-G 3.5'	26874	03/28/96	04/09/96	04/09/96	
125038-012	BH-H 3.5'	26874	03/28/96	04/09/96	04/09/96	

Analyte	Units	125038-008	125038-010	125038-011	125038-012
Diln Fac:		1	1	1	1
Benzene	ug/Kg	<5	<5	<5	<5
Toluene	ug/Kg	<5	10 C	<5	<5
Ethylbenzene	ug/Kg	<5	<5	<5	9.2
m,p-Xylenes	ug/Kg	<5	<5	<5	<5
o-Xylene	ug/Kg	10	6	<5	11
Surrogate					
Trifluorotoluene	%REC	90	90	91	89
Bromobenzene	%REC	87	84	87	83

**: Not reported due to overlapping hydrocarbon ranges
C: Presence of this compound confirmed by second column, however, the confirmation concentration differed from the reported result by more than a factor of two

BTXE

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
125038-013	BH-I 3.5'	26874	03/28/96	04/09/96	04/09/96	
125038-015	BH-J 3.5	26874	03/28/96	04/09/96	04/09/96	

Analyte	Units	125038-013	125038-015
Diln Fac:		1	1
Benzene	ug/Kg	<5	<5
Toluene	ug/Kg	<5	<5
Ethylbenzene	ug/Kg	<5	<5
m,p-Xylenes	ug/Kg	<5	<5
o-Xylene	ug/Kg	<5	<5
Surrogate			
Trifluorotoluene	%REC	92	91
Bromobenzene	%REC	90	90

**: Not reported due to overlapping hydrocarbon ranges

Curtis & Tompkins, Ltd.

Lab #: 125038 BATCH QC REPORT

BTXE

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 26874
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/08/96
Analysis Date: 04/08/96

MB Lab ID: QC18826

Analyte	Result
Benzene	<5.0
Toluene	<5.0
Ethylbenzene	<5.0
m,p-Xylenes	<5.0
o-Xylene	<5.0

Surrogate	%Rec	Recovery Limits
Trifluorotoluene	95	43-114
Bromobenzene	95	45-140

Curtis & Tompkins, Ltd.

Lab #: 125038 BATCH QC REPORT

BTXE

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 26874
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/08/96
Analysis Date: 04/08/96

LCS Lab ID: QC18825

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	100.9	100	101	80-120
Toluene	103.7	100	104	80-120
Ethylbenzene	102.3	100	102	80-120
m,p-Xylenes	204.2	200	102	80-120
o-Xylene	105.9	100	106	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	86	43-114
Bromobenzene	84	45-140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

TEH-Tot Ext Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: LUFT

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
125038-001	BH-A 3.5'	26780	03/28/96	04/02/96	04/05/96	
125038-003	BH-B 3.5'	26780	03/28/96	04/02/96	04/04/96	
125038-005	BH-C 5.0'	26780	03/28/96	04/02/96	04/04/96	
125038-006	BH-D 3.5'	26780	03/28/96	04/02/96	04/04/96	

Analyte Diln Fac:	Units	125038-001 10	125038-003 1	125038-005 1	125038-006 1
Diesel Range	mg/Kg	1700 YL	<1	<1	<1
Surrogate					
Hexacosane	%REC	87	85	93	83

Y: Sample exhibits fuel pattern which does not resemble standard
L: Lighter hydrocarbons than indicated standard

TEH-Tot Ext Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: LUFT

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
125038-008	BH-E 3.5'	26780	03/28/96	04/02/96	04/04/96	
125038-010	BH-F 3.5'	26780	03/28/96	04/02/96	04/04/96	
125038-011	BH-G 3.5'	26780	03/28/96	04/02/96	04/04/96	
125038-012	BH-H 3.5'	26780	03/28/96	04/02/96	04/05/96	

Analyte Diln Fac:	Units	125038-008 20	125038-010 1	125038-011 1	125038-012 20
Diesel Range	mg/Kg	2100 YH	150 YH	69 YH	4300 YH
Surrogate					
Hexacosane	%REC	DO	87	90	DO

Y: Sample exhibits fuel pattern which does not resemble standard
H: Heavier hydrocarbons than indicated standard
L: Lighter hydrocarbons than indicated standard
DO: Surrogate diluted out

TEH-Tot Ext Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: LUFT

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
125038-013	BH-I 3.5'	26780	03/28/96	04/02/96	04/04/96	
125038-015	BH-J 3.5	26780	03/28/96	04/02/96	04/04/96	

Analyte	Units	125038-013	125038-015
Diln Fac:		1	1
Diesel Range	mg/Kg	42 YH	<1
Surrogate			
Hexacosane	%REC	80	91

Y: Sample exhibits fuel pattern which does not resemble standard
H: Heavier hydrocarbons than indicated standard
L: Lighter hydrocarbons than indicated standard

Curtis & Tompkins, Ltd.

Lab #: 125038 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons	
Client: Aqua Science Engineers, Inc.	Analysis Method: CA LUFT (EPA 8015M)
Project#: 2971	Prep Method: LUFT
Location: Custom Alloy Scrap Sales	

METHOD BLANK	
Matrix: Soil	Prep Date: 04/02/96
Batch#: 26780	Analysis Date: 04/04/96
Units: mg/Kg	
Diln Fac: 1	

MB Lab ID: QC18453

Analyte	Result	
Diesel Range	<1.0	
Surrogate	%Rec	Recovery Limits
Hexacosane	96	60-140

Curtis & Tompkins, Ltd.

Lab #: 125038 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: LUFT

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 26780
Units: mg/Kg
Diln Fac: 1

Prep Date: 04/02/96
Analysis Date: 04/04/96

LCS Lab ID: QC18454

Analyte	Result	Spike Added	%Rec #	Limits
Diesel Range	44.2	49.5	89	60-140
Surrogate	%Rec	Limits		
Hexacosane	91	60-140		

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

Curtis & Tompkins, Ltd.

Lab #: 125038 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: LUFT

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 125041-003
Matrix: Soil
Batch#: 26780
Units: mg/Kg dry weight
Diln Fac: 1

Sample Date: 04/01/96
Received Date: 04/02/96
Prep Date: 04/02/96
Analysis Date: 04/05/96
Moisture: 5%

MS Lab ID: QC18455

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Diesel Range	52.11	<0.000	48.84	94	60-140
Surrogate	%Rec	Limits			
Hexacosane	89	60-140			

MSD Lab ID: QC18456

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Diesel Range	52.21	54.53	105	60-140	11	<30
Surrogate	%Rec	Limits				
Hexacosane	89	60-140				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

CLIENT: Aqua Science Engineers, Inc.
PROJECT ID: 2971
LOCATION: Custom Alloy Scrap Sales
MATRIX: Soil

DATE REPORTED: 04/05/96

Metals Analytical Report

				Cadmium					
Sample ID	Lab ID	Sample Date	Receive Date	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
BH-A 3.5'	125038-001	03/28/96	04/01/96	0.34	0.099	1	26804	EPA 6010A	04/04/96
BH-B 3.5'	125038-003	03/28/96	04/01/96	0.30	0.097	1	26804	EPA 6010A	04/04/96
BH-C 5.0'	125038-005	03/28/96	04/01/96	0.34	0.098	1	26804	EPA 6010A	04/04/96
BH-D 3.5'	125038-006	03/28/96	04/01/96	0.25	0.10	1	26804	EPA 6010A	04/04/96
BH-E 3.5'	125038-008	03/28/96	04/01/96	1.1	0.097	1	26804	EPA 6010A	04/04/96
BH-F 3.5'	125038-010	03/28/96	04/01/96	0.29	0.097	1	26804	EPA 6010A	04/04/96
BH-G 3.5'	125038-011	03/28/96	04/01/96	0.27	0.10	1	26804	EPA 6010A	04/04/96
BH-H 3.5'	125038-012	03/28/96	04/01/96	0.65	0.097	1	26804	EPA 6010A	04/04/96
BH-I 3.5'	125038-013	03/28/96	04/01/96	0.34	0.096	1	26804	EPA 6010A	04/04/96
BH-J 3.5	125038-015	03/28/96	04/01/96	0.31	0.099	1	26804	EPA 6010A	04/04/96

Curtis & Tompkins, Ltd.

CLIENT: Aqua Science Engineers, Inc.
PROJECT ID: 2971
LOCATION: Custom Alloy Scrap Sales
MATRIX: Soil

DATE REPORTED: 04/05/96

Metals Analytical Report

				Chromium (total)					
Sample ID	Lab ID	Sample Date	Receive Date	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
BH-A 3.5'	125038-001	03/28/96	04/01/96	24	0.50	1	26804	EPA 6010A	04/04/96
BH-B 3.5'	125038-003	03/28/96	04/01/96	24	0.49	1	26804	EPA 6010A	04/04/96
BH-C 5.0'	125038-005	03/28/96	04/01/96	46	0.49	1	26804	EPA 6010A	04/04/96
BH-D 3.5'	125038-006	03/28/96	04/01/96	36	0.50	1	26804	EPA 6010A	04/04/96
BH-E 3.5'	125038-008	03/28/96	04/01/96	26	0.48	1	26804	EPA 6010A	04/04/96
BH-F 3.5'	125038-010	03/28/96	04/01/96	34	0.48	1	26804	EPA 6010A	04/04/96
BH-G 3.5'	125038-011	03/28/96	04/01/96	35	0.50	1	26804	EPA 6010A	04/04/96
BH-H 3.5'	125038-012	03/28/96	04/01/96	37	0.48	1	26804	EPA 6010A	04/04/96
BH-I 3.5'	125038-013	03/28/96	04/01/96	27	0.48	1	26804	EPA 6010A	04/04/96
BH-J 3.5	125038-015	03/28/96	04/01/96	43	0.50	1	26804	EPA 6010A	04/04/96

Curtis & Tompkins, Ltd.

CLIENT: Aqua Science Engineers, Inc.
PROJECT ID: 2971
LOCATION: Custom Alloy Scrap Sales
MATRIX: Soil

DATE REPORTED: 04/05/96

Metals Analytical Report

				Lead					
Sample ID	Lab ID	Sample Date	Receive Date	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
BH-A 3.5'	125038-001	03/28/96	04/01/96	4.4	0.15	1	26804	EPA 6010A	04/04/96
BH-B 3.5'	125038-003	03/28/96	04/01/96	13	0.15	1	26804	EPA 6010A	04/04/96
BH-C 5.0'	125038-005	03/28/96	04/01/96	4.6	0.15	1	26804	EPA 6010A	04/04/96
BH-D 3.5'	125038-006	03/28/96	04/01/96	4.2	0.15	1	26804	EPA 6010A	04/04/96
BH-E 3.5'	125038-008	03/28/96	04/01/96	66	0.14	1	26804	EPA 6010A	04/04/96
BH-F 3.5'	125038-010	03/28/96	04/01/96	4.5	0.14	1	26804	EPA 6010A	04/04/96
BH-G 3.5'	125038-011	03/28/96	04/01/96	6.4	0.15	1	26804	EPA 6010A	04/04/96
BH-H 3.5'	125038-012	03/28/96	04/01/96	150	0.14	1	26804	EPA 6010A	04/04/96
BH-I 3.5'	125038-013	03/28/96	04/01/96	8.6	0.14	1	26804	EPA 6010A	04/04/96
BH-J 3.5	125038-015	03/28/96	04/01/96	5.4	0.15	1	26804	EPA 6010A	04/04/96

Curtis & Tompkins, Ltd.

CLIENT: Aqua Science Engineers, Inc.
PROJECT ID: 2971
LOCATION: Custom Alloy Scrap Sales
MATRIX: Soil

DATE REPORTED: 04/05/96

Metals Analytical Report

				Nickel					
Sample ID	Lab ID	Sample Date	Receive Date	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
BH-A 3.5'	125038-001	03/28/96	04/01/96	20	0.99	1	26804	EPA 6010A	04/04/96
BH-B 3.5'	125038-003	03/28/96	04/01/96	21	0.97	1	26804	EPA 6010A	04/04/96
BH-C 5.0'	125038-005	03/28/96	04/01/96	24	0.98	1	26804	EPA 6010A	04/04/96
BH-D 3.5'	125038-006	03/28/96	04/01/96	19	1.0	1	26804	EPA 6010A	04/04/96
BH-E 3.5'	125038-008	03/28/96	04/01/96	23	0.97	1	26804	EPA 6010A	04/04/96
BH-F 3.5'	125038-010	03/28/96	04/01/96	21	0.97	1	26804	EPA 6010A	04/04/96
BH-G 3.5'	125038-011	03/28/96	04/01/96	15	1.0	1	26804	EPA 6010A	04/04/96
BH-H 3.5'	125038-012	03/28/96	04/01/96	24	0.97	1	26804	EPA 6010A	04/04/96
BH-I 3.5'	125038-013	03/28/96	04/01/96	21	0.96	1	26804	EPA 6010A	04/04/96
BH-J 3.5	125038-015	03/28/96	04/01/96	22	0.99	1	26804	EPA 6010A	04/04/96

Curtis & Tompkins, Ltd.

CLIENT: Aqua Science Engineers, Inc.
PROJECT ID: 2971
LOCATION: Custom Alloy Scrap Sales
MATRIX: Soil

DATE REPORTED: 04/05/96

Metals Analytical Report

				Zinc					
Sample ID	Lab ID	Sample Date	Receive Date	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
BH-A 3.5'	125038-001	03/28/96	04/01/96	15	0.99	1	26804	EPA 6010A	04/04/96
BH-B 3.5'	125038-003	03/28/96	04/01/96	23	0.97	1	26804	EPA 6010A	04/04/96
BH-C 5.0'	125038-005	03/28/96	04/01/96	23	0.98	1	26804	EPA 6010A	04/04/96
BH-D 3.5'	125038-006	03/28/96	04/01/96	18	1.0	1	26804	EPA 6010A	04/04/96
BH-E 3.5'	125038-008	03/28/96	04/01/96	62	0.97	1	26804	EPA 6010A	04/04/96
BH-F 3.5'	125038-010	03/28/96	04/01/96	19	0.97	1	26804	EPA 6010A	04/04/96
BH-G 3.5'	125038-011	03/28/96	04/01/96	24	1.0	1	26804	EPA 6010A	04/04/96
BH-H 3.5'	125038-012	03/28/96	04/01/96	120	0.97	1	26804	EPA 6010A	04/04/96
BH-I 3.5'	125038-013	03/28/96	04/01/96	22	0.96	1	26804	EPA 6010A	04/04/96
BH-J 3.5	125038-015	03/28/96	04/01/96	24	0.99	1	26804	EPA 6010A	04/04/96

Curtis & Tompkins, Ltd.

Curtis & Tompkins, Ltd.

CLIENT: Aqua Science Engineers, Inc.
JOB NUMBER: 125038

DATE REPORTED: 04/05/96

BATCH QC REPORT
BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS% Rec.	BSD% Rec.	Rec. Limits	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Cadmium	50	46.1	46.5	ug/L	92	93	80-120	1	20	26804	EPA 6010A	04/04/96
Chromium (total)	200	184	185	ug/L	92	93	80-120	1	20	26804	EPA 6010A	04/04/96
Lead	500	455	460	ug/L	91	92	80-120	1	20	26804	EPA 6010A	04/04/96
Nickel	500	463	470	ug/L	93	94	80-120	2	20	26804	EPA 6010A	04/04/96
Zinc	500	387	395	ug/L	77*	79*	80-120	2	20	26804	EPA 6010A	04/04/96

* = Out of Limits

Curtis & Tompkins, Ltd.

CLIENT: Aqua Science Engineers, Inc.
JOB NUMBER: 125038

DATE REPORTED: 04/05/96

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Cadmium	ND	0.1	mg/Kg	1	26804	EPA 6010A	04/04/96
Chromium (total)	ND	0.5	mg/Kg	1	26804	EPA 6010A	04/04/96
Lead	0.18	0.15	mg/Kg	1	26804	EPA 6010A	04/04/96
Nickel	ND	1	mg/Kg	1	26804	EPA 6010A	04/04/96
Zinc	ND	1	mg/Kg	1	26804	EPA 6010A	04/04/96

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

Client: Aqua Science Engineers, Inc.

Laboratory Login Number: 125038

Project Name: Custom Alloy Scrap Sales
Project Number: 2971

Report Date: 05 April 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **METHOD:** SMWW 17:5520EF

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
125038-001	BH-A 3.5'	Soil	28-MAR-96	01-APR-96	05-APR-96	ND	mg/Kg	50	DLP	26834
125038-003	BH-B 3.5'	Soil	28-MAR-96	01-APR-96	05-APR-96	ND	mg/Kg	50	DLP	26834
125038-005	BH-C 5.0'	Soil	28-MAR-96	01-APR-96	05-APR-96	ND	mg/Kg	50	DLP	26834
125038-006	BH-D 3.5'	Soil	28-MAR-96	01-APR-96	05-APR-96	ND	mg/Kg	50	DLP	26834
125038-008	BH-E 3.5'	Soil	28-MAR-96	01-APR-96	05-APR-96	3900	mg/Kg	50	DLP	26834
125038-010	BH-F 3.5'	Soil	28-MAR-96	01-APR-96	05-APR-96	4500	mg/Kg	50	DLP	26834
125038-011	BH-G 3.5'	Soil	28-MAR-96	01-APR-96	05-APR-96	ND	mg/Kg	50	DLP	26834
125038-012	BH-H 3.5'	Soil	28-MAR-96	01-APR-96	05-APR-96	2300	mg/Kg	50	DLP	26834
125038-013	BH-I 3.5'	Soil	28-MAR-96	01-APR-96	05-APR-96	ND	mg/Kg	50	DLP	26834
125038-015	BH-J 3.5	Soil	28-MAR-96	01-APR-96	05-APR-96	ND	mg/Kg	50	DLP	26834

ND = Not Detected at or above Reporting Limit (RL).

Curtis & Tompkins, Ltd.

Q C B a t c h R e p o r t

Client: Aqua Science Engineers, Inc.
Project Name: Custom Alloy Scrap Sales
Project Number: 2971

Laboratory Login Number: 125038
Report Date: 05 April 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric)

QC Batch Number: 26834

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
MB	ND	50	mg/Kg	SMWW 17:5520EF	05-APR-96

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	80%	SMWW 17:5520EF	05-APR-96
BSD	80%	SMWW 17:5520EF	05-APR-96

		Control Limits
Average Spike Recovery	80%	80% - 120%
Relative Percent Difference	.1%	< 20%

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: BH-A 3.5'
Lab ID: 125038-001
Matrix: Soil
Batch#: 26785
Units: ug/Kg
Diln Fac: 1

Sampled: 03/28/96
Received: 04/01/96
Extracted: 04/04/96
Analyzed: 04/04/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Dibromochloromethane	ND	5.0
Bromoform	ND	5.0
Tetrachloroethene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
Chlorobenzene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	108	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	115	79-122

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: BH-B 3.5'
Lab ID: 125038-003
Matrix: Soil
Batch#: 26785
Units: ug/Kg
Diln Fac: 1

Sampled: 03/28/96
Received: 04/01/96
Extracted: 04/04/96
Analyzed: 04/04/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Dibromochloromethane	ND	5.0
Bromoform	ND	5.0
Tetrachloroethene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
Chlorobenzene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	97	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	97	79-122

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: BH-C 5.0'
Lab ID: 125038-005
Matrix: Soil
Batch#: 26785
Units: ug/Kg
Diln Fac: 1

Sampled: 03/28/96
Received: 04/01/96
Extracted: 04/04/96
Analyzed: 04/04/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Dibromochloromethane	ND	5.0
Bromoform	ND	5.0
Tetrachloroethene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
Chlorobenzene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	95	68-126
Toluene-d8	102	87-125
Bromofluorobenzene	103	79-122

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: BH-D 3.5'
Lab ID: 125038-006
Matrix: Soil
Batch#: 26785
Units: ug/Kg
Diln Fac: 1

Sampled: 03/28/96
Received: 04/01/96
Extracted: 04/04/96
Analyzed: 04/04/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	9.3	5.0
1,1,2-Trichloroethane	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Dibromochloromethane	ND	5.0
Bromoform	ND	5.0
Tetrachloroethene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
Chlorobenzene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	101	68-126
Toluene-d8	102	87-125
Bromofluorobenzene	103	79-122

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: BH-E 3.5'
Lab ID: 125038-008
Matrix: Soil
Batch#: 26810
Units: ug/Kg
Diln Fac: 1

Sampled: 03/28/96
Received: 04/01/96
Extracted: 04/04/96
Analyzed: 04/04/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Dibromochloromethane	ND	5.0
Bromoform	ND	5.0
Tetrachloroethene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
Chlorobenzene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	103	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	102	79-122

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: BH-F 3.5'
Lab ID: 125038-010
Matrix: Soil
Batch#: 26810
Units: ug/Kg
Diln Fac: 1

Sampled: 03/28/96
Received: 04/01/96
Extracted: 04/04/96
Analyzed: 04/04/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	55	5.0
trans-1,2-Dichloroethene	18	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	52	5.0
1,1,2-Trichloroethane	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Dibromochloromethane	ND	5.0
Bromoform	ND	5.0
Tetrachloroethene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
Chlorobenzene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	100	68-126
Toluene-d8	97	87-125
Bromofluorobenzene	93	79-122

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: BH-G 3.5'
Lab ID: 125038-011
Matrix: Soil
Batch#: 26785
Units: ug/Kg
Diln Fac: 1

Sampled: 03/28/96
Received: 04/01/96
Extracted: 04/04/96
Analyzed: 04/04/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Dibromochloromethane	ND	5.0
Bromoform	ND	5.0
Tetrachloroethene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
Chlorobenzene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	97	68-126
Toluene-d8	103	87-125
Bromofluorobenzene	104	79-122

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: BH-H 3.5'
Lab ID: 125038-012
Matrix: Soil
Batch#: 26785
Units: ug/Kg
Diln Fac: 1

Sampled: 03/28/96
Received: 04/01/96
Extracted: 04/04/96
Analyzed: 04/04/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Dibromochloromethane	ND	5.0
Bromoform	ND	5.0
Tetrachloroethene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
Chlorobenzene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	100	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	102	79-122

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: BH-I 3.5'
Lab ID: 125038-013
Matrix: Soil
Batch#: 26785
Units: ug/Kg
Diln Fac: 1

Sampled: 03/28/96
Received: 04/01/96
Extracted: 04/04/96
Analyzed: 04/04/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Dibromochloromethane	ND	5.0
Bromoform	ND	5.0
Tetrachloroethene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
Chlorobenzene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	94	68-126
Toluene-d8	102	87-125
Bromofluorobenzene	99	79-122

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: BH-J 3.5
Lab ID: 125038-015
Matrix: Soil
Batch#: 26785
Units: ug/Kg
Diln Fac: 1

Sampled: 03/28/96
Received: 04/01/96
Extracted: 04/04/96
Analyzed: 04/04/96

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Dibromochloromethane	ND	5.0
Bromoform	ND	5.0
Tetrachloroethene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
Chlorobenzene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	100	68-126
Toluene-d8	102	87-125
Bromofluorobenzene	103	79-122

Curtis & Tompkins, Ltd.

Lab #: 125038 BATCH QC REPORT

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 26785
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/03/96
Analysis Date: 04/03/96

MB Lab ID: QC18474

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Dibromochloromethane	ND	5.0
Bromoform	ND	5.0
Tetrachloroethene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
Chlorobenzene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	109	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	97	79-122

Curtis & Tompkins, Ltd.

Lab #: 125038 BATCH QC REPORT

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 26785
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/03/96
Analysis Date: 04/03/96

MB Lab ID: QC18527

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Dibromochloromethane	ND	5.0
Bromoform	ND	5.0
Tetrachloroethene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
Chlorobenzene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	105	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	94	79-122

Curtis & Tompkins, Ltd.

Lab #: 125038 BATCH QC REPORT

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 26810
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/04/96
Analysis Date: 04/04/96

MB Lab ID: QC18567

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Dibromochloromethane	ND	5.0
Bromoform	ND	5.0
Tetrachloroethene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
Chlorobenzene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	99	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	98	79-122

Curtis & Tompkins, Ltd.

Lab #: 125038 BATCH QC REPORT

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 26810
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/04/96
Analysis Date: 04/04/96

MB Lab ID: QC18567

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Dibromochloromethane	ND	5.0
Bromoform	ND	5.0
Tetrachloroethene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
Chlorobenzene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	99	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	98	79-122

Curtis & Tompkins, Ltd.

Lab #: 125038 BATCH QC REPORT

Halogenated Volatile Organics

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Soil
Batch#: 26785
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/03/96
Analysis Date: 04/03/96

BS Lab ID: QC18472

Analyte	Spike Added	BS	%Rec #	Limits
1,1-Dichloroethene	50	59.15	118	51-180
Trichloroethene	50	48.61	97	73-141
Chlorobenzene	50	49.09	98	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	105	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	99	79-122

BSD Lab ID: QC18473

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	60.88	122	51-180	3	<22
Trichloroethene	50	49.51	99	73-141	2	<24
Chlorobenzene	50	48.87	98	83-129	0	<21

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	107	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	99	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 3 outside limits
Spike Recovery: 0 out of 6 outside limits

Curtis & Tompkins, Ltd.

Lab #: 125038 BATCH QC REPORT

Halogenated Volatile Organics

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 124973-017
Matrix: Soil
Batch#: 26810
Units: ug/Kg dry weight
Diln Fac: 1

Sample Date: 03/26/96
Received Date: 03/28/96
Prep Date: 04/04/96
Analysis Date: 04/04/96
Moisture: 7%

MS Lab ID: QC18615

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	53.76	0	58.93	110	51-180
Trichloroethene	53.76	0	49.64	92	73-141
Chlorobenzene	53.76	0	49.43	92	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	84	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	97	79-122

MSD Lab ID: QC18616

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	53.76	63.75	119	51-180	8	<22
Trichloroethene	53.76	49.11	91	73-141	1	<24
Chlorobenzene	53.76	47.7	89	83-129	4	<21

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	84	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	98	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 3 outside limits
Spike Recovery: 0 out of 6 outside limits

Curtis & Tompkins, Ltd.

Lab #: 125038 BATCH QC REPORT

Halogenated Volatile Organics

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 26810
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/04/96
Analysis Date: 04/04/96

LCS Lab ID: QC18566

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	54.47	50	109	51-180
Trichloroethene	46.98	50	94	73-141
Chlorobenzene	47.97	50	96	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	99	68-126
Toluene-d8	99	87-125
Bromofluorobenzene	97	79-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 3 outside limits

TE5056 409-3536

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 3-28-96 PAGE 1 OF 3

SAMPLERS (SIGNATURE) Scott Ferriman, Rahil E. Kutay (PHONE NO.) (510) 820-9391

PROJECT NAME Custom Alloy Scrap Sales NO. 2971

ADDRESS Poplar Street, Oakland, CA

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

	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					
-1	BH-A 3.5'	3/28	8:40	Soil	1		X	X		X			X	X									
-2	BH-A 6.5'		9:00		1																		
-3	BH-B 3.5'		10:25		1		X	X		X			X	X									
-4	BH-B 7.0'		10:30		1																		
-5	BH-C 5.0'		13:00		1		X	X		X			X	X									
-6	BH-D 3.5'		13:10		1		X	X		X			X	X									
-7	BH-D 7.0'		13:16		1																		
-8	BH-E 3.5'		13:53		1		X	X		X			X	X									
-9	BH-E 7.0'		14:00		1																		
-10	BH-F 3.5'		15:15		1		X	X		X			X	X									
-11	BH-G 3.5'	V	14:30	V	1		X	X		X			X	X									

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
Scott Ferriman				
(signature) (time)	(signature) (time)	(signature) (time)	(signature) (time)	
Scott Ferriman 4-1-96	JOSE DELGADO			
(printed name) (date)	(printed name) (date)	(printed name) (date)	(printed name) (date)	
Company- ASE, Inc	Company- QET 11:20 4/1/96	Company-	Company-	

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 3-28-96 PAGE 2 OF 3

SAMPLERS (SIGNATURE) Scott Ferriman (PHONE NO.)
Richard E. Kitay (510)820-9391

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

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

OK per JDW 4/1/96

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					
-12 BH-H 3.5'	3/28	13:17	Soil	1		X	X		X			X										
-13 BH-I 3.5'	↓	11:12	↓	↓		X	X		X			X										
-14 BH-I 7.0'		11:16																				
-15 BH-J 3.5'	↓	10.42	↓	↓		X	X		X			X										
-16 BH-A 3.5'		16.52																				

JDW 4/1/96

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS: JDW 4/1/96
(signature) (time)	(signature) (time)	(signature) (time)	(signature) (time)	~~Sample #12 did not arrive with the rest. Extra sample labeled BH-A @ 3.5' 16.52 on 3/28/96 did arrive. Placed on hold~~ JDW 4/1/96
Scott Ferriman 4-1-96	JOSE DELGADO			
(printed name) (date)	(printed name) (date)	(printed name) (date)	(printed name) (date)	
Company- ASE, Inc	Company CCT 11:20 4/1/96	Company-	Company-	

APPENDIX D

Analytical Report and Chain of Custody Forms
For Groundwater Samples

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

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

Prepared for:

Aqua Science Engineers, Inc.
2411 Old Crow Canyon Rd
Suite 4
San Ramon, CA 94583

Date: 08-APR-96
Lab Job Number: 125035
Project ID: 2971
Location: Custom Alloy Scrap Sales

Reviewed by: _____

Reviewed by: _____

This package may be reproduced only in its entirety.

TVH-Total Volatile Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
125035-001	BH-A WATER	26860	03/28/96	04/08/96	04/08/96	
125035-002	BH-B WATER	26860	03/28/96	04/08/96	04/08/96	
125035-003	BH-C WATER	26860	03/28/96	04/08/96	04/08/96	
125035-004	BH-E WATER	26860	03/28/96	04/08/96	04/08/96	

Analyte Diln Fac:	Units	125035-001 1	125035-002 1	125035-003 1	125035-004 1
Gasoline	ug/L	95 Y	<50	51 Y	<50
Surrogate					
Trifluorotoluene	%REC	105	101	108	108
Bromobenzene	%REC	104	100	102	100

Y: Sample exhibits fuel pattern which does not resemble standard

BTXE

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
125035-001	BH-A WATER	26860	03/28/96	04/08/96	04/08/96	
125035-002	BH-B WATER	26860	03/28/96	04/08/96	04/08/96	
125035-003	BH-C WATER	26860	03/28/96	04/08/96	04/08/96	
125035-004	BH-E WATER	26860	03/28/96	04/08/96	04/08/96	

Analyte	Units	125035-001	125035-002	125035-003	125035-004
Diln Fac:		1	1	1	1
Benzene	ug/L	<0.5	<0.5	<0.5	<0.5
Toluene	ug/L	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	ug/L	<0.5	<0.5	<0.5	0.9
m,p-Xylenes	ug/L	<0.5	<0.5	<0.5	<0.5
o-Xylene	ug/L	1.3	<0.5	<0.5	1.3
Surrogate					
Trifluorotoluene	%REC	94	87	113	92
Bromobenzene	%REC	95	89	90	89

TVH-Total Volatile Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
125035-005	BH-I WATER	26860	03/28/96	04/08/96	04/08/96	

Analyte	Units	125035-005
Diln Fac:		1
Gasoline	ug/L	<50
Surrogate		
Trifluorotoluene	%REC	105
Bromobenzene	%REC	100

BTXE

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
125035-005	BH-I WATER	26860	03/28/96	04/08/96	04/08/96	

Analyte	Units	125035-005
Diln Fac:		1
Benzene	ug/L	<0.5
Toluene	ug/L	<0.5
Ethylbenzene	ug/L	<0.5
m,p-Xylenes	ug/L	<0.5
o-Xylene	ug/L	<0.5
Surrogate		
Trifluorotoluene	%REC	91
Bromobenzene	%REC	89

Curtis & Tompkins, Ltd.

Lab #: 125035 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 26860
Units: ug/L
Diln Fac: 1

Prep Date: 04/07/96
Analysis Date: 04/07/96

MB Lab ID: QC18758

Analyte	Result	
Gasoline	<50	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	100	69-120
Bromobenzene	94	70-122

Curtis & Tompkins, Ltd.

Lab #: 125035 BATCH QC REPORT

BTXE

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 26860
Units: ug/L
Diln Fac: 1

Prep Date: 04/07/96
Analysis Date: 04/07/96

MB Lab ID: QC18758

Analyte	Result
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylenes	<0.5
o-Xylene	<0.5

Surrogate	%Rec	Recovery Limits
Trifluorotoluene	87	58-130
Bromobenzene	84	62-131

Curtis & Tompkins, Ltd.

Lab #: 125035 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 26860
Units: ug/L
Diln Fac: 1

Prep Date: 04/07/96
Analysis Date: 04/07/96

LCS Lab ID: QC18759

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	1937	2000	99	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	106	69-120
Bromobenzene	106	70-122

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

Curtis & Tompkins, Ltd.

Lab #: 125035 BATCH QC REPORT

BTXE

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 26860
Units: ug/L
Diln Fac: 1

Prep Date: 04/07/96
Analysis Date: 04/07/96

LCS Lab ID: QC18759

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	21.2	20	106	80-120
Toluene	22	20	110	80-120
Ethylbenzene	21.6	20	108	80-120
m,p-Xylenes	42.6	40	107	80-120
o-Xylene	22.2	20	111	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	86	58-130
Bromobenzene	84	62-131

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits

Curtis & Tompkins, Ltd.

Lab #: 125035 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 124974-006
Matrix: Water
Batch#: 26860
Units: ug/L
Diln Fac: 1

Sample Date: 03/26/96
Received Date: 03/27/96
Prep Date: 04/07/96
Analysis Date: 04/07/96

MS Lab ID: QC18761

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	2000	<50.00	2170	100	75-125
Surrogate	**%Rec**	**Limits**			
Trifluorotoluene	107	69-120			
Bromobenzene	112	70-122			

MSD Lab ID: QC18762

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	2000	2302	106	75-125	6	<20
Surrogate	**%Rec**	**Limits**				
Trifluorotoluene	108	69-120				
Bromobenzene	111	70-122				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Curtis & Tompkins, Ltd.

Client: Aqua Science Engineers, Inc.

Laboratory Login Number: 125035

Project Name: Custom Alloy Scrap Sales
Project Number: 2971

Report Date: 08 April 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **METHOD: SMWW 17:5520BF**

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
125035-001	BH-A WATER	Water	28-MAR-96	01-APR-96	03-APR-96	ND	mg/L	5	DLP	26798
125035-002	BH-B WATER	Water	28-MAR-96	01-APR-96	03-APR-96	ND	mg/L	8	DLP	26798
125035-003	BH-C WATER	Water	28-MAR-96	01-APR-96	03-APR-96	ND	mg/L	5	DLP	26798
125035-005	BH-1 WATER	Water	28-MAR-96	01-APR-96	03-APR-96	ND	mg/L	5	DLP	26798

ND = Not Detected at or above Reporting Limit (RL).

Curtis & Tompkins, Ltd.

QC Batch Report

Client: Aqua Science Engineers, Inc.
Project Name: Custom Alloy Scrap Sales
Project Number: 2971

Laboratory Login Number: 125035
Report Date: 08 April 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 26798**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
MB	ND	5	mg/L	SMWW 17:5520BF	03-APR-96

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	81%	SMWW 17:5520BF	03-APR-96
BSD	81%	SMWW 17:5520BF	03-APR-96

		Control Limits
Average Spike Recovery	81%	80% - 120%
Relative Percent Difference	.1%	< 20%

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: BH-A WATER
Lab ID: 125035-001
Matrix: Water
Batch#: 26786
Units: ug/L
Diln Fac: 1

Sampled: 03/28/96
Received: 04/01/96
Extracted: 04/03/96
Analyzed: 04/03/96

Analyte	Result	Reporting Limit
Chloromethane	ND	2.0
Bromomethane	ND	2.0
Vinyl Chloride	8.3	2.0
Chloroethane	ND	2.0
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	2.1	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	55	1.0
trans-1,2-Dichloroethene	15	1.0
Chloroform	ND	1.0
Freon 113	ND	1.0
1,2-Dichloroethane	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
Trichloroethene	34	1.0
1,1,2-Trichloroethane	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
Dibromochloromethane	ND	1.0
Bromoform	ND	2.0
Tetrachloroethene	1.0	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Chlorobenzene	21	1.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	39	5.0

Surrogate	%Recovery	Recovery Limits
Toluene-d8	99	87-125
Bromofluorobenzene	98	79-122
1,2-Dichloroethane-d4	114	68-126

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: BH-B WATER
Lab ID: 125035-002
Matrix: Water
Batch#: 26786
Units: ug/L
Diln Fac: 1

Sampled: 03/28/96
Received: 04/01/96
Extracted: 04/03/96
Analyzed: 04/03/96

Analyte	Result	Reporting Limit
Chloromethane	ND	2.0
Bromomethane	ND	2.0
Vinyl Chloride	2.4	2.0
Chloroethane	ND	2.0
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	1.0
1,1-Dichloroethane	22	1.0
cis-1,2-Dichloroethene	3.4	1.0
trans-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
Freon 113	ND	1.0
1,2-Dichloroethane	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
Trichloroethene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
Dibromochloromethane	ND	1.0
Bromoform	ND	2.0
Tetrachloroethene	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Chlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Recovery	Recovery Limits
Toluene-d8	100	87-125
Bromofluorobenzene	98	79-122
1,2-Dichloroethane-d4	113	68-126

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: BH-C WATER
Lab ID: 125035-003
Matrix: Water
Batch#: 26786
Units: ug/L
Diln Fac: 1

Sampled: 03/28/96
Received: 04/01/96
Extracted: 04/03/96
Analyzed: 04/03/96

Analyte	Result	Reporting Limit
Chloromethane	ND	2.0
Bromomethane	ND	2.0
Vinyl Chloride	10	2.0
Chloroethane	ND	2.0
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	1.0
1,1-Dichloroethane	1.5	1.0
cis-1,2-Dichloroethene	78	1.0
trans-1,2-Dichloroethene	3.3	1.0
Chloroform	ND	1.0
Freon 113	ND	1.0
1,2-Dichloroethane	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
Trichloroethene	100	1.0
1,1,2-Trichloroethane	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
Dibromochloromethane	ND	1.0
Bromoform	ND	2.0
Tetrachloroethene	1.0	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Chlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Recovery	Recovery Limits
Toluene-d8	100	87-125
Bromofluorobenzene	99	79-122
1,2-Dichloroethane-d4	117	68-126

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: BH-E WATER
Lab ID: 125035-004
Matrix: Water
Batch#: 26786
Units: ug/L
Diln Fac: 1

Sampled: 03/28/96
Received: 04/01/96
Extracted: 04/03/96
Analyzed: 04/03/96

Analyte	Result	Reporting Limit
Chloromethane	ND	2.0
Bromomethane	ND	2.0
Vinyl Chloride	43	2.0
Chloroethane	ND	2.0
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	75	1.0
trans-1,2-Dichloroethene	6.7	1.0
Chloroform	ND	1.0
Freon 113	ND	1.0
1,2-Dichloroethane	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
Trichloroethene	9.1	1.0
1,1,2-Trichloroethane	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
Dibromochloromethane	ND	1.0
Bromoform	ND	2.0
Tetrachloroethene	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Chlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Recovery	Recovery Limits
Toluene-d8	100	87-125
Bromofluorobenzene	106	79-122
1,2-Dichloroethane-d4	117	68-126

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: BH-I WATER
Lab ID: 125035-005
Matrix: Water
Batch#: 26786
Units: ug/L
Diln Fac: 1

Sampled: 03/28/96
Received: 04/01/96
Extracted: 04/03/96
Analyzed: 04/03/96

Analyte	Result	Reporting Limit
Chloromethane	ND	2.0
Bromomethane	ND	2.0
Vinyl Chloride	ND	2.0
Chloroethane	ND	2.0
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	1.3	1.0
trans-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
Freon 113	ND	1.0
1,2-Dichloroethane	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
Trichloroethene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
Dibromochloromethane	ND	1.0
Bromoform	ND	2.0
Tetrachloroethene	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Chlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Recovery	Recovery Limits
Toluene-d8	100	87-125
Bromofluorobenzene	98	79-122
1,2-Dichloroethane-d4	116	68-126

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 26786
Units: ug/L
Diln Fac: 1

Prep Date: 04/03/96
Analysis Date: 04/03/96

MB Lab ID: QC18477

Analyte	Result	Reporting Limit
Chloromethane	ND	2.0
Bromomethane	ND	2.0
Vinyl Chloride	ND	2.0
Chloroethane	ND	2.0
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	ND	1.0
trans-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
Freon 113	ND	1.0
1,2-Dichloroethane	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
Trichloroethene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
Dibromochloromethane	ND	1.0
Bromoform	ND	2.0
Tetrachloroethene	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Chlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Rec	Recovery Limits
Toluene-d8	100	87-125
Bromofluorobenzene	99	79-122
1,2-Dichloroethane-d4	108	68-126

Curtis & Tompkins, Ltd.

Lab #: 125035 BATCH QC REPORT

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 26786
Units: ug/L
Diln Fac: 1

Prep Date: 04/03/96
Analysis Date: 04/03/96

MB Lab ID: QC18520

Analyte	Result	Reporting Limit
Chloromethane	ND	2.0
Bromomethane	ND	2.0
Vinyl Chloride	ND	2.0
Chloroethane	ND	2.0
Methylene Chloride	ND	20
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	ND	1.0
trans-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
Freon 113	ND	1.0
1,2-Dichloroethane	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
Trichloroethene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
Dibromochloromethane	ND	1.0
Bromoform	ND	2.0
Tetrachloroethene	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Chlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Rec	Recovery Limits
Toluene-d8	100	87-125
Bromofluorobenzene	96	79-122
1,2-Dichloroethane-d4	104	68-126

Curtis & Tompkins, Ltd.

Lab #: 125035 BATCH QC REPORT

Halogenated Volatile Organics

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 125031-001
Matrix: Water
Batch#: 26786
Units: ug/L
Diln Fac: 1

Sample Date: 03/28/96
Received Date: 04/01/96
Prep Date: 04/03/96
Analysis Date: 04/03/96

MS Lab ID: QC18521

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<1.000	61.56	123	51-180
Trichloroethene	50	<1.000	47.05	94	73-141
Chlorobenzene	50	<1.000	47.55	95	83-129

Surrogate	%Rec	Limits
Toluene-d8	100	87-125
Bromofluorobenzene	102	79-122
1,2-Dichloroethane-d4	115	68-126

MSD Lab ID: QC18522

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	61.31	123	51-180	0	<22
Trichloroethene	50	46.63	93	73-141	1	<24
Chlorobenzene	50	46.98	94	83-129	1	<21

Surrogate	%Rec	Limits
Toluene-d8	99	87-125
Bromofluorobenzene	99	79-122
1,2-Dichloroethane-d4	114	68-126

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 3 outside limits
Spike Recovery: 0 out of 6 outside limits

Curtis & Tompkins, Ltd.

Lab #: 125035 BATCH QC REPORT

Halogenated Volatile Organics

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 26786
Units: ug/L
Diln Fac: 1

Prep Date: 04/03/96
Analysis Date: 04/03/96

LCS Lab ID: QC18476

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	55.75	50	111	51-180
Trichloroethene	47	50	94	73-141
Chlorobenzene	48.41	50	97	83-129

Surrogate	%Rec	Limits
Toluene-d8	100	87-125
Bromofluorobenzene	101	79-122
1,2-Dichloroethane-d4	100	68-126

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 3 outside limits

Curtis & Tompkins, Ltd.

Lab #: 125035 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 26787
Units: ug/L
Diln Fac: 1

Prep Date: 04/02/96
Analysis Date: 04/04/96

BS Lab ID: QC18480

Analyte	Spike Added	BS	%Rec #	Limits
Diesel Range	2475	2663	108	60-140
Surrogate	%Rec	Limits		
Hexacosane	102	60-140		

BSD Lab ID: QC18481

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel Range	2475	2794	113	60-140	5	<35
Surrogate	%Rec	Limits				
Hexacosane	101	60-140				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Curtis & Tompkins, Ltd.

Lab #: 125035 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 26787
Units: ug/L
Diln Fac: 1

Prep Date: 04/02/96
Analysis Date: 04/04/96

MB Lab ID: QC18479

Analyte	Result	
Diesel Range	<50	
Surrogate	%Rec	Recovery Limits
Hexacosane	98	60-140

TEH-Tot Ext Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2971
Location: Custom Alloy Scrap Sales

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
125035-001	BH-A WATER	26787	03/28/96	04/02/96	04/05/96	
125035-002	BH-B WATER	26787	03/28/96	04/02/96	04/05/96	
125035-003	BH-C WATER	26787	03/28/96	04/02/96	04/05/96	
125035-005	BH-I WATER	26787	03/28/96	04/02/96	04/05/96	

Analyte	Units	125035-001	125035-002	125035-003	125035-005
Diln Fac:		1	1	1	1
Diesel Range	ug/L	3800 YH	7100 YH	2600 YH	2000 YH
Surrogate					
Hexacosane	%REC	106	94	112	108

Y: Sample exhibits fuel pattern which does not resemble standard
H: Heavier hydrocarbons than indicated standard

TD 5035

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 3-28-96 PAGE 3 OF 3

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

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

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

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					
-1 BH-A Water	3/28	9:30	Water	7		X	X		X			X	X									
-2 BH-B Water	"	11:15	"	6		X	X		X			X										
-3 BH-C Water	"	13:40	"	7		X	X		X			X	X									
-4 BH-E Water	"	14:40	"	2		X			X													
-5 BH-I Water	✓	12:15	✓	7		X	X		X			X	X									

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
(signature) (time)	(signature) (time)	(signature) (time)	(signature) (time)	
Scott Ferriman 4-1-96	JOSE DELGADO			
(printed name) (date)	(printed name) (date)	(printed name) (date)	(printed name) (date)	
Company- ASE, Inc.	Company- CET 4/1/96 11:20	Company-	Company-	

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

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

Prepared for:

Aqua Science Engineers, Inc.
2411 Old Crow Canyon Rd
Suite 4
San Ramon, CA 94583

Date: 11-APR-96
Lab Job Number: 125145
Project ID: 2971
Location: Custom Alloy Scrap Sales

Reviewed by: _____

Reviewed by: _____

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Curtis & Tompkins, Ltd.

SAMPLE ID: BH-A WATER
LAB ID: 125145-001
CLIENT: Aqua Science Engineers, Inc.
PROJECT ID: 2971
LOCATION: Custom Alloy Scrap Sales
MATRIX: Filtrate

DATE SAMPLED: 03/28/96
DATE RECEIVED: 04/01/96
DATE REPORTED: 04/11/96

Metals Analytical Report

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Cadmium	ND	2.0	1	26902	EPA 6010A	04/10/96
Chromium (total)	ND	10	1	26902	EPA 6010A	04/10/96
Lead	ND	3.0	1	26902	EPA 6010A	04/10/96
Nickel	240	20	1	26902	EPA 6010A	04/10/96
Zinc	ND	20	1	26902	EPA 6010A	04/10/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: BH-C WATER
LAB ID: 125145-002
CLIENT: Aqua Science Engineers, Inc.
PROJECT ID: 2971
LOCATION: Custom Alloy Scrap Sales
MATRIX: Filtrate

DATE SAMPLED: 03/28/96
DATE RECEIVED: 04/01/96
DATE REPORTED: 04/11/96

Metals Analytical Report

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Cadmium	ND	2.0	1	26902	EPA 6010A	04/10/96
Chromium (total)	ND	10	1	26902	EPA 6010A	04/10/96
Lead	ND	3.0	1	26902	EPA 6010A	04/10/96
Nickel	130	20	1	26902	EPA 6010A	04/10/96
Zinc	ND	20	1	26902	EPA 6010A	04/10/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

SAMPLE ID: BH-I WATER
LAB ID: 125145-003
CLIENT: Aqua Science Engineers, Inc.
PROJECT ID: 2971
LOCATION: Custom Alloy Scrap Sales
MATRIX: Filtrate

DATE SAMPLED: 03/28/96
DATE RECEIVED: 04/01/96
DATE REPORTED: 04/11/96

Metals Analytical Report

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Cadmium	2.3	2.0	1	26902	EPA 6010A	04/10/96
Chromium (total)	ND	10	1	26902	EPA 6010A	04/10/96
Lead	ND	3.0	1	26902	EPA 6010A	04/10/96
Nickel	1000	20	1	26902	EPA 6010A	04/10/96
Zinc	ND	20	1	26902	EPA 6010A	04/10/96

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Aqua Science Engineers, Inc.
JOB NUMBER: 125145

DATE REPORTED: 04/11/96

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Cadmium	ND	2	ug/L	1	26902	EPA 6010A	04/10/96
Chromium (total)	ND	10	ug/L	1	26902	EPA 6010A	04/10/96
Lead	ND	3	ug/L	1	26902	EPA 6010A	04/10/96
Nickel	ND	20	ug/L	1	26902	EPA 6010A	04/10/96
Zinc	ND	20	ug/L	1	26902	EPA 6010A	04/10/96

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Aqua Science Engineers, Inc.
JOB NUMBER: 125145

DATE REPORTED: 04/11/96

BATCH QC REPORT
BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS% Rec.	BSD% Rec.	Rec. Limits	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Cadmium	50	51.4	51	ug/L	103	102	80-120	1	20	26902	EPA 6010A	04/10/96
Chromium (total)	200	202	198	ug/L	101	99	80-120	2	20	26902	EPA 6010A	04/10/96
Lead	500	508	501	ug/L	102	100	80-120	1	20	26902	EPA 6010A	04/10/96
Nickel	500	513	500	ug/L	103	100	80-120	3	20	26902	EPA 6010A	04/10/96
Zinc	500	510	498	ug/L	102	100	80-120	2	20	26902	EPA 6010A	04/10/96

D5035

Chain of Custody

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

DATE 3-28-96 PAGE 3 OF 3

SAMPLERS (SIGNATURE) Scott T. Ferriman (PHONE NO.)
Robert E. Kitay (510) 820-9391

PROJECT NAME Custom Alloy Scrap Sales NO. 2971
ADDRESS Poplar Street, Oakland, Cal

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

	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 B&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
-1	BH-A Water	3/28	9:30	Water	7		X	X		X			X	X				
-2	BH-B Water	"	11:15	"	6		X	X		X			X					
-3	BH-C Water	"	13:40	"	7		X	X		X			X	X				
-4	BH-E Water	"	14:40	"	2		X			X								
-5	BH-I Water	✓	12:15	✓	7		X	X		X			X	X				

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
Scott T. Ferriman	[signature]			
(signature) (time)	(signature) (time)	(signature) (time)	(signature) (time)	
Scott Ferriman 4-1-96	JOSE DELGADO			
(printed name) (date)	(printed name) (date)	(printed name) (date)	(printed name) (date)	
Company- ASE, Inc.	Company- CET 4/1/96 11:20	Company-	Company-	

AEN

CURTIS & TOMPKINS, LTD. BERKELEY LOGIN CHANGE FORM

Reason for change: X Client Request: By: Robert Kitay Date/Time: 4/9/96 3:30 Initials: G
Login Review ____ Data Review

Current Lab ID	Previous Lab ID	Client ID	Matrix	Add/Cancel	Analysis	Duedate
~~125~~ 3						
125~~H~~5-001	125035-1	BH-A water	H_2O	add	Dissolved (Filtered)	4/
-002	-3	BA-C water	H_2O	add	Cd, Cr, Ni, Pb	
-003	-5	BH-I water	H_2O	add	& Zn	

Curtis & Tompkins, Ltd.