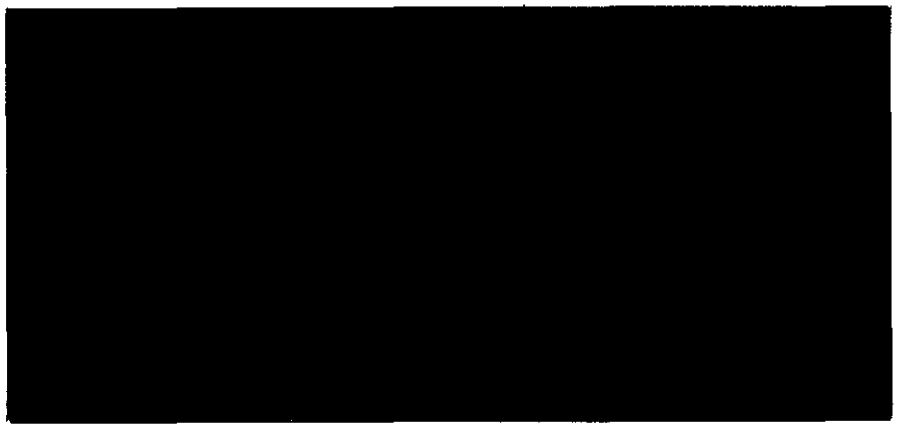
environmental

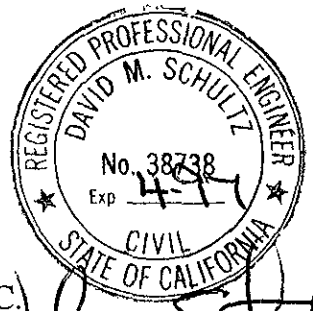


ENVIRONMENTAL SERVICES AND REMEDIATION CONTRACTING

aqua science engineers inc.

May 23, 1996

REPORT
of
MONITORING WELL DESTRUCTION
AND
SOIL OVEREXCAVATION REMEDIATION PROJECT
ASE JOB NO. 2607
at
Former Alameda Max's Service Station
1357 High Street
Alameda, California



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 remedial activities at the former Alameda Max's service station located at 1357 High Street in Alameda, California *(Figure 1)*. These activities were performed to remove contaminated soil and groundwater that has been impacted by hydrocarbons. These activities were initiated by the property owner, Mr. James A. Phillipsen, in accordance with a letter received from the Alameda County Health Care Services Agency (ACHCSA) dated April 11, 1995 (Appendix A).

2.0 SITE HISTORY

A gasoline service station formerly occupied the site *(Figure 2)*. On March 26, 1993, ASE removed one (1) 6,000-gallon gasoline underground storage tank (UST), one (1) 5,000-gallon gasoline UST, one (1) 4,000-gallon gasoline UST, one (1) 550-gallon gasoline UST, one (1) 150-gallon waste oil UST and one (1) 150-gallon oil and water separator from the site. All of the USTs were steel. The 550-gallon gasoline UST had a hole upon inspection, and strong petroleum odors were present around the UST. The 150-gallon waste oil UST did not contain any apparent holes or cracks, however, a strong petroleum odor was emanating from its excavation. No holes, cracks or petroleum odors were identified upon inspection of the other USTs. Up to 140 parts per million (ppm) total petroleum hydrocarbons as gasoline (TPH-G), 2,200 ppm total petroleum hydrocarbons as diesel (TPH-D) and 12,000 ppm oil and grease (O&G) were detected in soil samples collected from the UST pits.

On November 22, 1993, ASE overexcavated soil from the former waste-oil UST pit and removed the soil stockpiles that were generated during the UST removal operations. A total of approximately 88 tons of contaminated soil were overexcavated and removed from the site. Only 2 ppm O&G were detected in a confirmation sample collected at the bottom of northern sidewall of the waste oil UST excavation.

On March 31, 1994, ASE drilled borings BH-A through BH-C at the site and installed groundwater monitoring wells MW-1 through MW-3 in the borings. Up to 7,500 ppm O&G and 1,400 ppm TPH-D were detected in a soil sample collected from boring BH-B near the former waste oil UST. Relatively low TPH-G concentrations (7.4 ppm) were detected in shallow unsaturated soil from boring BH-C. No hydrocarbons were detected in the soil sample collected in boring BH-A.

On April 4, 1994, ASE collected groundwater samples from the wells. 6,200 parts per billion (ppb) O&G, 150 ppb TPH-G and low benzene, toluene, ethylbenzene and total xylenes (BTEX) and trichloroethene (TCE) concentrations were in groundwater samples from monitoring well MW-2, located near the former waste oil UST. 1,200 ppb TPH-G, 180 ppb TPH-D and between 3 and 230 ppb BTEX were detected in groundwater samples collected from monitoring well MW-3, at the downgradient edge of the site.

On August 2, 1994, monitoring well MW-2 contained 0.16-feet of oil floating on the groundwater surface. 60 ppb TPH-G, 500 ppb TPH-D and no BTEX were detected in monitoring well MW-1. 2,700 ppb TPH-G and between 6 ppb and 470 ppb BTEX were detected in the groundwater sample collected from monitoring well MW-3.

On September 30, 1994, ASE drilled soil boring BH-D and installed monitoring well MW-4 in the boring. This boring is located in High Street downgradient of the site. No hydrocarbons were detected in a soil sample collected from the capillary zone in this boring, and 500 ppb TPH-G, 200 ppb TPH-D and between 2 and 70 ppb BTEX were detected in groundwater samples collected from this well on October 4, 1994.

On July 31, 1995, ASE drilled six soil borings in High Street to determine whether groundwater contamination extended across High Street or whether contamination may have migrated along underground utility lines buried under High Street. The analytical results showed that the hydrocarbon plume had not yet crossed High Street and that it appeared that underground utility lines have not acted as a conduit for the spread of contamination along High Street.

Between September 15, 1995 and November 7, 1995, an oil skimmer operated in monitoring well MW-2 to remove the free-floating oil that had been present in that well. Approximately 65 gallons of oil and water were removed from the well during this period. Only a slight sheen is now present on the surface of groundwater in that well.

The site has been on a quarterly groundwater sampling plan since December 1994. During this period, hydrocarbon concentrations have been generally consistent at the site. Monitoring well MW-2 has consistently contained a layer of free-floating hydrocarbons which appear to be an unused motor oil. Groundwater samples collected from monitoring well MW-1 have contained up to 200 ppb TPH-G, 1,600 ppb TPH-D and low BTEX concentrations. Groundwater samples collected from monitoring well MW-3 have contained up to 2,700 ppb TPH-G, 300 ppb TPH-D, 9 ppb

benzene, 30 ppb toluene, 78 ppb ethylbenzene and 470 ppb total xylenes. Groundwater samples collected from monitoring well MW-4 have contained up to 2,900 ppb TPH-G, 620 ppb TPH-D, 9 ppb benzene, 48 ppb toluene, 180 ppb ethylbenzene, and 450 ppb total xylenes. Groundwater has consistently flowed to the southeast toward High Street during this period.

On January 29, 1996, ASE drilled two soil borings in the vicinity of monitoring well MW-2 in order to analyze soil samples for polynuclear aromatic hydrocarbons (PNAs). Free-floating oil was present on the surface of the groundwater in both borings. In addition, naphthalene, acenaphthene, fluorene and phenanthrene were detected in the soil at concentrations between 0.13 and 2.4 parts per million.

3.0 SCOPE OF WORK (SOW)

Based on the site history and requirements outlined in the ACHCSA April 11, 1995 letter, ASE's SOW was to:

1) Prepare a workplan for approval from the ACHCSA;

2) Obtain all necessary permits from the appropriate agencies to destroy monitoring well MW-2 from the Alameda County Flood Control and Water Conservation District (Zone 7);

3) Destroy monitoring well MW-2 to allow access for overexcavation activities;

4) Overexcavate contaminated soil in the vicinity of the former waste oil UST and stockpile contaminated soil at the site;

5) Collect confirmation soil samples from each sidewall;

6) Analyze the confirmation soil samples for TPH-G, TPH-D, O&G, BTEX, PNAs and volatile organic compounds (VOCs);

7) Profile the soil stockpiles for disposal at an appropriate disposal facility;

8) Transport the soil stockpiles to an appropriate disposal facility;

9) Backfill and compact the excavation;

10) Report the methods and findings of this remediation project.

Details of this assessment follow.

4.0 MONITORING WELL DESTRUCTION

Prior to drilling, ASE obtained Alameda County Flood Control and Water Conservation District (Zone 7) well destruction permit 96184 (Appendix B). On March 13, 1996, Soils Exploration Services of Benicia, California destroyed monitoring well MW-2 by drilling around the well casing to the total depth of the well. All cement and bentonite sanitary seals, sandpack and well casing were removed during the well destruction. The remaining borehole was then filled with neat cement placed by tremie pipe. This well destruction was directed by ASE project geologist Robert Kitay. Following the well destruction, the necessary paperwork was filed with Zone 7 and the California Department of Water Resources (DWR).

5.0 SOIL OVEREXCAVATION AND EXCAVATION DEWATERING

On April 19, 1996, ASE overexcavated approximately 225 tons of contaminated soil from the site. The limits of the excavation were as follows: The excavation was extended as far northwest as the previously overexcavated area near the former waste oil tank, as far northeast as the former gasoline USTs backfill, southwest until the excavation was within the 12-foot safety margin of High Street and monitoring well MW-3, and southwest until no more soil that may contain free-phase oil was encountered. Significant contamination was still present along the southeast and southwest walls. The overexcavation to the southwest was halted when Ms. Eva Chu of the ACHCSA assured ASE that no additional overexcavation was needed in this area in order to obtain closure, even though it appeared contamination still remained based on visual observations. Confirmation soil samples were collected at the southeast and southwest walls of the excavation at the direction of Ms. Eva Chu of the ACHCSA. No samples were collected from the northwest or northeast sidewalls since clean backfill material was encountered. The confirmation soil samples were collected from the backhoe bucket by driving brass tubes into the soil. The tubes were then sealed with Teflon tape, plastic end caps and duct tape, labeled, sealed in plastic bags and placed into an ice chest with "blue" ice for transport to Curtis & Tompkins, Ltd. (C&T) of Berkeley, California (ELAP #1459) under chain-of-custody.

The excavation was dewatered as the overexcavation progressed. Approximately 700 gallons of water and free-floating oil were removed

from the excavation by Clearwater Environmental Management, Inc. of Fremont, California using a vacuum truck. This water was subsequently transported to the McKittrick Waste Treatment Site in McKittrick, California under non-hazardous waste manifest #NH 2966 (Appendix C).

6.0 ANALYTICAL RESULTS FOR CONFIRMATION SOIL SAMPLES

The confirmation soil samples were analyzed by C&T for TPH-G by modified EPA Method 5030/8015, TPH-D by modified EPA Method 3510/8015, O&G by Standard Method 5520EF, BTEX by EPA Method 8020, VOCs by EPA Method 8010 and PNAs by EPA Method 8270. The analytical results are tabulated in Tables One and Two, and copies of the certified analytical report and chain of custody form are included in Appendix D.

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

Location & Depth	TPH Gasoline	TPH Diesel	O&G	Benzene	Toluene	Ethyl Benzene	Total Xylenes
SE - 4.0'	<1	<1	3,000	< 0.005	< 0.005	< 0.005	0.0365
SW-4.0'	1,300	250*	<50	<0.1	<0.1	<0.1	3.2
EPA METHOD	5030/ 8015	3520/ 8015	5520 EF	8020	8020	8020	8020

Notes:
* = Non-typical chromatogram pattern

TABLE TWO
Summary of Chemical Analysis of **CONFIRMATION SOIL** Samples
PNAs and VOCs
All results are in **parts per million**

Location & Depth	Naphthalene	Other PNAs	All VOCs
SE - 4.0'	< 0.05	< 0.05	< 0.005-0.02
SW-4.0'	1.3	< 0.05	< 0.13-0.25
EPA METHOD	3550/ 8270	3550/ 8270	5030/ 8240

7.0 SOIL PROFILING, OFF-HAUL AND DISPOSAL

Eight soil samples were collected from the stockpiled soil in order to profile the stockpile for disposal. These samples were collected in brass tubes, sealed with Teflon tape, plastic end caps and duct tape, labeled, sealed in plastic bags and placed into an ice chest with "blue" ice for transport to C&T under chain-of-custody. The eight samples were then composited by C&T (at a rate of four samples into one) into two samples for analyses. These composited samples were then analyzed for TPH-G by modified EPA Method 5030/8015, TPH-D by modified EPA Method 3510/8015, O&G by Standard Method 5520EF, BTEX by EPA Method 8020, VOCs by EPA Method 8010 and semi-volatile organic compounds (SVOCs) by EPA Method 8270. The analytical results are tabulated in Table Three and Four, and copies of the certified analytical report and chain of custody form are included in Appendix E.

TABLE THREE

Summary of Chemical Analysis of **STOCKPILE SOIL** Samples
Hydrocarbons and BTEX
All results are in **parts per million**

Location & Depth	TPH Gasoline	TPH Diesel	O&G	Benzene	Toluene	Ethyl Benzene	Total Xylenes
STKP (A-D)	190*	1,500*	4,300	< 0.2 a < 0.13 b	< 0.2 a < 0.13 b	< 0.2 a 0.12 b	0.42 a 0.7 b
STKP (E-H)	170*	330*	1,300	< 0.2 a < 0.13 b	< 0.2 a 0.22 b	1.5 a 1.1 b	6.0 a 8.7 b
EPA METHOD	5030/ 8015	3520/ 8015	5520 EF	8020a 8240b	8020a 8240b	8020a 8240b	8020a 8240b

Notes:
* = Non-typical chromatogram pattern

TABLE FOUR

Summary of Chemical Analysis of **STOCKPILE SOIL** Samples
Metals, SVOCs and VOCs
All results are in **parts per million**

Location & Depth	Cd	Cr	Pb	Ni	Zn	All SVOCs	All VOCs
SE - 4.0'	0.87	51	3.4	39	20	< 1.7-8.3	< 0.13-0.25
SW-4.0'	0.76	41	3.2	36	20	< 0.33-1.7	< 0.13-0.25
EPA METHOD	6010	6010	6010	6010	6010	3550/ 8270	5030/ 8240

Based on these analytical results, the soil was accepted into Forward Landfill in Manteca, California as Class II waste under approval #600722. The soil was subsequently transported to Forward Landfill on May 8, 1996 by T.E. O'Connor and Sons under non-hazardous waste manifests (Appendix F).

8.0 EXCAVATION BACKFILL AND COMPACTION

On May 8, 1996, the excavation was backfilled with uncontaminated soil from the top two feet of the overexcavation (segregated as overexcavation progressed) and clean imported fill from the Kaiser Sand and Gravel Company Radum Plant in Pleasanton, California. The backfilled soil was then compacted with a sheepsfoot and wacker.

9.0 CONCLUSIONS AND RECOMMENDATIONS

Approximately 225 tons of contaminated soil and 700 gallons of contaminated groundwater and free-floating oil were removed from the site during this portion of the project. The limits of the overexcavation were the backfill from the previous overexcavation to the northwest and former USTs to the northeast which are both considered clean, 12-feet from High Street to the southeast which still contained detectable concentrations (excavation halted due to a margin of safety factor). Although additional overexcavation was possible for an additional 11-feet to the southwest, the overexcavation was halted after consulting with Ms. Eva Chu of the ACHCSA and Ms. Chu assuring ASE that the remaining contamination would not need to be overexcavated in order to obtain case closure.

Based on discussions with Ms. Eva Chu at the site and Ms. Juliet Shin of the ACHCSA prior to and subsequent to the overexcavation, monitoring well MW-2 will not need to be replaced.

It does not appear that any additional work will be required at the site beyond continued quarterly groundwater monitoring. Since no hydrocarbon concentrations exceeded California Department of Toxic Substances Control (DTSC) maximum contaminant levels (MCLs) for drinking water during the March 1996 quarterly groundwater sampling, it appears that the site may be suitable for closure in the near future. If only low hydrocarbon concentrations are detected in the groundwater samples during the next three quarters, ASE will recommend applying for case closure. The next quarterly sampling period is scheduled for June 1996.

10.0 REPORT LIMITATIONS

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

It 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 to assist you with your environmental needs. Should you have any questions or comments, please feel free to call us at (510) 820-9391.

Respectfully submitted,

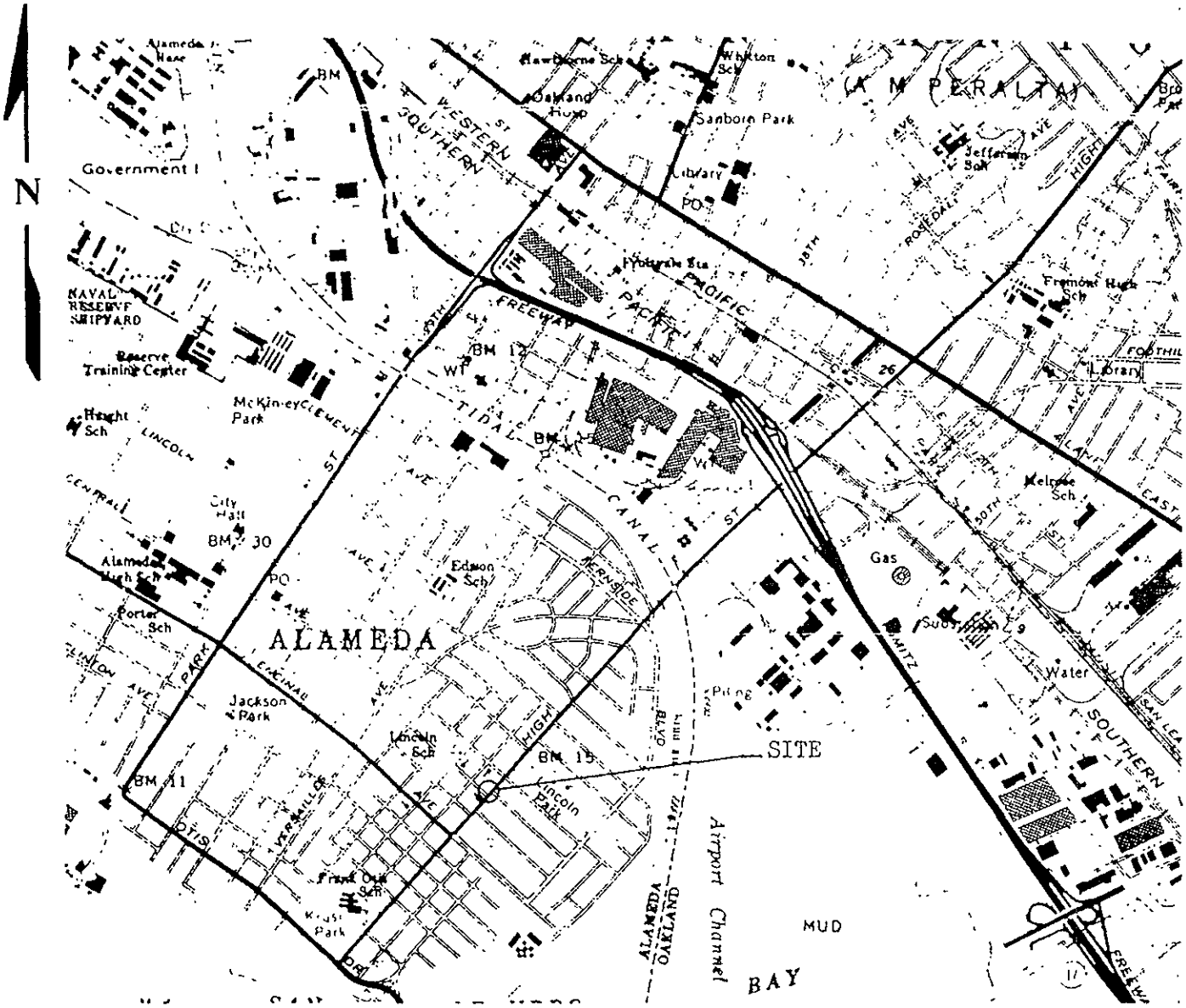
AQUA SCIENCE ENGINEERS, INC.

Robert E. Kitay

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

Attachments: Figures 1 and 2
Appendices A through F

FIGURES

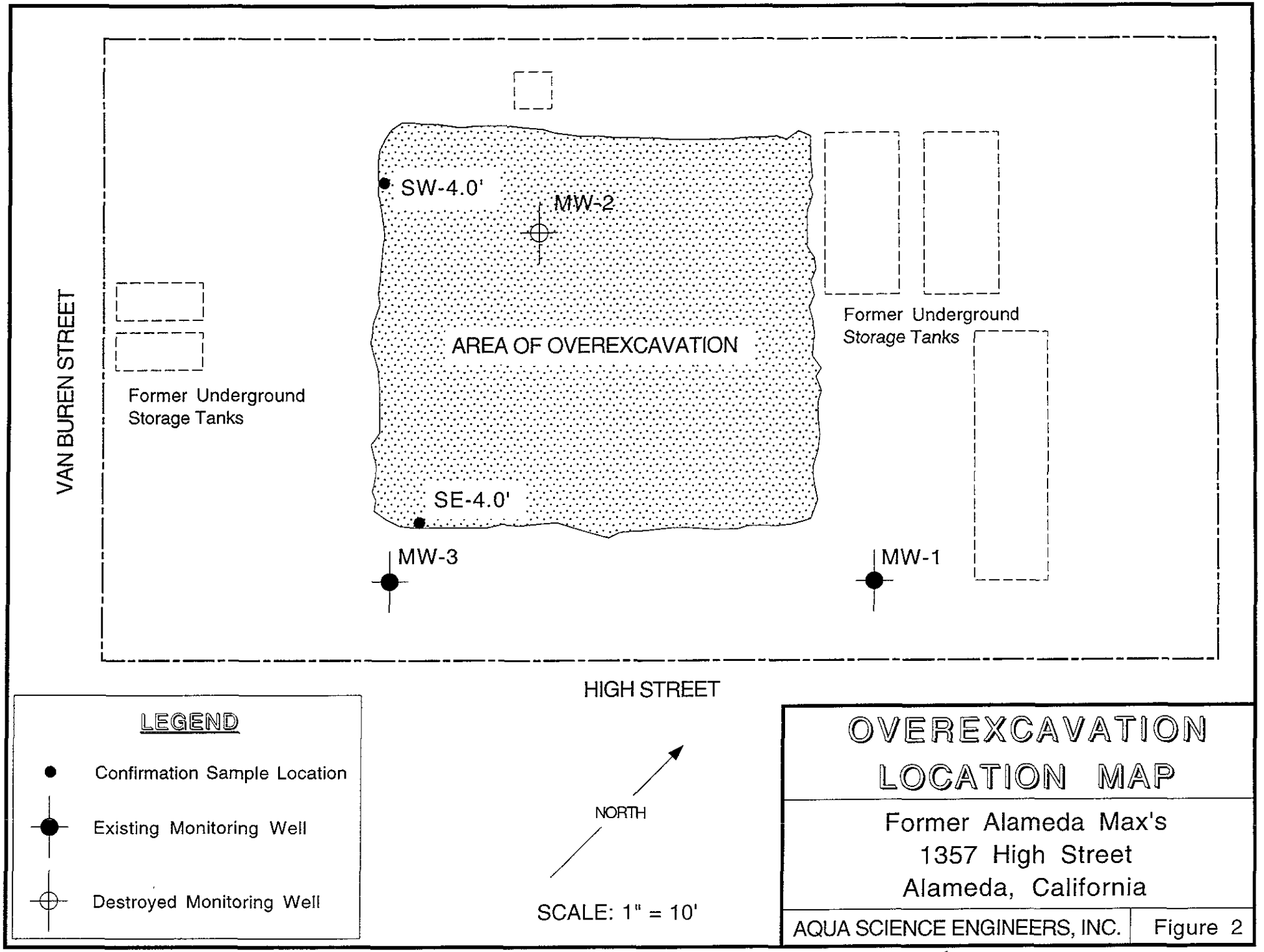


BASE. Oakland East and Oakland West 7.5 minute quadrangle topographic map, dated 1980, scale 1:24,000.

SITE LOCATION MAP

Alameda Max's
1357 High Street
Alameda, California

Aqua Science Engineers | Figure 1



OVEREXCAVATION LOCATION MAP

Former Alameda Max's
1357 High Street
Alameda, California

AQUA SCIENCE ENGINEERS, INC. | Figure 2

APPENDIX A

Alameda County Health Care Services Agency
"Direction" Letter

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, Assistant Agency Director

ALAMEDA COUNTY CC 430-4510
DEPT. OF ENVIRONMENTAL HEALTH
ENVIRONMENTAL PROTECTION DIVISION
1131 HARBOR BAY PKWY., RM.250
ALAMEDA, CAL. 94502-6577

April 11, 1995

Mr. James Phillipsen
3111 Marina Drive
Alameda, CA 94501

STID 1702

Re: Required investigations at 1357 High Street, Alameda, California

Dear Mr. Phillipsen,

This office has reviewed Aqua Science Engineer's (ASE) Quarterly Groundwater Monitoring Report, dated April 3, 1995, for the above site. During the last four quarters of on-site ground water monitoring, floating product, and elevated levels of Total Petroleum Hydrocarbons as gasoline (TPHg), Total Petroleum Hydrocarbons as diesel (TPHd), and benzene have been identified. Additionally, for the last three quarters of ground water monitoring in the off-site downgradient well, MW-4, TPHg, TPHd, and concentrations of benzene exceeding drinking water standards have consistently been identified.

Per Article 11 Title 23 California Code of Regulations, the extent of the contaminant plume should be delineated. Due to the shallow groundwater table, this office is concerned about the potential for any utility lines along High Street to be acting as a conduit for plume migration. As part of the next phase of work at the site, you are required to determine whether there are any utility lines along High Street and whether the plume is migrating along the utility trench.

Based on the free product observed in Well MW-2, and the analysis results for soil samples collected from this location in March 1994 (1,400 parts per million (ppm) TPHd and 7,500 ppm Total Oil & Grease (TOG) at 3-feet below ground surface), there still appears to be an ongoing source of contaminants in this area. Per Article 11 Title 23 California Code of Regulations, you are required to implement interim remedial measures to periodically remove the observed floating product. Based on the amount of floating product present, passive product skimmers may be one acceptable option for product removal. According to the April 1995 Quarterly Report, the contents of the floating product was not characterized. This office is requesting that you identify the type of product identified in Well MW-2, so that we can better determine the source of this product.

Please submit a work plan within 45 days of the date of this letter, addressing the above concerns.

Throughout the last year of ground water monitoring, the levels of TPHg, TPHd, and benzene observed in all the monitoring wells have remained fairly consistent, even with the overexcavation work conducted at the site. This indicates that there may still be an ongoing source for these contaminants. For example, soil sample #6, which was collected from the sidewall of the former gasoline tank pit, identified 140ppm TPHg and 120 parts per billion (ppb) benzene. Although initial recommendations proposed to overexcavate this area, no overexcavation was ever conducted in this location.

If after the next quarterly monitoring event, commensurate contaminant concentrations are still being identified in the wells, you will be required to submit an additional work plan addressing measures to contain the plume from migrating further off site. Additionally, if it appears that any remaining contaminant sources continue to significantly impact ground water, remedial measures shall be taken.

If you have any questions or comments, please contact me at (510) 567-6763.

Sincerely,

Juliet Shin
Senior Hazardous Materials Specialist

cc: Robert E. Kitay
Aqua Science Engineers, Inc.
2411 Old Crow Canyon Rd., #4
San Ramon, CA 94583

Cheryl Gordon
Division of Clean Water Programs
P.O. Box 944212
Sacramento, CA 94224-2120

File

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, DIRECTOR

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To Robert Kitay	From Juliet Shin
Co. Aqua Science	Co. Alameda County
Dept.	Phone # 510-567-6763
Fax # 837-4853	Fax # 510-337-9335

February 28, 1996

Mr. James A. Phillipsen
3111 Marina Drive
Alameda, CA 94501

STID 1702

Re: Second work plan for excavation at 1357 High Street, Alameda, California

Dear Mr. Phillipsen,

This office has reviewed Aqua Science Engineers' work plan, dated February 14, 1996, which was submitted in response to the discovery that floating product still exists at the site. Although floating product was thought to have dissipated with the employment of the oil skimmer, recent borings placed at the site on January 29, 1996 verified that extensive amounts of floating product still exist at very shallow depths. Therefore, similar to the January 22, 1996 proposal, the above February 1996 work plan proposes the destruction and replacement of Well MW-2 and overexcavation of the area adjacent to the former waste oil UST in an attempt to eliminate the observed floating product and the source of the floating product. This workplan is acceptable to this office.

Confirmation soil samples collected from the excavation shall be analyzed for TPHg, TPHd, Oil & Grease, BTEX, PNAs, and chlorinated hydrocarbons. Per the August 22, 1995 report, a former sample of the floating product identified hydrocarbons with carbon chains as high as C44. Please make sure that the applied Oil & Grease analysis encompasses these higher carbon chains.

Please be reminded that the next quarterly groundwater monitoring is due to be conducted at the site in March 1996. Please notify this office at least one week in advance of field work.

If you have any questions or comments, please contact me at (510) 567-6763.

Sincerely,

Juliet Shin
Senior Hazardous Materials Specialist

cc: Robert E. Kitay, Aqua Science Engineers, Inc., 2411 Old Crow Canyon Road #4
San Ramon, CA 94583

Acting Chief-File

APPENDIX B

Well Destruction 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 Former Alameda Marine Property
1357 High Street
Alameda, CA 94501

CLIENT
Name James Phillipsen
Address 311 Marina Drive Voice (510) 523-8964
City Alameda, CA Zip 94501

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	
Monitoring		Well Destruction	X

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

DRILLING METHOD:
Mud Rotary ___ Air Rotary ___ Auger X
Cable ___ Other ___

DRILLER'S LICENSE NO. C-57 582696

WELL PROJECTS
Drill Hole Diameter 10 in. Maximum
Casing Diameter 4 in. Depth 25 ft.
Surface Seal Depth 25 ft. Number 1

GEOTECHNICAL PROJECTS
Number of Borings ___ Maximum
Hole Diameter ___ in. Depth ___ ft.

ESTIMATED STARTING DATE 3-13-96
ESTIMATED COMPLETION DATE 3-15-96

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

APPLICANT'S SIGNATURE Robert E. Kitay Date 3-8-96

FOR OFFICE USE

PERMIT NUMBER 96184
LOCATION NUMBER 2S/3W 18K80

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 12 Mar 96
Wyman Hong

91992

12 March 1996

ZONE 7
WATER RESOURCES ENGINEERING
DRILLING ORDINANCE

JAMES PHILLIPSEN
1357 HIGH STREET
ALAMEDA
WELLS 2S/3W 18K80
PERMIT 96184

Destruction Requirements:

1. Drill out the well so that the casing, seal, and gravel pack are removed to the bottom of the well.

2. Sound the well as deeply as practicable and record for your report.

3. Using a tremie pipe, fill the hole to 2 feet below the lower of finished grade or original ground with neat cement.

4. After the seal has set, backfill the remaining hole with compacted material.

These destruction requirements as proposed by Robert Kitay of Aqua Science Engineers meet or exceed the Zone 7 minimum requirements.

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

APPENDIX C

Excavation Water Manifest

22755

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	2. Page 1 of 1	3. Document Number NH-№ 2966

4. Generator's Name and Mailing Address
Clearwater Environmental Management
PO Box 7420
Fremont, CA 94537-7420
Generator's Phone 510-797-8511

Profile # 296-179-IV

5. Transporter Company Name	6. US EPA ID Number	7. Transporter Phone
Clearwater Env. Mgt.	CAR000007013	510-797-8511

8. Designated Facility Name and Site Address	9. US EPA ID Number	10. Facility's Phone
McKittrick Waste Treatment Site 56533 Hwy 58, West McKittrick, CA 93251	CAD980636831	805-762-7366

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS WASTE LIQUID	001	TT	700	G
b.				

15. Special Handling Instructions and Additional Information
Wear Protective Gear

Emergency Contact
510-797-8511
ATTN: Steve Stone

Site Aqua Science
1357 High Street
Alameda, CA

Handling Codes for Wastes Listed Above	
11a	11b

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to state or federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Steven R Stone	Steven R Stone	04	19	96

17. Transporter Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Steven R Stone	Steven R Stone	04	19	96

18. Discrepancy Indication Space

RECEIVED

19. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in item 18.

Printed/Typed Name	Signature	Month	Day	Year
PH-7.0 TONS: 2.26 R. Wilkerson	R Wilkerson	4	20	96

WHITE – ORIGINAL (Return to Generator) YELLOW – TSDF (Retain Copy) PINK – TRANSPORTER COPY GOLDENROD – GENERATOR'S COPY

APPENDIX D

Analytical Report and Chain of Custody Form
For Confirmation 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: 29-APR-96
Lab Job Number: 125268
Project ID: 2607
Location: Phillipsen

Reviewed by: _____

Reviewed by: _____

Polynuclear Aromatic Hydrocarbons by GC/MS

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8270
Prep Method: EPA 3550

Field ID: SE-4.0'
Lab ID: 125268-001
Matrix: Soil
Batch#: 27174
Units: ug/Kg
Diln Fac: 1

Sampled: 04/19/96
Received: 04/22/96
Extracted: 04/23/96
Analyzed: 04/26/96

Analyte	Result	Reporting Limit
Naphthalene	ND	50
Acenaphthylene	ND	50
Acenaphthene	ND	50
Fluorene	ND	50
Phenanthrene	ND	50
Anthracene	ND	50
Fluoranthene	ND	50
Pyrene	ND	50
Benzo(a)anthracene	ND	50
Chrysene	ND	50
Benzo(b)fluoranthene	ND	50
Benzo(k)fluoranthene	ND	50
Benzo(a)pyrene	ND	50
Indeno(1,2,3-cd)pyrene	ND	50
Dibenz(a,h)anthracene	ND	50
Benzo(g,h,i)perylene	ND	50

Surrogate	%Recovery	Recovery Limits
Nitrobenzene-d5	67	23-120
2-Fluorobiphenyl	82	30-115
Terphenyl-d14	114	18-137

Polynuclear Aromatic Hydrocarbons by GC/MS

Client:	Aqua Science Engineers, Inc.	Analysis Method:	EPA 8270
Project#:	2607	Prep Method:	EPA 3550
Location:	Phillipsen		

Field ID:	SW-4.0'	Sampled:	04/19/96
Lab ID:	125268-002	Received:	04/22/96
Matrix:	Soil	Extracted:	04/23/96
Batch#:	27174	Analyzed:	04/29/96
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Naphthalene	1300	50
Acenaphthylene	ND	50
Acenaphthene	ND	50
Fluorene	ND	50
Phenanthrene	ND	50
Anthracene	ND	50
Fluoranthene	ND	50
Pyrene	ND	50
Benzo(a)anthracene	ND	50
Chrysene	ND	50
Benzo(b)fluoranthene	ND	50
Benzo(k)fluoranthene	ND	50
Benzo(a)pyrene	ND	50
Indeno(1,2,3-cd)pyrene	ND	50
Dibenz(a,h)anthracene	ND	50
Benzo(g,h,i)perylene	ND	50

Surrogate	%Recovery	Recovery Limits
Nitrobenzene-d5	112	23-120
2-Fluorobiphenyl	90	30-115
Terphenyl-d14	99	18-137

Curtis & Tompkins, Ltd.

Lab #: 125268 BATCH QC REPORT

Polynuclear Aromatic Hydrocarbons by GC/MS

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8270
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 27174
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/23/96
Analysis Date: 04/26/96

MB Lab ID: QC19978

Analyte	Result	Reporting Limit
Naphthalene	ND	50
Acenaphthylene	ND	50
Acenaphthene	ND	50
Fluorene	ND	50
Phenanthrene	ND	50
Anthracene	ND	50
Fluoranthene	ND	50
Pyrene	ND	50
Benzo(a)anthracene	ND	50
Chrysene	ND	50
Benzo(b)fluoranthene	ND	50
Benzo(k)fluoranthene	ND	50
Benzo(a)pyrene	ND	50
Indeno(1,2,3-cd)pyrene	ND	50
Dibenz(a,h)anthracene	ND	50
Benzo(g,h,i)perylene	ND	50

Surrogate	%Rec	Recovery Limits
Nitrobenzene-d5	69	23-120
2-Fluorobiphenyl	78	30-115
Terphenyl-d14	94	18-137

Curtis & Tompkins, Ltd.

Lab #: 125268 BATCH QC REPORT

Polynuclear Aromatic Hydorcarbons by GC/MS

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8270
Prep Method: EPA 3550

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 27174
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/23/96
Analysis Date: 04/26/96

LCS Lab ID: QC19979

Analyte	Result	Spike Added	%Rec #	Limits
Acenaphthene	705.5	833.3	85	31-137
Pyrene	778.8	833.3	93	35-142

Surrogate	%Rec	Limits
Nitrobenzene-d5	80	23-120
2-Fluorobiphenyl	87	30-115
Terphenyl-d14	96	18-137

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

Curtis & Tompkins, Ltd.

Lab #: 125268 BATCH QC REPORT

Polynuclear Aromatic Hydrocarbons by GC/MS

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8270
Prep Method: EPA 3550

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 125257-014
Matrix: Soil
Batch#: 27174
Units: ug/Kg dry weight
Diln Fac: 1

Sample Date: 04/17/96
Received Date: 04/19/96
Prep Date: 04/23/96
Analysis Date: 04/30/96
Moisture: 60%

MS Lab ID: QC19980

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Acenaphthene	2083	<8250	1504	72	31-137
Pyrene	2083	<8250	1670	80	35-142
Surrogate	**%Rec**	**Limits**			
Nitrobenzene-d5	77	23-120			
2-Fluorobiphenyl	78	30-115			
Terphenyl-d14	83	18-137			

MSD Lab ID: QC19981

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Acenaphthene	2083	1465	70	31-137	3	<21
Pyrene	2083	1624	78	35-142	3	<28
Surrogate	**%Rec**	**Limits**				
Nitrobenzene-d5	77	23-120				
2-Fluorobiphenyl	78	30-115				
Terphenyl-d14	83	18-137				

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 2 outside limits
Spike Recovery: 0 out of 4 outside limits

Curtis & Tompkins, Ltd.

Client: Aqua Science Engineers, Inc.

Laboratory Login Number: 125268

Project Name: Phillipsen
Project Number: 2607

Report Date: 29 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
125268-001	SE-4.0'	Soil	19-APR-96	22-APR-96	25-APR-96	3000	mg/Kg	50	TR	27217
125268-002	SW-4.0'	Soil	19-APR-96	22-APR-96	25-APR-96	ND	mg/Kg	50	TR	27217

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: Phillipsen
Project Number: 2607

Laboratory Login Number: 125268
Report Date: 29 April 96

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 27217**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	50	mg/Kg	SMWW 17:5520EF	25-APR-96

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	84%	SMWW 17:5520EF	25-APR-96
BSD	87%	SMWW 17:5520EF	25-APR-96

		Control Limits
Average Spike Recovery	86%	80% - 120%
Relative Percent Difference	3.6%	< 20%

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: SE-4.0'
Lab ID: 125268-001
Matrix: Soil
Batch#: 27167
Units: ug/Kg
Diln Fac: 1

Sampled: 04/19/96
Received: 04/22/96
Extracted: 04/23/96
Analyzed: 04/23/96

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	101	87-125
Bromofluorobenzene	83	79-122

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: SW-4.0'
Lab ID: 125268-002
Matrix: Soil
Batch#: 27189
Units: ug/Kg
Diln Fac: 25

Sampled: 04/19/96
Received: 04/22/96
Extracted: 04/25/96
Analyzed: 04/25/96

Analyte	Result	Reporting Limit
Chloromethane	ND	250
Bromomethane	ND	250
Vinyl Chloride	ND	250
Chloroethane	ND	250
Methylene Chloride	ND	500
Trichlorofluoromethane	ND	130
1,1-Dichloroethene	ND	130
1,1-Dichloroethane	ND	130
cis-1,2-Dichloroethene	ND	130
trans-1,2-Dichloroethene	ND	130
Chloroform	ND	130
Freon 113	ND	130
1,2-Dichloroethane	ND	130
1,1,1-Trichloroethane	ND	130
Carbon Tetrachloride	ND	130
Bromodichloromethane	ND	130
1,2-Dichloropropane	ND	130
cis-1,3-Dichloropropene	ND	130
Trichloroethene	ND	130
1,1,2-Trichloroethane	ND	130
trans-1,3-Dichloropropene	ND	130
Dibromochloromethane	ND	130
Bromoform	ND	130
Tetrachloroethene	ND	130
1,1,2,2-Tetrachloroethane	ND	130
Chlorobenzene	ND	130
1,3-Dichlorobenzene	ND	130
1,4-Dichlorobenzene	ND	130
1,2-Dichlorobenzene	ND	130

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	86	68-126
Toluene-d8	102	87-125
Bromofluorobenzene	104	79-122

Curtis & Tompkins, Ltd.

Lab #: 125268 BATCH QC REPORT

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 27167
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/23/96
Analysis Date: 04/23/96

MB Lab ID: QC19946

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	88	68-126
Toluene-d8	97	87-125
Bromofluorobenzene	91	79-122

Curtis & Tompkins, Ltd.

Lab #: 125268 BATCH QC REPORT

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 27167
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/23/96
Analysis Date: 04/23/96

MB Lab ID: QC19950

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	100	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	89	79-122

Curtis & Tompkins, Ltd.

Lab #: 125268 BATCH QC REPORT

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 27189
Units: ug/L
Diln Fac: 1

Prep Date: 04/24/96
Analysis Date: 04/24/96

MB Lab ID: QC20041

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	100	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	99	79-122

Curtis & Tompkins, Ltd.

Lab #: 125268 BATCH QC REPORT

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 27189
Units: ug/L
Diln Fac: 1

Prep Date: 04/24/96
Analysis Date: 04/24/96

MB Lab ID: QC20043

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	98	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	97	79-122

Curtis & Tompkins, Ltd

Lab #: 125268 BATCH QC REPORT

Halogenated Volatile Organics

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8240
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 125281-001
Matrix: Soil
Batch#: 27167
Units: ug/Kg
Diln Fac: 1

Sample Date: 04/22/96
Received Date: 04/22/96
Prep Date: 04/23/96
Analysis Date: 04/23/96

MS Lab ID: QC19947

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	0	51.64	103	51-180
Trichloroethene	50	3.166	60.95	116	73-141
Chlorobenzene	50	0	48.98	98	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	98	68-126
Toluene-d8	102	87-125
Bromofluorobenzene	96	79-122

MSD Lab ID: QC19948

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	59.48	119	51-180	14	<22
Trichloroethene	50	58.29	110	73-141	4	<24
Chlorobenzene	50	51.7	103	83-129	5	<21

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	94	68-126
Toluene-d8	97	87-125
Bromofluorobenzene	93	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 #: 125268 BATCH QC REPORT

Halogenated Volatile Organics

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8240
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 125285-002
Matrix: Water
Batch#: 27189
Units: ug/L
Diln Fac: 1

Sample Date: 04/15/96
Received Date: 04/22/96
Prep Date: 04/24/96
Analysis Date: 04/24/96

MS Lab ID: QC20044

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<1.000	55.93	112	51-180
Trichloroethene	50	<1.000	51.57	103	73-141
Chlorobenzene	50	<1.000	51.26	103	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	103	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	100	79-122

MSD Lab ID: QC20045

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	56.26	113	51-180	1	<22
Trichloroethene	50	51.33	103	73-141	0	<24
Chlorobenzene	50	52.1	104	83-129	2	<21

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	103	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	100	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 #: 125268 BATCH QC REPORT

Halogenated Volatile Organics

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 27167
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/23/96
Analysis Date: 04/23/96

LCS Lab ID: QC19945

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	45.74	50	92	51-180
Trichloroethene	51.55	50	103	73-141
Chlorobenzene	51.93	50	104	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	99	68-126
Toluene-d8	100	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

Curtis & Tompkins, Ltd.

Lab #: 125268 BATCH QC REPORT

Halogenated Volatile Organics

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 27189
Units: ug/L
Diln Fac: 1

Prep Date: 04/24/96
Analysis Date: 04/24/96

LCS Lab ID: QC20040

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	65.86	50	132	51-180
Trichloroethene	58.84	50	118	73-141
Chlorobenzene	54.95	50	110	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	99	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	102	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

TEH-Tot Ext Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
125268-001	SE-4.0'	27175	04/19/96	04/23/96	04/27/96	
125268-002	SW-4.0'	27175	04/19/96	04/23/96	04/27/96	

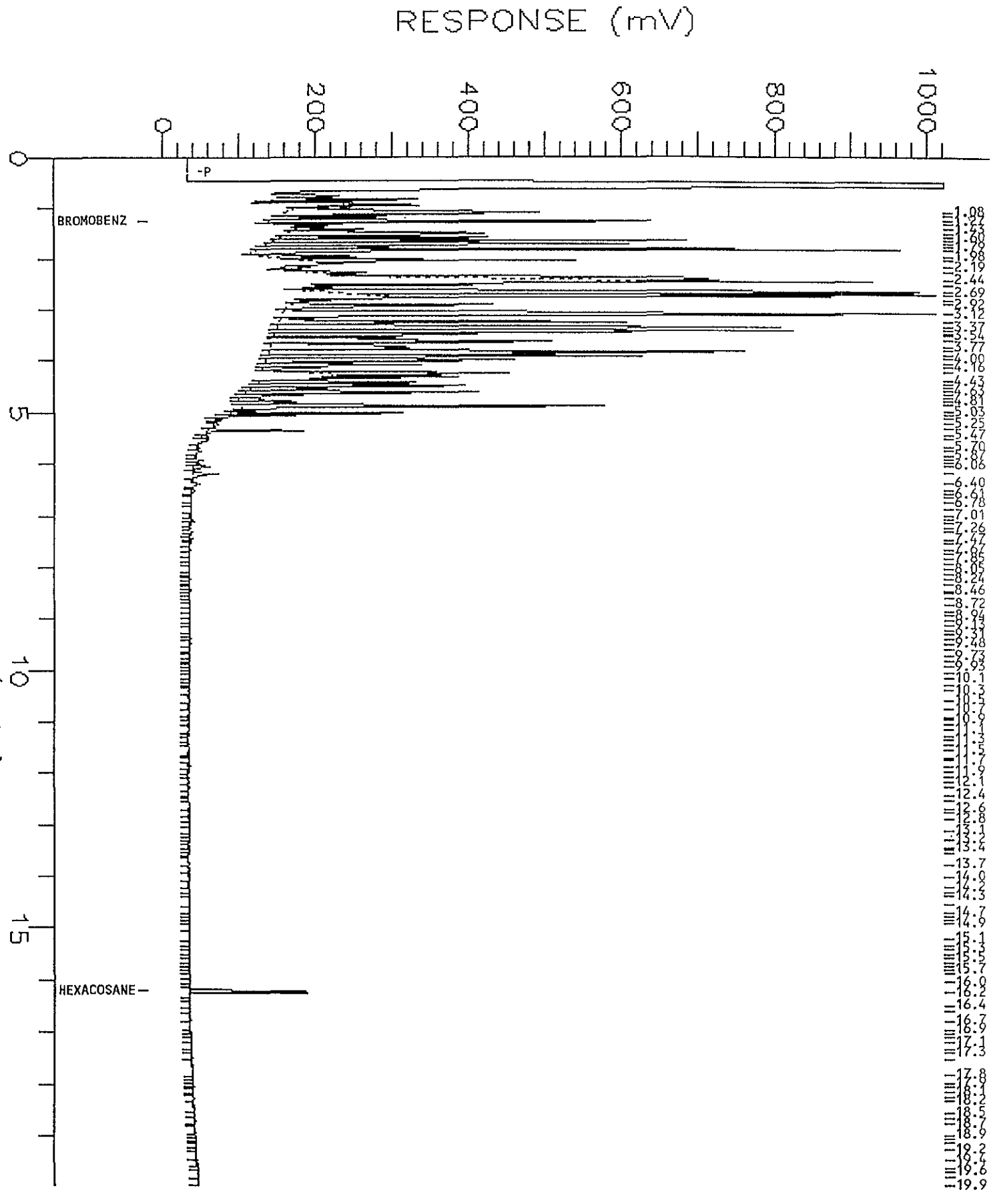
Analyte	Units	125268-001	125268-002
Diln Fac:		1	1
Diesel Range	mg/Kg	<1	250 YL
Surrogate			
Hexacosane	%REC	74	74

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

TEH Chromatogram-GC13 CH A

Sample Name : 125268-002,50:5
FileName : G:\GC13\CHA\117A052.raw
Method : 13A20.ins
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0 Plot Offset: -19 mV

Sample #: 27175 Page 1 of 1
Date : 4/29/96 09:22 AM
Time of Injection: 4/27/96 02:34 PM
Low Point : -19.19 mV High Point : 1024.00 mV
Plot Scale: 1043 mV



Curtis & Tompkins, Ltd.

Lab #: 125268 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

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

METHOD BLANK

Matrix: Soil
Batch#: 27175
Units: mg/Kg
Diln Fac: 1

Prep Date: 04/23/96
Analysis Date: 04/24/96

MB Lab ID: QC19982

Analyte	Result	
Diesel Range	<1.0	
Surrogate	%Rec	Recovery Limits
Hexacosane	76	60-140

Curtis & Tompkins, Ltd.

Lab #: 125268 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

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

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 27175
Units: mg/Kg
Diln Fac: 1

Prep Date: 04/23/96
Analysis Date: 04/24/96

LCS Lab ID: QC19983

Analyte	Result	Spike Added	%Rec #	Limits
Diesel Range	35.4	49.5	72	60-140
Surrogate	%Rec	Limits		
Hexacosane	80	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 #: 125268 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

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

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 125217-002
Matrix: Soil
Batch#: 27175
Units: mg/Kg dry weight
Diln Fac: 1

Sample Date: 04/13/96
Received Date: 04/16/96
Prep Date: 04/23/96
Analysis Date: 04/24/96
Moisture: 4%

MS Lab ID: QC19984

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Diesel Range	51.56	27.81	75	92	60-140
Surrogate	%Rec	Limits			
Hexacosane	77	60-140			

MSD Lab ID: QC19985

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Diesel Range	51.56	81.56	104	60-140	13	<30
Surrogate	%Rec	Limits				
Hexacosane	84	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 #: 125268 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

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

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 27209
Units: mg/Kg
Diln Fac: 1

Prep Date: 04/24/96
Analysis Date: 04/24/96

LCS Lab ID: QC20114

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	9.5	10	95	80-120
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	94	52-127		
Bromobenzene	74	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

Curtis & Tompkins, Ltd.

Lab #: 125268 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

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

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 27245
Units: ug/L
Diln Fac: 1

Prep Date: 04/25/96
Analysis Date: 04/25/96

LCS Lab ID: QC20249

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	1917	2006	96	80-120
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	103	52-127		
Bromobenzene	98	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

Curtis & Tompkins, Ltd.

Lab #: 125268

BATCH QC REPORT

BTXE

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 27209
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/24/96
Analysis Date: 04/24/96

LCS Lab ID: QC20115

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	102.1	100	102	80-120
Toluene	113.5	100	114	80-120
Ethylbenzene	110.4	100	110	80-120
m,p-Xylenes	226.2	200	113	80-120
o-Xylene	121	100	121 *	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	94	43-114
Bromobenzene	89	45-140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 1 out of 5 outside limits

Curtis & Tompkins, Ltd.

Lab #: 125268 BATCH QC REPORT

BTXE

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 27245
Units: ug/L
Diln Fac: 1

Prep Date: 04/25/96
Analysis Date: 04/25/96

LCS Lab ID: QC20250

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	20.4	20	102	80-120
Toluene	22.4	20	112	80-120
Ethylbenzene	21.8	20	109	80-120
m,p-Xylenes	45.1	40	113	80-120
o-Xylene	23	20	115	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	99	43-114
Bromobenzene	86	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

Curtis & Tompkins, Ltd.

Lab #: 125268 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

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

METHOD BLANK

Matrix: Soil
Batch#: 27209
Units: mg/Kg
Diln Fac: 1

Prep Date: 04/24/96
Analysis Date: 04/24/96

MB Lab ID: QC20113

Analyte	Result	
Gasoline	<1.0	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	84	52-127
Bromobenzene	62	47-112

Curtis & Tompkins, Ltd.

Lab #: 125268 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

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

METHOD BLANK

Matrix: Water
Batch#: 27245
Units: ug/L
Diln Fac: 1

Prep Date: 04/25/96
Analysis Date: 04/25/96

MB Lab ID: QC20248

Analyte	Result	
Gasoline	<1.0	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	97	52-127
Bromobenzene	79	47-112

Curtis & Tompkins, Ltd.

Lab #: 125268 BATCH QC REPORT

BTXE

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 27209
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/24/96
Analysis Date: 04/24/96

MB Lab ID: QC20113

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	92	43-114
Bromobenzene	85	45-140

Curtis & Tompkins, Ltd.

Lab #: 125268 BATCH QC REPORT

BTXE

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 27245
Units: ug/L
Diln Fac: 1

Prep Date: 04/25/96
Analysis Date: 04/25/96

MB Lab ID: QC20248

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	98	43-114
Bromobenzene	83	45-140

Curtis & Tompkins, Ltd.

Lab #: 125268 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

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

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 125302-001
Matrix: Soil
Batch#: 27209
Units: mg/Kg
Diln Fac: 1

Sample Date: 04/23/96
Received Date: 04/23/96
Prep Date: 04/24/96
Analysis Date: 04/24/96

MS Lab ID: QC20116

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	10	<1.000	9.1	91	65-135
Surrogate	**%Rec**	**Limits**			
Trifluorotoluene	95	52-127			
Bromobenzene	75	47-112			

MSD Lab ID: QC20199

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	10	8.8	88	65-135	3	<20
Surrogate	**%Rec**	**Limits**				
Trifluorotoluene	96	52-127				
Bromobenzene	77	47-112				

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 #: 125268 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

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

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 125328-001
Matrix: Water
Batch#: 27245
Units: ug/L
Diln Fac: 1

Sample Date: 04/23/96
Received Date: 04/25/96
Prep Date: 04/25/96
Analysis Date: 04/25/96

MS Lab ID: QC20251

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	2000	<50.00	1856	93	65-135
Surrogate	**%Rec**	**Limits**			
Trifluorotoluene	95	52-127			
Bromobenzene	91	47-112			

MSD Lab ID: QC20252

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	2000	1925	96	65-135	4	<20
Surrogate	**%Rec**	**Limits**				
Trifluorotoluene	99	52-127				
Bromobenzene	95	47-112				

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

TVH-Total Volatile Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
125268-001	SE-4.0'	27209	04/19/96	04/24/96	04/24/96	
125268-002	SW-4.0'	27245	04/19/96	04/25/96	04/25/96	

Analyte	Units	125268-001	125268-002
Diln Fac:		1	20
Gasoline	mg/Kg	<1	1300
Surrogate			
Trifluorotoluene	%REC	88	112
Bromobenzene	%REC	70	93

BTXE

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
125268-001	SE-4.0'	27209	04/19/96	04/24/96	04/24/96	
125268-002	SW-4.0'	27245	04/19/96	04/25/96	04/25/96	

Analyte	Units	125268-001	125268-002
Diln Fac:		1	20
Benzene	ug/Kg	<5	<100
Toluene	ug/Kg	<5	<100
Ethylbenzene	ug/Kg	<5	<100
m,p-Xylenes	ug/Kg	30	3200
o-Xylene	ug/Kg	6.5	<100
Surrogate			
Trifluorotoluene	%REC	99	100
Bromobenzene	%REC	91	96

125260

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 4-19-96 PAGE 1 OF 1

SAMPLERS (SIGNATURE) (PHONE NO.)
Scott T. Fecaman 510 820 9391

PROJECT NAME Phillipsen NO. 2607
ADDRESS 1357 High Street, Alameda

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:
5-Day

SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH-GASOLINE (EPA 5030/8015)	TPH-GASOLINE/BTEX (EPA 5030/8015-8020)	TPH-DIESEL (EPA 3510/8015)	PURGABLE AROMATICS (EPA 602/CC20)	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	8100 PAH's
SE-4.0'	4-19-96	13:45	soil	1		X	X		X			X						X
SW-4.0'	4-19-96	13:50	soil	1		X	X		X			X						X

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
Scott T. Fecaman	Jose Delgado			
(signature) (time)	(signature) (time)	(signature) (time)	(signature) (time)	
Scott T. Fecaman 4-22-96	JOSE DELGADO			
(printed name) (date)	(printed name) (date)	(printed name) (date)	(printed name) (date)	
Company- ASE, Inc	Company- CET 11:00 4/22/96	Company-	Company-	

APPENDIX E

Analytical Report and Chain of Custody Form
For Stockpile 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: 29-APR-96
Lab Job Number: 125267
Project ID: 2607
Location: Phillipsen

Reviewed by: _____

Reviewed by: _____

Semivolatile Organics by GC/MS

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8270
Prep Method: EPA 3550

Field ID: STKP(A-D)
Lab ID: 125267-001
Matrix: Soil
Batch#: 27174
Units: ug/Kg
Diln Fac: 5

Sampled: 04/19/96
Received: 04/22/96
Extracted: 04/23/96
Analyzed: 04/29/96

Analyte	Result	Reporting Limit
Phenol	ND	1700
2-Chlorophenol	ND	1700
Benzyl alcohol	ND	1700
2-Methylphenol	ND	1700
4-Methylphenol	ND	1700
2-Nitrophenol	ND	8300
2,4-Dimethylphenol	ND	1700
Benzoic acid	ND	8300
2,4-Dichlorophenol	ND	1700
4-Chloro-3-methylphenol	ND	1700
2,4,6-Trichlorophenol	ND	1700
2,4,5-Trichlorophenol	ND	8300
2,4-Dinitrophenol	ND	8300
4-Nitrophenol	ND	8300
4,6-Dinitro-2-methylphenol	ND	8300
Pentachlorophenol	ND	8300
N-Nitrosodimethylamine	ND	1700
Aniline	ND	1700
bis(2-Chloroethyl)ether	ND	1700
1,3-Dichlorobenzene	ND	1700
1,4-Dichlorobenzene	ND	1700
1,2-Dichlorobenzene	ND	1700
bis(2-Chloroisopropyl) ether	ND	1700
N-Nitroso-di-n-propylamine	ND	1700
Hexachloroethane	ND	1700
Nitrobenzene	ND	1700
Isophorone	ND	1700
bis(2-Chloroethoxy)methane	ND	1700
1,2,4-Trichlorobenzene	ND	1700
Naphthalene	ND	1700
4-Chloroaniline	ND	1700
Hexachlorobutadiene	ND	1700
2-Methylnaphthalene	ND	1700
Hexachlorocyclopentadiene	ND	1700
2-Chloronaphthalene	ND	1700
2-Nitroaniline	ND	8300
Dimethylphthalate	ND	1700
Acenaphthylene	ND	1700

Semivolatile Organics by GC/MS

Field ID: STKP(A-D)
Lab ID: 125267-001
Matrix: Soil
Batch#: 27174
Units: ug/Kg
Diln Fac: 5

Sampled: 04/19/96
Received: 04/22/96
Extracted: 04/23/96
Analyzed: 04/29/96

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	1700
3-Nitroaniline	ND	8300
Acenaphthene	ND	1700
Dibenzofuran	ND	1700
2,4-Dinitrotoluene	ND	1700
Diethylphthalate	ND	1700
4-Chlorophenyl-phenylether	ND	1700
Fluorene	ND	1700
4-Nitroaniline	ND	8300
N-Nitrosodiphenylamine	ND	1700
Azobenzene	ND	1700
4-Bromophenyl-phenylether	ND	1700
Hexachlorobenzene	ND	1700
Phenanthrene	ND	1700
Anthracene	ND	1700
Di-n-butylphthalate	ND	1700
Fluoranthene	ND	1700
Benzidine	ND	1700
Pyrene	ND	1700
Butylbenzylphthalate	ND	1700
3,3'-Dichlorobenzidine	ND	8300
Benzo(a)anthracene	ND	1700
Chrysene	ND	1700
bis(2-Ethylhexyl)phthalate	ND	1700
Di-n-octylphthalate	ND	1700
Benzo(b)fluoranthene	ND	1700
Benzo(k)fluoranthene	ND	1700
Benzo(a)pyrene	ND	1700
Indeno(1,2,3-cd)pyrene	ND	1700
Dibenz(a,h)anthracene	ND	1700
Benzo(g,h,i)perylene	ND	1700

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	68	25-121
Phenol-d5	80	24-113
2,4,6-Tribromophenol	47	19-122
Nitrobenzene-d5	57	23-120
2-Fluorobiphenyl	87	30-115
Terphenyl-d14	97	18-137

Semivolatile Organics by GC/MS

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8270
Prep Method: EPA 3550

Field ID: STKP(E-H)
Lab ID: 125267-002
Matrix: Soil
Batch#: 27174
Units: ug/Kg
Diln Fac: 1

Sampled: 04/19/96
Received: 04/22/96
Extracted: 04/23/96
Analyzed: 04/29/96

Analyte	Result	Reporting Limit
Phenol	ND	330
2-Chlorophenol	ND	330
Benzyl alcohol	ND	330
2-Methylphenol	ND	330
4-Methylphenol	ND	330
2-Nitrophenol	ND	1700
2,4-Dimethylphenol	ND	330
Benzoic acid	ND	1700
2,4-Dichlorophenol	ND	330
4-Chloro-3-methylphenol	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	1700
2,4-Dinitrophenol	ND	1700
4-Nitrophenol	ND	1700
4,6-Dinitro-2-methylphenol	ND	1700
Pentachlorophenol	ND	1700
N-Nitrosodimethylamine	ND	330
Aniline	ND	330
bis(2-Chloroethyl)ether	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
bis(2-Chloroisopropyl) ether	ND	330
N-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
bis(2-Chloroethoxy)methane	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	330
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
2-Methylnaphthalene	ND	330
Hexachlorocyclopentadiene	ND	330
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	1700
Dimethylphthalate	ND	330
Acenaphthylene	ND	330

Semivolatile Organics by GC/MS

Field ID: STKP(E-H)
Lab ID: 125267-002
Matrix: Soil
Batch#: 27174
Units: ug/Kg
Diln Fac: 1

Sampled: 04/19/96
Received: 04/22/96
Extracted: 04/23/96
Analyzed: 04/29/96

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	1700
Acenaphthene	ND	330
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330
Diethylphthalate	ND	330
4-Chlorophenyl-phenylether	ND	330
Fluorene	ND	330
4-Nitroaniline	ND	1700
N-Nitrosodiphenylamine	ND	330
Azobenzene	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Fluoranthene	ND	330
Benzidine	ND	330
Pyrene	ND	330
Butylbenzylphthalate	ND	330
3,3'-Dichlorobenzidine	ND	1700
Benzo(a)anthracene	ND	330
Chrysene	ND	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	78	25-121
Phenol-d5	85	24-113
2,4,6-Tribromophenol	79	19-122
Nitrobenzene-d5	83	23-120
2-Fluorobiphenyl	90	30-115
Terphenyl-d14	104	18-137

EPA 8270 Semi-Volatile Organics

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8270
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 27174
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/23/96
Analysis Date: 04/26/96

MB Lab ID: QC19978

Analyte	Result	Reporting Limit
Phenol	ND	330
2-Chlorophenol	ND	330
Benzyl alcohol	ND	330
2-Methylphenol	ND	330
4-Methylphenol	ND	330
2-Nitrophenol	ND	1700
2,4-Dimethylphenol	ND	330
Benzoic acid	ND	1700
2,4-Dichlorophenol	ND	330
4-Chloro-3-methylphenol	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	1700
2,4-Dinitrophenol	ND	1700
4-Nitrophenol	ND	1700
4,6-Dinitro-2-methylphenol	ND	1700
Pentachlorophenol	ND	1700
N-Nitrosodimethylamine	ND	330
Aniline	ND	330
bis(2-Chloroethyl)ether	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
bis(2-Chloroisopropyl) ether	ND	330
N-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
bis(2-Chloroethoxy)methane	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	330
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
2-Methylnaphthalene	ND	330
Hexachlorocyclopentadiene	ND	330
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	1700
Dimethylphthalate	ND	330
Acenaphthylene	ND	330
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	1700

EPA 8270 Semi-Volatile Organics

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8270
Prep Method: EPA 3550

METHOD BLANK

Matrix: Soil
Batch#: 27174
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/23/96
Analysis Date: 04/26/96

MB Lab ID: QC19978

Analyte	Result	Reporting Limit
Acenaphthene	ND	330
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330
Diethylphthalate	ND	330
4-Chlorophenyl-phenylether	ND	330
Fluorene	ND	330
4-Nitroaniline	ND	1700
N-Nitrosodiphenylamine	ND	330
Azobenzene	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Fluoranthene	ND	330
Benzidine	ND	330
Pyrene	ND	330
Butylbenzylphthalate	ND	330
3,3'-Dichlorobenzidine	ND	1700
Benzo(a)anthracene	ND	330
Chrysene	ND	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

Surrogate	%Rec	Recovery Limits
2-Fluorophenol	82	25-121
Phenol-d5	78	24-113
2,4,6-Tribromophenol	46	19-122
Nitrobenzene-d5	69	23-120
2-Fluorobiphenyl	78	30-115
Terphenyl-d14	94	18-137

Curtis & Tompkins, Ltd.

Lab #: 125267 BATCH QC REPORT

EPA 8270 Semi-Volatile Organics

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8270
Prep Method: EPA 3550

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 27174
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/23/96
Analysis Date: 04/26/96

LCS Lab ID: QC19979

Analyte	Result	Spike Added	%Rec #	Limits
Phenol	1400	1667	84	26-90
2-Chlorophenol	1396	1667	84	25-102
4-Chloro-3-methylphenol	1300	1667	78	26-103
4-Nitrophenol	827.1	1667	50	11-114
Pentachlorophenol	341.3	1667	20	17-109
1,4-Dichlorobenzene	710.7	833	85	28-104
N-Nitroso-di-n-propylamine	676.2	833	81	41-126
1,2,4-Trichlorobenzene	653.9	833	78	38-107
Acenaphthene	705.5	833.3	85	31-137
2,4-Dinitrotoluene	592.9	833	71	28-89
Pyrene	778.8	833.3	93	35-142

Surrogate	%Rec	Limits
2-Fluorophenol	92	25-121
Phenol-d5	92	24-113
2,4,6-Tribromophenol	84	19-122
Nitrobenzene-d5	80	23-120
2-Fluorobiphenyl	87	30-115
Terphenyl-d14	96	18-137

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 11 outside limits

Curtis & Tompkins, Ltd.

Lab #: 125267 BATCH QC REPORT

EPA 8270 Semi-Volatile Organics

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8270
Prep Method: EPA 3550

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 125257-014
Matrix: Soil
Batch#: 27174
Units: ug/Kg dry weight
Diln Fac: 1

Sample Date: 04/17/96
Received Date: 04/19/96
Prep Date: 04/23/96
Analysis Date: 04/30/96
Moisture: 60%

MS Lab ID: QC19980

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Phenol	4168	<8250	2962	71	26-90
2-Chlorophenol	4168	<8250	3033	73	25-102
4-Chloro-3-methylphenol	4168	<8250	3207	77	26-103
4-Nitrophenol	4168	<42500	1776	43	11-114
Pentachlorophenol	4168	<42500	1700	41	17-109
1,4-Dichlorobenzene	2083	<8250	1563	75	28-104
N-Nitroso-di-n-propylamine	2083	<8250	1502	72	41-126
1,2,4-Trichlorobenzene	2083	<8250	1519	73	38-107
Acenaphthene	2083	<8250	1504	72	31-137
2,4-Dinitrotoluene	2083	<8250	922.5	44	28-89
Pyrene	2083	<8250	1670	80	35-142

Surrogate	%Rec	Limits
2-Fluorophenol	74	25-121
Phenol-d5	79	24-113
2,4,6-Tribromophenol	69	19-122
Nitrobenzene-d5	77	23-120
2-Fluorobiphenyl	78	30-115
Terphenyl-d14	83	18-137

MSD Lab ID: QC19981

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Phenol	4168	2942	71	26-90	0	<35
2-Chlorophenol	4168	2674	64	25-102	13	<50
4-Chloro-3-methylphenol	4168	3281	79	26-103	3	<33
4-Nitrophenol	4168	1680	40	11-114	7	<50
Pentachlorophenol	4168	1681	40	17-109	2	<47
1,4-Dichlorobenzene	2083	1584	76	28-104	1	<27
N-Nitroso-di-n-propylamine	2083	1332	64	41-126	12	<38
1,2,4-Trichlorobenzene	2083	1508	72	38-107	1	<23
Acenaphthene	2083	1465	70	31-137	3	<19
2,4-Dinitrotoluene	2083	855	41	28-89	7	<47
Pyrene	2083	1624	78	35-142	3	<36

Surrogate	%Rec	Limits
2-Fluorophenol	73	25-121
Phenol-d5	79	24-113
2,4,6-Tribromophenol	69	19-122
Nitrobenzene-d5	77	23-120
2-Fluorobiphenyl	78	30-115
Terphenyl-d14	83	18-137

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits

TEH-Tot Ext Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
125267-001	STKP(A-D)	27175	04/19/96	04/23/96	04/29/96	
125267-002	STKP(E-H)	27175	04/19/96	04/23/96	04/27/96	

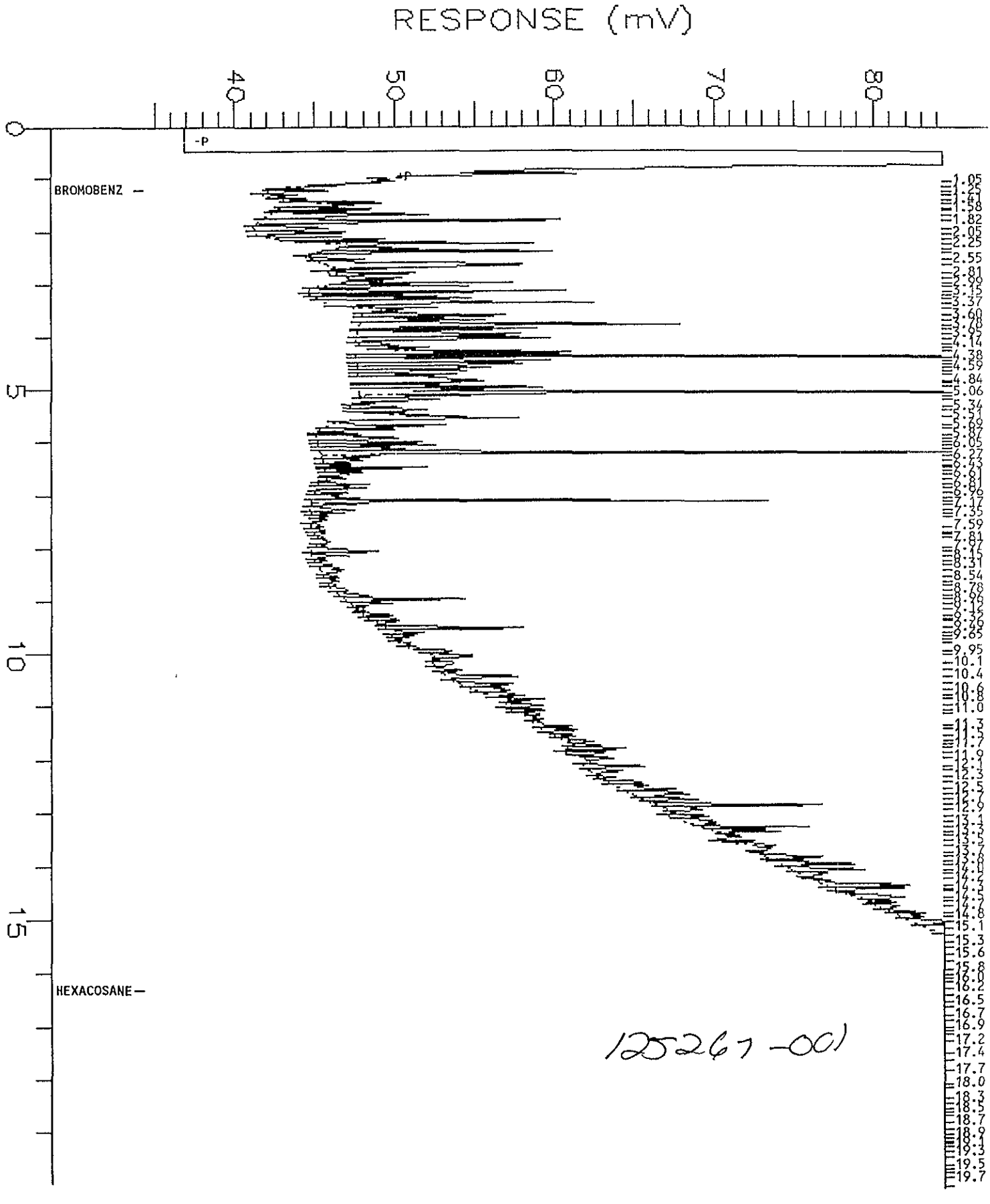
Analyte	Units	125267-001	125267-002
Diln Fac:		10	1
Diesel Range	mg/Kg	1500 YLH	330 YLH
Surrogate			
Hexacosane	%REC	DO	87

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 Chromatogram-GC13 CH A

Sample Name : 125267-001,50:50
FileName : g:\gc13\cha\120A005.raw
Method : 13A20.ins
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: -1 Plot Offset: 34 mV

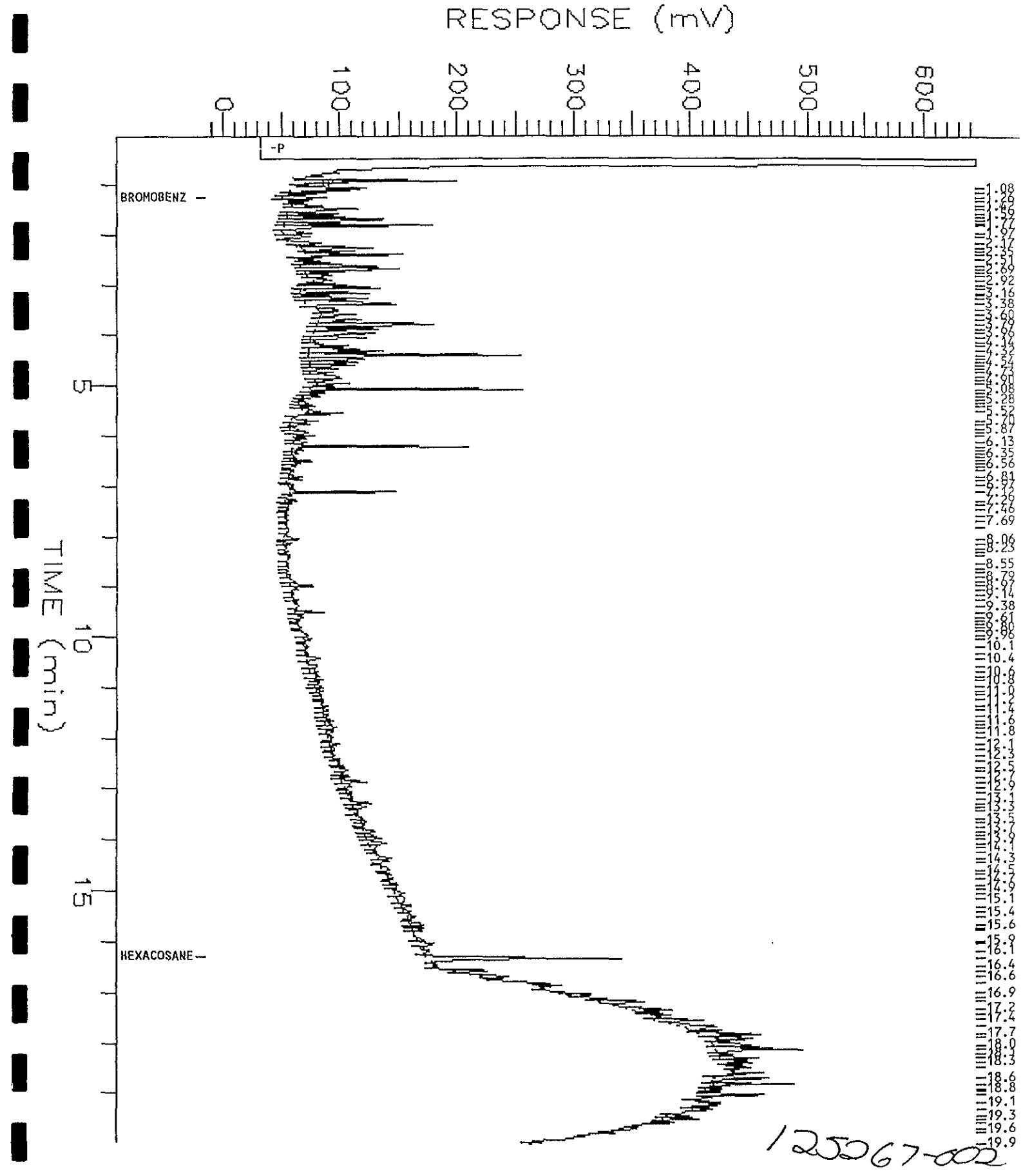
Sample #: 27175 Page 1 of 1
Date : 4/29/96 11:24 AM
Time of Injection: 4/29/96 11:02 AM
Low Point : 34.31 mV High Point : 84.31 mV
Plot Scale: 50 mV



TEH Chromatogram-GC13 CH A

Sample Name : 125267-002,50:5
FileName : G:\GC13\CHA\117A054.raw
Method : 13A20.ins
Start Time : 0.01 min End Time : 20.00 min
Scale Factor: 0 Plot Offset: -15 mV

Sample #: 27175 Page 1 of 1
Date : 4/29/96 09:25 AM
Time of Injection: 4/27/96 03:34 PM
Low Point : -15.33 mV High Point : 644.58 mV
Plot Scale: 660 mV



125267-002

Curtis & Tompkins, Ltd.

Lab #: 125267

BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

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

METHOD BLANK

Matrix: Soil
Batch#: 27175
Units: mg/Kg
Diln Fac: 1

Prep Date: 04/23/96
Analysis Date: 04/24/96

MB Lab ID: QC19982

Analyte	Result	
Diesel Range	<1.0	
Surrogate	%Rec	Recovery Limits
Hexacosane	76	60-140

Curtis & Tompkins, Ltd.

Lab #: 125267 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

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

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 27175
Units: mg/Kg
Diln Fac: 1

Prep Date: 04/23/96
Analysis Date: 04/24/96

LCS Lab ID: QC19983

Analyte	Result	Spike Added	%Rec #	Limits
Diesel Range	35.4	49.5	72	60-140
Surrogate	%Rec	Limits		
Hexacosane	80	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 #: 125267 BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

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

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 125217-002
Matrix: Soil
Batch#: 27175
Units: mg/Kg dry weight
Diln Fac: 1

Sample Date: 04/13/96
Received Date: 04/16/96
Prep Date: 04/23/96
Analysis Date: 04/24/96
Moisture: 4%

MS Lab ID: QC19984

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Diesel Range	51.56	27.81	75	92	60-140
Surrogate	%Rec	Limits			
Hexacosane	77	60-140			

MSD Lab ID: QC19985

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Diesel Range	51.56	81.56	104	60-140	13	<30
Surrogate	%Rec	Limits				
Hexacosane	84	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.

Client: Aqua Science Engineers, Inc.

Laboratory Login Number: 125267

Project Name: Phillipsen
Project Number: 2607

Report Date: 29 April 96

ANALYSIS: Total Oil & Grease (Gravimetric)

METHOD: SMWW 17:5520E

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
125267-001	STKP(A-D)	Soil	19-APR-96	22-APR-96	25-APR-96	4300	mg/Kg	50	TR	27218
125267-002	STKP(E-H)	Soil	19-APR-96	22-APR-96	25-APR-96	1300	mg/Kg	50	TR	27218

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: Phillipsen
Project Number: 2607

Laboratory Login Number: 125267
Report Date: 29 April 96

ANALYSIS: Total Oil & Grease (Gravimetric)

QC Batch Number: 27218

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	50	mg/Kg	SMWW 17:5520E	25-APR-96

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	94%	SMWW 17:5520E	25-APR-96
BSD	91%	SMWW 17:5520E	25-APR-96

		Control Limits
Average Spike Recovery	93%	80% - 120%
Relative Percent Difference	3.0%	< 20%

Curtis & Tompkins, Ltd.

SAMPLE ID: STKP(A-D)
LAB ID: 125267-001
CLIENT: Aqua Science Engineers, Inc.
PROJECT ID: 2607
LOCATION: Phillipsen
MATRIX: Soil

DATE SAMPLED: 04/19/96
DATE RECEIVED: 04/22/96
DATE REPORTED: 04/29/96

Metals Analytical Report

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
Cadmium	0.87	0.096	1	27237	EPA 6010A	04/26/96
Chromium (total)	51	0.48	1	27237	EPA 6010A	04/26/96
Lead	3.4	0.14	1	27237	EPA 6010A	04/26/96
Nickel	39	0.96	1	27237	EPA 6010A	04/26/96
Zinc	20	0.96	1	27237	EPA 6010A	04/26/96

Curtis & Tompkins, Ltd.

SAMPLE ID: STKP(E-H)
LAB ID: 125267-002
CLIENT: Aqua Science Engineers, Inc.
PROJECT ID: 2607
LOCATION: Phillipsen
MATRIX: Soil

DATE SAMPLED: 04/19/96
DATE RECEIVED: 04/22/96
DATE REPORTED: 04/29/96

Metals Analytical Report

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
Cadmium	0.76	0.097	1	27237	EPA 6010A	04/26/96
Chromium (total)	41	0.49	1	27237	EPA 6010A	04/26/96
Lead	3.2	0.15	1	27237	EPA 6010A	04/26/96
Nickel	36	0.97	1	27237	EPA 6010A	04/26/96
Zinc	20	0.97	1	27237	EPA 6010A	04/26/96

Curtis & Tompkins, Ltd.

CLIENT: Aqua Science Engineers, Inc.
JOB NUMBER: 125267

DATE REPORTED: 04/29/96

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Cadmium	ND	0.1	mg/Kg	1	27237	EPA 6010A	04/26/96
Chromium (total)	ND	0.5	mg/Kg	1	27237	EPA 6010A	04/26/96
Lead	ND	0.15	mg/Kg	1	27237	EPA 6010A	04/26/96
Nickel	ND	1	mg/Kg	1	27237	EPA 6010A	04/26/96
Zinc	ND	1	mg/Kg	1	27237	EPA 6010A	04/26/96

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Aqua Science Engineers, Inc.
JOB NUMBER: 125267

DATE REPORTED: 04/29/96

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	44.8	43.9	ug/L	90	88	80-120	2	20	27237	EPA 6010A	04/26/96
Chromium (total)	200	176	173	ug/L	88	87	80-120	2	20	27237	EPA 6010A	04/26/96
Lead	500	442	435	ug/L	88	87	80-120	2	20	27237	EPA 6010A	04/26/96
Nickel	500	445	439	ug/L	89	88	80-120	1	20	27237	EPA 6010A	04/26/96
Zinc	500	415	409	ug/L	83	82	80-120	2	20	27237	EPA 6010A	04/26/96

Curtis & Tompkins, Ltd.

CLIENT: Aqua Science Engineers, Inc.
JOB NUMBER: 125267

DATE REPORTED: 04/29/96

BATCH QC REPORT
SAMPLE DUPLICATE

Compound	Sample	Sample Result	Duplicate Result	Units	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Cadmium	125267-001	0.8702	0.8261	mg/Kg	5	20	27237	EPA 6010A	04/26/96
Chromium (total)	125267-001	51.44	46.91	mg/Kg	9	20	27237	EPA 6010A	04/26/96
Lead	125267-001	3.413	3.174	mg/Kg	7	20	27237	EPA 6010A	04/26/96
Nickel	125267-001	39.47	37.63	mg/Kg	5	20	27237	EPA 6010A	04/26/96
Zinc	125267-001	20.29	19.95	mg/Kg	2	20	27237	EPA 6010A	04/26/96

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: STKP(A-D)
Lab ID: 125267-001
Matrix: Soil
Batch#: 27189
Units: ug/Kg
Diln Fac: 25

Sampled: 04/19/96
Received: 04/22/96
Extracted: 04/25/96
Analyzed: 04/25/96

Analyte	Result	Reporting Limit
Chloromethane	ND	250
Bromomethane	ND	250
Vinyl Chloride	ND	250
Chloroethane	ND	250
Methylene Chloride	ND	500
Trichlorofluoromethane	ND	130
1,1-Dichloroethene	ND	130
1,1-Dichloroethane	ND	130
cis-1,2-Dichloroethene	ND	130
trans-1,2-Dichloroethene	ND	130
Chloroform	ND	130
Freon 113	ND	130
1,2-Dichloroethane	ND	130
1,1,1-Trichloroethane	ND	130
Carbon Tetrachloride	ND	130
Bromodichloromethane	ND	130
1,2-Dichloropropane	ND	130
cis-1,3-Dichloropropene	ND	130
Trichloroethene	ND	130
1,1,2-Trichloroethane	ND	130
trans-1,3-Dichloropropene	ND	130
Dibromochloromethane	ND	130
Bromoform	ND	130
Tetrachloroethene	ND	130
1,1,2,2-Tetrachloroethane	ND	130
Chlorobenzene	ND	130
1,3-Dichlorobenzene	ND	130
1,4-Dichlorobenzene	ND	130
1,2-Dichlorobenzene	ND	130

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	89	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	118	79-122

Aromatic Volatile Organics
EPA 8020 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: STKP(A-D)
Lab ID: 125267-001
Matrix: Soil
Batch#: 27189
Units: ug/Kg
Diln Fac: 25

Sampled: 04/19/96
Received: 04/22/96
Extracted: 04/25/96
Analyzed: 04/25/96

Analyte	Result	Reporting Limit
Benzene	ND	130
Toluene	ND	130
Ethylbenzene	120 J	130
m,p-Xylenes	510	130
o-Xylene	190	130
Chlorobenzene	ND	130
1,3-Dichlorobenzene	ND	130
1,4-Dichlorobenzene	ND	130
1,2-Dichlorobenzene	ND	130

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	89	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	118	79-122

J: Estimated Value

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: STKP(E-H)
Lab ID: 125267-002
Matrix: Soil
Batch#: 27189
Units: ug/Kg
Diln Fac: 25

Sampled: 04/19/96
Received: 04/22/96
Extracted: 04/25/96
Analyzed: 04/25/96

Analyte	Result	Reporting Limit
Chloromethane	ND	250
Bromomethane	ND	250
Vinyl Chloride	ND	250
Chloroethane	ND	250
Methylene Chloride	ND	500
Trichlorofluoromethane	ND	130
1,1-Dichloroethene	ND	130
1,1-Dichloroethane	ND	130
cis-1,2-Dichloroethene	ND	130
trans-1,2-Dichloroethene	ND	130
Chloroform	ND	130
Freon 113	ND	130
1,2-Dichloroethane	ND	130
1,1,1-Trichloroethane	ND	130
Carbon Tetrachloride	ND	130
Bromodichloromethane	ND	130
1,2-Dichloropropane	ND	130
cis-1,3-Dichloropropene	ND	130
Trichloroethene	ND	130
1,1,2-Trichloroethane	ND	130
trans-1,3-Dichloropropene	ND	130
Dibromochloromethane	ND	130
Bromoform	ND	130
Tetrachloroethene	ND	130
1,1,2,2-Tetrachloroethane	ND	130
Chlorobenzene	ND	130
1,3-Dichlorobenzene	ND	130
1,4-Dichlorobenzene	ND	130
1,2-Dichlorobenzene	ND	130

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	89	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	111	79-122

Aromatic Volatile Organics
EPA 8020 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8240
Prep Method: EPA 5030

Field ID: STKP(E-H)
Lab ID: 125267-002
Matrix: Soil
Batch#: 27189
Units: ug/Kg
Diln Fac: 25

Sampled: 04/19/96
Received: 04/22/96
Extracted: 04/25/96
Analyzed: 04/25/96

Analyte	Result	Reporting Limit
Benzene	ND	130
Toluene	220	130
Ethylbenzene	1100	130
m,p-Xylenes	6400	130
o-Xylene	2300	130
Chlorobenzene	ND	130
1,3-Dichlorobenzene	ND	130
1,4-Dichlorobenzene	ND	130
1,2-Dichlorobenzene	ND	130

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	89	68-126
Toluene-d8	98	87-125
Bromofluorobenzene	111	79-122

Curtis & Tompkins, Ltd.

Lab #: 125267 BATCH QC REPORT

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 27189
Units: ug/L
Diln Fac: 1

Prep Date: 04/24/96
Analysis Date: 04/24/96

MB Lab ID: QC20041

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	100	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	99	79-122

Curtis & Tompkins, Ltd.

Lab #: 125267 BATCH QC REPORT

EPA 8020 Purgeable Aromatics
EPA 8020 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 27189
Units: ug/L
Diln Fac: 1

Prep Date: 04/24/96
Analysis Date: 04/24/96

MB Lab ID: QC20041

Analyte	Result	Reporting Limit
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	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	100	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	99	79-122

Curtis & Tompkins, Ltd

Lab #: 125267 BATCH QC REPORT

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 27189
Units: ug/L
Diln Fac: 1

Prep Date: 04/24/96
Analysis Date: 04/24/96

MB Lab ID: QC20043

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	98	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	97	79-122

Curtis & Tompkins, Ltd.

Lab #: 125267 BATCH QC REPORT

EPA 8020 Purgeable Aromatics
EPA 8020 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8240
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 27189
Units: ug/L
Diln Fac: 1

Prep Date: 04/24/96
Analysis Date: 04/24/96

MB Lab ID: QC20043

Analyte	Result	Reporting Limit
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	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	98	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	97	79-122

Curtis & Tompkins, Ltd.

Lab #: 125267 BATCH QC REPORT

EPA 8020 Purgeable Aromatics
EPA 8020 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 27189
Units: ug/L
Diln Fac: 1

Prep Date: 04/24/96
Analysis Date: 04/24/96

LCS Lab ID: QC20040

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	55.33	50	111	78-142
Toluene	56.17	50	112	76-150
Chlorobenzene	54.95	50	110	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	99	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	102	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

Curtis & Tompkins, Ltd.

Lab #: 125267 BATCH QC REPORT

Halogenated Volatile Organics

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 27189
Units: ug/L
Diln Fac: 1

Prep Date: 04/24/96
Analysis Date: 04/24/96

LCS Lab ID: QC20040

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	65.86	50	132	51-180
Trichloroethene	58.84	50	118	73-141
Chlorobenzene	54.95	50	110	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	99	68-126
Toluene-d8	100	87-125
Bromofluorobenzene	102	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

Curtis & Tompkins, Ltd.

Lab #: 125267 BATCH QC REPORT

Halogenated Volatile Organics

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8240
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 125285-002
Matrix: Water
Batch#: 27189
Units: ug/L
Diln Fac: 1

Sample Date: 04/15/96
Received Date: 04/22/96
Prep Date: 04/24/96
Analysis Date: 04/24/96

MS Lab ID: QC20044

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<1.000	55.93	112	51-180
Trichloroethene	50	<1.000	51.57	103	73-141
Chlorobenzene	50	<1.000	51.26	103	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	103	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	100	79-122

MSD Lab ID: QC20045

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	56.26	113	51-180	1	<22
Trichloroethene	50	51.33	103	73-141	0	<24
Chlorobenzene	50	52.1	104	83-129	2	<21

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	103	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	100	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 #: 125267 BATCH QC REPORT

EPA 8020 Purgeable Aromatics
EPA 8020 Analyte List

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8240
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 125285-002
Matrix: Water
Batch#: 27189
Units: ug/L
Diln Fac: 1

Sample Date: 04/15/96
Received Date: 04/22/96
Prep Date: 04/24/96
Analysis Date: 04/24/96

MS Lab ID: QC20044

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Benzene	50	<1.000	50.96	102	78-142
Toluene	50	<1.000	50.62	101	76-150
Chlorobenzene	50	<1.000	51.26	103	83-129

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	103	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	100	79-122

MSD Lab ID: QC20045

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Benzene	50	51.05	102	78-142	0	<21
Toluene	50	51.13	102	76-150	1	<21
Chlorobenzene	50	52.1	104	83-129	2	<21

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	103	68-126
Toluene-d8	101	87-125
Bromofluorobenzene	100	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

FORWARD INCORPORATED

P.O. BOX 6336 • STOCKTON, CA 95206
(209) 466-4482 • FAX (209) 465-0631

SITE	TICKET	GRID
[illegible]	[illegible]	[illegible]

WEIGHMASTER
C CARBAJAL

DATE IN	TIME IN
05/08/96	10:23

DATE OUT	TIME OUT
05/08/96	10:55

600722
AQUA SCIENCE ENGINEERS. INC.
SCOTT FERRIMAN
2411 OLD CROW CANYON RD.- # 4
SAN RAMON CA 94583

VEHICLE	ROLL OFF
[illegible]	

REFERENCE	ORIGIN
600722	JAMES A PHILIPSEN

Scale Gross Weight 71680 LB Inbound - Charge ticket
Scale 2 Tare Weight 30460 LB
Net Weight 41220 LB

QTY	DESCRIPTION	AMOUNT
20.61	Class II Soil by Ton per Tons	

MANIFEST # 44062
TRUCK # 2L73733
P.O. # NONE
TRAILER # UP1203
Schedule 24 hours in advance directly with the landfill.
Call (209)982-4298 to schedule.
[illegible]

NET AMOUNT
TENDERED
CHANGE

SIGNATURE X

recycled paper

FORWARD INC.

NON-HAZARDOUS WASTE MANIFEST
WASTE TREATMENT AND DISPOSAL FACILITY

JOB ACCEPTANCE NO. -600722

TO BE COMPLETED BY THE GENERATOR

GENERATOR: James A. Phillipsen
MAILING ADDRESS: 317 Marina Drive
CITY, STATE, ZIP: Alameda, CA 94501
PHONE: 510-532-8964
CONTACT PERSON: David Allen, AQUA SCIENCE ENG.
SIGNATURE OF AUTHORIZED AGENT / TITLE: David Allen, Agent for Phillipsen
DATE: 5-8-96

REQUIRED PERSONAL PROTECTIVE EQUIPMENT
☒ GLOVES ☐ GOGGLES ☐ RESPIRATOR ☐ HARD HAT
☐ TY-VEK ☐ OTHER

SPECIAL HANDLING PROCEDURES:

WASTE TYPE

☐ TREATMENT SOIL
☒ DISPOSAL SOIL
☐ CONSTRUCTION SOIL
☐ SLUDGE
☐ NON-FRIABLE ASBESTOS
☐ WOOD
☐ ASH
☐ OTHER

GENERATING FACILITY: Former Alameda Max's
1357 High Street
Alameda CA 94501

RECEIVING FACILITY

FORWARD INC. LANDFILL
9999 SOUTH AUSTIN ROAD
MANTECA, CALIFORNIA 95336
(209) 982-4298 PHONE
(209) 982-1009 FAX

TRANSPORTER HAULER MUST COMPLETE

NAME: T.E. O'Conner & Sons
ADDRESS: P.O. Box 1194
CITY, STATE, ZIP: Pleasanton, CA 94566
PHONE: 510-846-7124
SIGNATURE OF AUTHORIZED AGENT OR DRIVER: [signature]
DATE: 5-8-96

NOTES:

TRUCK NUMBER: 4727838 UP 52752

☐ END DUMP ☐ BOTTOM DUMP ☒ TRANSFER
☐ ROLL-OFF(S) ☐ FLAT-BED ☐ VAN ☐ DRUMS

FACILITY REQUIREMENTS

FORWARD INC. LANDFILL

Forward shall have no obligation to accept the waste if weather or other conditions impair the safe and effective disposal of the waste or if the waste impairs the safe and effective operation of the Landfill. Forward shall use reasonable efforts to promptly notify Disposer of its inability to accept the waste for any reason. If Forward's refusal to accept the waste is based on weather or other site conditions, Forward shall notify the Disposer when site conditions are expected to change such that Forward will be able to accept the waste.

REMARKS:

FACILITY TICKET NUMBER:

SIGNATURE OF AUTHORIZED AGENT: [signature]
DATE: 5-8-96

CUBIC YARDS: 10

DISPOSAL METHOD (TO BE COMPLETED BY FORWARD)

	DISPOSE	BIO	AERATE	STOCKPILE	OTHER
☐ SOIL					
☐ SLUDGE					
☐ NON-FRIABLE ASBESTOS					
☐ WOOD					
☐ ASH					
☐ OTHER					

SCHEDULING MUST BE MADE PRIOR TO 4:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE
TO SCHEDULE CALL (209) 982-4298

MANIFEST # 44063

FORWARD INCORPORATED

P.O. BOX 6336 • STOCKTON, CA 95206
(209) 466-4482 • FAX (209) 465-0631

SITE	TICKET	GRID
01	021190	D-75

WEIGHMASTER
C CARBAJAL

DATE IN	TIME IN
05/08/96	10:08

DATE OUT	TIME OUT
05/08/96	10:53

600722
AQUA SCIENCE ENGINEERS. INC.
SCOTT FERRIMAN
2411 OLD CROW CANYON RD.- # 4
SAN RAMON CA 94583

VEHICLE	ROLL OFF
T.E.O. #16	

REFERENCE	ORIGIN
600722	JAMES A FRILIPSEN

Scale 1 Gross Weight 73030 LB Inbound - Charge Ticket
Scale 2 Tare Weight 30190 LB
Net Weight 42500 LB

QTY	DESCRIPTION	AMOUNT
21.45	Class II Soil @ Ton per TONS	

MANIFEST # 40083
TRUCK # 4227838
P.O. # NONE
TRAILER # UR5252
Schedule 24 hours in advance directly with the landfill.
Call (209)982-4298 to schedule.
Drive Safely!!

NET AMOUNT
TENDERED
CHANGE

SIGNATURE X _____

recycled pa

FORWARD INC.

NON-HAZARDOUS WASTE MANIFEST
WASTE TREATMENT AND DISPOSAL FACILITY

JOB ACCEPTANCE NO. -000722

TO BE COMPLETED BY THE GENERATOR

GENERATOR: James A. Phillipsen
MAILING ADDRESS: 311 Marina Drive
CITY, STATE, ZIP: Alameda, CA 94501
PHONE: 510-532-8964
CONTACT PERSON: David Allen, AQUA SCIENCE ENG.
SIGNATURE OF AUTHORIZED AGENT / TITLE: David Allen, Agent for Phillipsen
DATE: 5-8-96

REQUIRED PERSONAL PROTECTIVE EQUIPMENT:
☒ GLOVES ☐ GOGGLES ☐ RESPIRATOR ☐ HARD HAT
☐ TY-VEK ☐ OTHER

SPECIAL HANDLING PROCEDURES:

WASTE TYPE:
☐ TREATMENT SOIL
☒ DISPOSAL SOIL
☐ CONSTRUCTION SOIL
☐ SLUDGE
☐ NON-FRIABLE ASBESTOS
☐ WOOD
☐ ASH
☐ OTHER

RECEIVING FACILITY:

FORWARD INC. LANDFILL
9999 SOUTH AUSTIN ROAD
MANTECA, CALIFORNIA 95336
(209) 982-4298 PHONE
(209) 982-1009 FAX

GENERATING FACILITY: Former Alameda Max's
1357 High Street
Alameda, CA 94501

TRANSPORTER HAULER MUST COMPLETE

NAME: T.E. O'Connor & Sons
ADDRESS: P.O. Box 1194
CITY, STATE, ZIP: Pleasanton, CA 94566
PHONE: 510-846-7124
SIGNATURE OF AUTHORIZED AGENT OR DRIVER: *
DATE: 5-8-96

NOTES:

TRUCK NUMBER: 3C91665 YE8514 5750

☐ END DUMP ☐ BOTTOM DUMP ☒ TRANSFER
☐ ROLL-OFF(S) ☐ FLAT BED ☐ VAN ☐ DRUMS

FACILITY REQUIREMENTS

FORWARD INC. LANDFILL

Forward shall have no obligation to accept the waste if weather or other conditions impair the safe and effective disposal of the waste or if the waste impairs the safe and effective operation of the Landfill. Forward shall use reasonable efforts to promptly notify Disposer of its inability to accept the waste for any reason. If Forward's refusal to accept the waste is based on weather or other site conditions, Forward shall notify the Disposer when site conditions are *expected to change* such that Forward will be able to accept the waste.

REMARKS:

FACILITY TICKET NUMBER:

SIGNATURE OF AUTHORIZED AGENT: *
DATE: 5-8-96

CUBIC YARDS: 10

DISPOSAL METHOD: (TO BE COMPLETED BY FORWARD)

	DISPOSE	BIO	AERATE	STOCKPILE	OTHER
☐ SOIL					
☐ SLUDGE					
☐ NON-FRIABLE ASBESTOS					
☐ WOOD					
☐ ASH					
☐ OTHER					

SCHEDULING MUST BE MADE PRIOR TO 4:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE
TO SCHEDULE CALL (209) 982-4298

MANIFEST # 44064

GENERATOR COPY

FORWARD INCORPORATED
P.O. BOX 6336 • STOCKTON, CA 95206
(209) 466-4482 • FAX (209) 465-0631

SITE	TICKET	GRID
01	021182	D-95

WEIGHMASTER
C CARBAJAL

DATE IN	TIME IN
05/08/96	09:42
DATE OUT	**TIME OUT**
05/08/96	10:09

600722
AQUA SCIENCE ENGINEERS. INC.
SCOTT FERRIMAN
2411 OLD CROW CANYON RD.- # 4
SAN RAMON CA 94583

VEHICLE	ROLL OFF
T.E.O.5150	

REFERENCE	ORIGIN
600722	JAMES A PHILIPSEN

Scale Gross Weight 76260 LB Inbound - Charge ticket
Scale 2 Tare Weight 30600 LB
Net Weight 45660 LB

QTY	DESCRIPTION	AMOUNT
22.83	Class II Soil by Ton per TONS	

MANIFEST # 44064
TRUCK # 3C91665
P.O. # NONE
TRAILER # YE8514
Schedule 24 hours in advance directl, with the landfill.
Call (209)982-4298 to schedule.
Dri.e Safel.!!

SIGNATURE X

NET AMOUNT
TENDERED
CHANGE

recycled pa

FORWARD INC.

NON-HAZARDOUS WASTE MANIFEST
WASTE TREATMENT AND DISPOSAL FACILITY

JOB ACCEPTANCE NO. - 6000727

TO BE COMPLETED BY THE GENERATOR

GENERATOR: James A. Phillipsen
MAILING ADDRESS: 311 Marina Drive
CITY, STATE, ZIP: Alameda, CA 94501
PHONE: 510-532-8964
CONTACT PERSON: David Allen, AQUA SCIENCE ENG.
SIGNATURE OF AUTHORIZED AGENT: David Allen, Agent for Phillipsen | TITLE: | DATE: 5-8-96

REQUIRED PERSONAL PROTECTIVE EQUIPMENT:
☒ GLOVES ☐ GOGGLES ☐ RESPIRATOR ☐ HARD HAT
☐ TY-VEK ☐ OTHER

SPECIAL HANDLING PROCEDURES:

WASTE TYPE:
☐ TREATMENT SOIL
☒ DISPOSAL SOIL
☐ CONSTRUCTION SOIL
☐ SLUDGE
☐ NON-FRIABLE ASBESTOS
☐ WOOD
☐ ASH
☐ OTHER

GENERATING FACILITY: Former Alameda Max's
1357 High Street
Alameda CA 94501

RECEIVING FACILITY:

FORWARD INC. LANDFILL
9999 SOUTH AUSTIN ROAD
MANTECA, CALIFORNIA 95336
(209) 982-4298 PHONE
(209) 982-1009 FAX

TRANSPORTER HAULER MUST COMPLETE

NAME: T. E O'Connor & Sons
ADDRESS: P.O Box 1194
CITY, STATE, ZIP: Pleasanton, CA 94566
PHONE: 510-846-7124
SIGNATURE OF AUTHORIZED AGENT OR DRIVER: * | DATE: 4-8-96

NOTES:

TRUCK NUMBER: UW3829

☐ END DUMP ☐ BOTTOM DUMP ☒ TRANSFER
☐ ROLL-OFF(S) ☐ FLAT BED ☐ VAN ☐ DRUMS

FACILITY REQUIREMENTS

FORWARD INC. LANDFILL

Forward shall have no obligation to accept the waste if weather or other conditions impair the safe and effective disposal of the waste or if the waste impairs the safe and effective operation of the Landfill. Forward shall use reasonable efforts to promptly notify Disposer of its inability to accept the waste for any reason. If Forward's refusal to accept the waste is based on weather or other site conditions, Forward shall notify the Disposer when site conditions are expected to change such that Forward will be able to accept the waste.

REMARKS:

FACILITY TICKET NUMBER:

SIGNATURE OF AUTHORIZED AGENT: * | DATE: 5-8-96

CUBIC YARDS: 10

DISPOSAL METHOD (TO BE COMPLETED BY FORWARD)

	DISPOSE	BIO	AERATE	STOCKPILE	OTHER
☐ SOIL					
☐ SLUDGE					
☐ NON-FRIABLE ASBESTOS					
☐ WOOD					
☐ ASH					
☐ OTHER					

SCHEDULING MUST BE MADE PRIOR TO 4:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE
TO SCHEDULE CALL (209) 982-4298

MANIFEST # 44065

FORWARD
INCORPORATED
P.O. BOX 6336 • STOCKTON, CA 95206
(209) 466-4482 • FAX (209) 465-0631

SITE	TICKET	GRID
01	021180	D-95

WEIGHMASTER
C CARBAJAL

DATE IN	TIME IN
05/08/96	09:39

DATE OUT	TIME OUT
05/08/96	10:06

600722
AQUA SCIENCE ENGINEERS, INC.
SCOTT FERRIMAN
2411 OLD CROW CANYON RD. - # 4
SAN RAMON CA 94583

VEHICLE	ROLL OFF
TE DGO #7	

REFERENCE	ORIGIN
600722	JAMES A PHILIPSEN

Scale Gross Weight 78200 LB Inbound - Charge ticket
Scale 2 Tare Weight 30340 LB
Net Weight 47960 LB

QTY	DESCRIPTION	AMOUNT
23.98	Class II Soil b. Ton per TONS	

MANIFEST # 44065
TRUCK # [illegible]
P.O. # NONE
TRAILER # UW5887
Schedule 24 hours in advance directly with the landfill.
Call (209)982-4298 to schedule.
Be Safe!!

NET AMOUNT
TENDERED
CHANGE

SIGNATURE X

recycled pa

Curtis & Tompkins, Ltd.

Lab #: 125267 BATCH QC REPORT

BTXE

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8020
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 27245
Units: ug/L
Diln Fac: 1

Prep Date: 04/25/96
Analysis Date: 04/25/96

MB Lab ID: QC20248

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	98	43-114
Bromobenzene	83	45-140

Curtis & Tompkins, Ltd

Lab #: 125267 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

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

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 27245
Units: ug/L
Diln Fac: 1

Prep Date: 04/25/96
Analysis Date: 04/25/96

LCS Lab ID: QC20249

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	1917	2006	96	80-120
Surrogate	**%Rec**	**Limits**		
Trifluorotoluene	103	52-127		
Bromobenzene	98	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

Curtis & Tompkins, Ltd.

Lab #: 125267 BATCH QC REPORT

BTXE

Client: Aqua Science Engineers, Inc.
Project#: 2607
Location: Phillipsen

Analysis Method: EPA 8020
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 27245
Units: ug/L
Diln Fac: 1

Prep Date: 04/25/96
Analysis Date: 04/25/96

LCS Lab ID: QC20250

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	20.4	20	102	80-120
Toluene	22.4	20	112	80-120
Ethylbenzene	21.8	20	109	80-120
m,p-Xylenes	45.1	40	113	80-120
o-Xylene	23	20	115	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	99	43-114
Bromobenzene	86	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

Curtis & Tompkins, Ltd.

Lab #: 125267 BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client:	Aqua Science Engineers, Inc.	Analysis Method:	CA LUFT (EPA 8015M)
Project#:	2607	Prep Method:	EPA 5030
Location:	Phillipsen		

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID:	ZZZZZZ	Sample Date:	04/23/96
Lab ID:	125328-001	Received Date:	04/25/96
Matrix:	Water	Prep Date:	04/25/96
Batch#:	27245	Analysis Date:	04/25/96
Units:	ug/L		
Diln Fac:	1		

MS Lab ID: QC20251

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	2000	<50.00	1856	93	65-135
Surrogate	**%Rec**	**Limits**			
Trifluorotoluene	95	52-127			
Bromobenzene	91	47-112			

MSD Lab ID: QC20252

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	2000	1925	96	65-135	4	<20
Surrogate	**%Rec**	**Limits**				
Trifluorotoluene	99	52-127				
Bromobenzene	95	47-112				

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

125267

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 4-19-96 PAGE 1 OF 1

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

PROJECT NAME Phillipsen NO. 2607

ADDRESS 1357 High Street, Alameda

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

5 - Day

SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH-GASOLINE (EPA 5030/8015)	TPH-GASOLINE/BTEX (EPA 5030/8015-8020)	TPH-DIESEL (EPA 3510/8015)	PURGABLE AROMATICS (EPA 602/8020)	PURGABLE HALOCARBONS (EPA 601/8010)	VOLATILE ORGANICS (EPA 624/8240)	BASE/NUETRALS, ACIDS (EPA 625/8270) 8270	OIL & GREASE (EPA 5520 E or F) Total 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	Client wants Total Oil & grease Method 5520 E per Scott Ferriman 4/23/96		
STKP(A-D)	4-19-96	15:10	Soil	4		X	X	X	X		X	X	X							composite
STKP(E-H)	4-19-96	15:40	Soil	4		X	X	X	X		X	X	X							composite

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
Scott T. F[illegible] (signature) (time)	Delgado (signature) (time)	(signature) (time)	(signature) (time)	
Scott T Ferriman 4-22-96 (printed name) (date)	JOSE DELGADO (printed name) (date)	(printed name) (date)	(printed name) (date)	
Company- ASE, Inc.	Company- C&T 11:00 4/22/96	Company-	Company-	

APPENDIX F

Soil Disposal Manifests

FORWARD INC.

NON-HAZARDOUS WASTE MANIFEST
WASTE TREATMENT AND DISPOSAL FACILITY

JOB ACCEPTANCE NO. 600722

TO BE COMPLETED BY THE GENERATOR

GENERATOR: James A. Phillipsen
MAILING ADDRESS: 311 Marina Drive
CITY, STATE, ZIP: Alameda, CA 94501
PHONE: 510-532-8964
CONTACT PERSON: David Allen, AQUA SCIENCE ENG.
SIGNATURE OF AUTHORIZED AGENT / TITLE: David Allen, Agent for Phillipsen
DATE: 5-8-96

REQUIRED PERSONAL PROTECTIVE EQUIPMENT
☒ GLOVES ☐ GOGGLES ☐ RESPIRATOR ☐ HARD HAT
☐ TY-VEK ☐ OTHER

SPECIAL HANDLING PROCEDURES:

WASTE TYPE

☐ TREATMENT SOIL
☒ DISPOSAL SOIL
☐ CONSTRUCTION SOIL
☐ SLUDGE
☐ NON-FRIABLE ASBESTOS
☐ WOOD
☐ ASH
☐ OTHER

GENERATING FACILITY:
Former Alameda Max's
1357 High Street
Alameda, CA 94501

RECEIVING FACILITY

FORWARD INC. LANDFILL
9999 SOUTH AUSTIN ROAD
MANTECA, CALIFORNIA 95336
(209) 982-4298 PHONE
(209) 982-1009 FAX

TRANSPORTER HAULER MUST COMPLETE

NAME: T.E. O'Connor & Sons
ADDRESS: P.O. BOX 1194
CITY, STATE, ZIP: Pleasanton, CA 94566
PHONE: 510-846-7124
SIGNATURE OF AUTHORIZED AGENT OR DRIVER: *
DATE:

NOTES:

TRUCK NUMBER: 83/83A
2L73730
UP1201

☐ END DUMP ☐ BOTTOM DUMP ☒ TRANSFER
☐ ROLL-OFF(S) ☐ FLAT BED ☐ VAN ☐ DRUMS

FACILITY REQUIREMENTS

FORWARD INC. LANDFILL

Forward shall have no obligation to accept the waste if weather or other conditions impair the safe and effective disposal of the waste or if the waste impairs the safe and effective operation of the Landfill. Forward shall use reasonable efforts to promptly notify Disposer of its inability to accept the waste for any reason. If Forward's refusal to accept the waste is based on weather or other site conditions, Forward shall notify the Disposer when site conditions are expected to change such that Forward will be able to accept the waste.

REMARKS:

FACILITY TICKET NUMBER:

SIGNATURE OF AUTHORIZED AGENT: *
DATE: 5/8/96

CUBIC YARDS: 10

DISPOSAL METHOD (TO BE COMPLETED BY FORWARD)

	DISPOSE	BIO	AERATE	STOCKPILE	OTHER
☒ SOIL					
☐ SLUDGE					
☐ NON-FRIABLE ASBESTOS					
☐ WOOD					
☐ ASH					
☐ OTHER					

SCHEDULING MUST BE MADE PRIOR TO 4:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.
TO SCHEDULE CALL (209) 982-4298

MANIFEST # 44056

FORWARD INCORPORATED

P.O. BOX 6336 • STOCKTON, CA 95206
(209) 466-4482 • FAX (209) 465-0631

600722
AQUA SCIENCE ENGINEERS, INC.
SCOTT FERRIMAN
2411 OLD CROW CANYON RD.- # 4
SAN RAMON, CA 94583

SITE	TICKET	GRID
01	021255	D-55

WEIGHTMASTER
C CARBAJAL

DATE IN	TIME IN
05/08/96	15:39

DATE OUT	TIME OUT
05/08/96	16:02

VEHICLE	ROLL OFF
T.E.O. #83	

REFERENCE	ORIGIN
600722	JAMES A PHILIPSEN

Scale Gross Weight 75540 LB Inbound - Charge ticket
Scale 2 Tare Weight 30420 LB
Net Weight 45120 LB

QTY	DESCRIPTION	AMOUNT
22.56	Class II Soil by Ton per TONS	

Received Check 17864 for $3150.00 for 5/8/96

MANIFEST # 44056
TRUCK # 2L73730
P.O. # NONE
TRAILER # UP1201
Schedule 24 hours in advance directly with the landfill.
Call (209)982-4298 to schedule.
Drive Safely!!

NET AMOUNT

TENDERED

CHANGE

SIGNATURE X

recycled paper

FORWARD INC.

NON-HAZARDOUS WASTE MANIFEST
WASTE TREATMENT AND DISPOSAL FACILITY

JOB ACCEPTANCE NO. -(00)722

TO BE COMPLETED BY THE GENERATOR

GENERATOR: James A. Phillipsen

MAILING ADDRESS: 311 Marina Drive

CITY, STATE, ZIP: Alameda, CA 94501

PHONE: 510-532-8964

CONTACT PERSON: David Allen, AQUA SCIENCE ENG.

SIGNATURE OF AUTHORIZED AGENT / TITLE: * David Allen, Agent for Phillipsen | DATE: 5-8-96

REQUIRED PERSONAL PROTECTIVE EQUIPMENT
- [x] GLOVES
- [ ] GOGGLES
- [ ] RESPIRATOR
- [ ] HARD HAT
- [ ] TY-VEK
- [ ] OTHER

SPECIAL HANDLING PROCEDURES:

WASTE TYPE (MARK)
- [ ] TREATMENT SOIL
- [x] DISPOSAL SOIL
- [ ] CONSTRUCTION SOIL
- [ ] SLUDGE
- [ ] NON-FRIABLE ASBESTOS
- [ ] WOOD
- [ ] ASH
- [ ] OTHER

GENERATING FACILITY:
Former Alameda Max's
1357 High Street
Alameda, CA 94501

RECEIVING FACILITY

FORWARD INC. LANDFILL
9999 SOUTH AUSTIN ROAD
MANTECA, CALIFORNIA 95336
(209) 982-4298 PHONE
(209) 982-1009 FAX

TRANSPORTER / HAULER MUST COMPLETE

NAME: T.E. O'Connor & Sons

ADDRESS: P.O. BOX 1194

CITY, STATE, ZIP: Pleasanton, CA 94566

PHONE: 510-846-7124

SIGNATURE OF AUTHORIZED AGENT OR DRIVER: * | DATE:

NOTES: #16

TRUCK NUMBER: 4Z27838 UP5252

- [ ] END DUMP
- [ ] BOTTOM DUMP
- [x] TRANSFER
- [ ] ROLL-OFF(S)
- [ ] FLAT-BED
- [ ] VAN
- [ ] DRUMS

FACILITY REQUIREMENTS

FORWARD INC. LANDFILL

Forward shall have no obligation to accept the waste if weather or other conditions impair the safe and effective disposal of the waste or if the waste impairs the safe and effective operation of the Landfill. Forward shall use reasonable efforts to promptly notify Disposer of its inability to accept the waste for any reason. If Forward's refusal to accept the waste is based on weather or other site conditions, Forward shall notify the Disposer when site conditions are expected to change such that Forward will be able to accept the waste.

REMARKS:

FACILITY TICKET NUMBER:

SIGNATURE OF AUTHORIZED AGENT: * | DATE: 5-8-96

CUBIC YARDS: 18

DISPOSAL METHOD (TO BE COMPLETED BY FORWARD)

	DISPOSE	BIO	AERATE	STOCKPILE	OTHER
[ ] SOIL					
[ ] SLUDGE					
[ ] NON-FRIABLE ASBESTOS					
[ ] WOOD					
[ ] ASH					
[ ] OTHER					

SCHEDULING MUST BE MADE PRIOR TO 4:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE
TO SCHEDULE CALL (209) 982-4298

MANIFEST # 44057

FORWARD INCORPORATED

P.O. BOX 6336 • STOCKTON, CA 95206
(209) 466-4482 • FAX (209) 465-0631

SITE	TICKET	GRID
01	021252	D-95

WEIGHMASTER
C CARBAJAL

DATE IN	TIME IN
05/08/96	15:14
DATE OUT	**TIME OUT**
05/08/96	15:38

600722
AQUA SCIENCE ENGINEERS, INC.
SCOTT FERRIMAN
2411 OLD CROW CANYON RD.- # 4
SAN RAMON CA 94583

VEHICLE	ROLL OFF
T.E.O. #16	

REFERENCE	ORIGIN
600722	JAMES A PHILIPSEN

Scale Gross Weight	80660	LB	Inbound - Charge ticket
Scale & Tare Weight	29980	LB	
Net Weight	50680	LB	

QTY	DESCRIPTION	AMOUNT
25.34	Class II Soil by Tonnage TONS	

MANIFEST # 44057
TRUCK # [illegible]
P.O. # NONE
TRAILER # UPSESS
Schedule 24 hours in advance directly with the landfill.
Call (209) 952-4255 to schedule.
Thank You!

NET AMOUNT
TENDERED
CHANGE

SIGNATURE X _____

recycled pa

FORWARD INC.

NON-HAZARDOUS WASTE MANIFEST
WASTE TREATMENT AND DISPOSAL FACILITY

JOB ACCEPTANCE NO. - 600722

TO BE COMPLETED BY THE GENERATOR

GENERATOR: James A. Phillipsen
MAILING ADDRESS: 3111 Marina Drive
CITY, STATE, ZIP: Alameda, CA 94501
PHONE: 510-532-8964
CONTACT PERSON: David Allen, AQUA SCIENCE ENG.
SIGNATURE OF AUTHORIZED AGENT/TITLE: *David Allen, Agent for Phillipsen
DATE: 5-8-96

REQUIRED PERSONAL PROTECTIVE EQUIPMENT
- [x] GLOVES
- [ ] GOGGLES
- [ ] RESPIRATOR
- [ ] HARD HAT
- [ ] TY-VEK
- [ ] OTHER

SPECIAL HANDLING PROCEDURES:

WASTE TYPE
- [ ] TREATMENT SOIL
- [x] DISPOSAL SOIL
- [ ] CONSTRUCTION SOIL
- [ ] SLUDGE
- [ ] NON-FRIABLE ASBESTOS
- [ ] WOOD
- [ ] ASH
- [ ] OTHER

GENERATING FACILITY
Former Alameda Max's
1357 High Street
Alameda, CA 94501

RECEIVING FACILITY
FORWARD INC. LANDFILL
9999 SOUTH AUSTIN ROAD
MANTECA, CALIFORNIA 95336
(209) 982-4298 PHONE
(209) 982-1009 FAX

TRANSPORTER/HAULER MUST COMPLETE

NAME: T.E. O'Connor & Sons
ADDRESS: P.O. BOX 1194
CITY, STATE, ZIP: Pleasanton, CA 94566
PHONE: 510-846-7124
SIGNATURE OF AUTHORIZED AGENT/DRIVER: *
DATE: 5-8-96

NOTES:

TRUCK NUMBER
3C9665
YE8514
5750

- END DUMP [ ]
- BOTTOM DUMP [ ]
- TRANSFER [x]
- ROLL OFF(S) [ ]
- FLAT BED [ ]
- VAN [ ]
- DRUMS [ ]

FACILITY REQUIREMENTS

FORWARD INC. LANDFILL

Forward shall have no obligation to accept the waste if weather or other conditions impair the safe and effective disposal of the waste or if the waste impairs the safe and effective operation of the Landfill. Forward shall use reasonable efforts to promptly notify Disposer of its inability to accept the waste for any reason. If Forward's refusal to accept the waste is based on weather or other site conditions, Forward shall notify the Disposer when site conditions are expected to change such that Forward will be able to accept the waste.

REMARKS:

FACILITY TICKET NUMBER:

SIGNATURE OF AUTHORIZED AGENT: *
DATE: 5-8-96

CUBIC YARDS: 12

DISPOSAL METHOD	(TO BE COMPLETED BY FORWARD) DISPOSE	BIO	AERATE	STOCKPILE	OTHER
[x] SOIL					
[ ] SLUDGE					
[ ] NON-FRIABLE ASBESTOS					
[ ] WOOD					
[x] ASH					
[ ] OTHER					

SCHEDULING MUST BE MADE PRIOR TO 4:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE. TO SCHEDULE CALL (209) 982-4298

MANIFEST # 44058

FORWARD INCORPORATED

P.O. BOX 6336 • STOCKTON, CA 95206
(209) 466-4482 • FAX (209) 465-0631

SITE	TICKET	GRID
01	021247	D-95

WEIGHMASTER
C CARBAJAL

DATE IN	TIME IN
05/08/96	14:50

DATE OUT	TIME OUT
05/08/96	15:18

600722
AQUA SCIENCE ENGINEERS. INC.
SCOTT FERRIMAN
2411 OLD CROW CANYON RD.- # 4
SAN RAMON CA 94583

VEHICLE	ROLL OFF	REFERENCE	ORIGIN
T.E.O.5150		600722	JAMES A PHILIPSEN

Scale Gross Weight 74340 LB Inbound - Charge ticket
Scale 2 Tare Weight 30440 LB
Net Weight 43900 LB

QTY	DESCRIPTION	AMOUNT
21.95	Class II Soil t.. Tan per TONS	

MANIFEST # 44058
TRUCK # 3c916c5
P.O. # NONE
TRAILER # ve8514
Schedule 24 hours in advance directly with the landfill.
Call (209)982-4298 to schedule.
Drive Safely!!

NET AMOUNT
TENDERED
CHANGE

SIGNATURE X _____

recycled pap

FORWARD INC.

NON-HAZARDOUS WASTE MANIFEST
WASTE TREATMENT AND DISPOSAL FACILITY

JOB ACCEPTANCE NO. -600122

TO BE COMPLETED BY THE GENERATOR

GENERATOR: James A. Phillipsen
MAILING ADDRESS: 311 Marina Drive
CITY, STATE, ZIP: Alameda, CA 94501
PHONE: 510-532-8964
CONTACT PERSON: David Allen, AQUA SCIENCE ENG.
SIGNATURE OF AUTHORIZED AGENT / TITLE: * Agent for Phillipsen
DATE: 5-8-96

REQUIRED PERSONAL PROTECTIVE EQUIPMENT:
☒ GLOVES ☐ GOGGLES ☐ RESPIRATOR ☐ HARD HAT
☐ TY-VEK ☐ OTHER

SPECIAL HANDLING PROCEDURES:

WASTE TYPE:
☐ TREATMENT SOIL
☒ DISPOSAL SOIL
☐ CONSTRUCTION SOIL
☐ SLUDGE
☐ NON-FRIABLE ASBESTOS
☐ WOOD
☐ ASH
☐ OTHER

GENERATING FACILITY:
Former Alameda Max's
1357 High Street
Alameda, CA 94501

RECEIVING FACILITY:
FORWARD INC. LANDFILL
9999 SOUTH AUSTIN ROAD
MANTECA, CALIFORNIA 95336
(209) 982-4298 PHONE
(209) 982-1009 FAX

TRANSPORTER HAULER MUST COMPLETE

NAME: T E O'Connor & Sons
ADDRESS: P.O Box 1194
CITY, STATE, ZIP: Pleasanton, CA 94566
PHONE: 510-846-7124
SIGNATURE OF AUTHORIZED AGENT OR DRIVER: *
DATE:

NOTES:
TRUCK NUMBER: IV69580 UW3829 #1

☐ END DUMP ☐ BOTTOM DUMP ☒ TRANSFER
☐ ROLL-OFF(S) ☐ FLAT-BED ☐ VAN ☐ DRUMS

FACILITY REQUIREMENTS

FORWARD INC. LANDFILL

Forward shall have no obligation to accept the waste if weather or other conditions impair the safe and effective disposal of the waste or if the waste impairs the safe and effective operation of the Landfill. Forward shall use reasonable efforts to promptly notify Disposer of its inability to accept the waste for any reason. If Forward's refusal to accept the waste is based on weather or other site conditions, Forward shall notify the Disposer when site conditions are expected to change such that Forward will be able to accept the waste.

REMARKS:

FACILITY TICKET NUMBER:

SIGNATURE OF AUTHORIZED AGENT: *
DATE: 5-8-96

CUBIC YARDS: 18

DISPOSAL METHOD: (TO BE COMPLETED BY FORWARD)

	DISPOSE	BIO	AERATE	STOCKPILE	OTHER
☐ SOIL					
☐ SLUDGE					
☐ NON-FRIABLE ASBESTOS					
☐ WOOD					
☐ ASH					
☐ OTHER					

SCHEDULING MUST BE MADE PRIOR TO 4:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.
TO SCHEDULE CALL (209) 982-4298

MANIFEST # 44059

FORWARD INCORPORATED

P.O. BOX 6336 • STOCKTON, CA 95206
(209) 466-4482 • FAX (209) 465-0631

SITE	TICKET	GRID
01	021243	D-75

WEIGHMASTER
C CARBAJAL

DATE IN	TIME IN
05/08/96	14:37

DATE OUT	TIME OUT
05/08/96	15:06

600722
AQUA SCIENCE ENGINEERS. INC.
SCOTT FERRIMAN
2411 OLD CROW CANYON RD.- # 4
SAN RAMON CA 94583

VEHICLE	ROLL OFF
TE OCO #7	

REFERENCE	ORIGIN
600722	JAMES A PHILIPSEN

Scale Gross Weight	75500	LB	Inbound - Charge ticket
Scale 2 Tare Weight	29960	LB	
Net Weight	45540	LB	

QTY	DESCRIPTION	AMOUNT
22.77	Class II Soil by Ton per TONS	

MANIFEST # 44059
TRUCK # 1V6753
P.O. # NONE
TRAILER # UNR82F
Be sure 24 hours in advance direct with the landfill.
Call (209)982-4273 to schedule.
Drive safe.

NET AMOUNT
TENDERED
CHANGE

SIGNATURE X _____

recycled pa

FORWARD INC.

NON-HAZARDOUS WASTE MANIFEST
WASTE TREATMENT AND DISPOSAL FACILITY

JOB ACCEPTANCE NO. - 6060122

TO BE COMPLETED BY THE GENERATOR

GENERATOR: James A Phillipsen
MAILING ADDRESS: 2111 Marina Drive
CITY, STATE, ZIP: Alameda, CA 94501
PHONE: 510-532-8964
CONTACT PERSON: David Allen, AQUA SCIENCE ENG.
SIGNATURE OF AUTHORIZED AGENT / TITLE: * Agent for Phillipsen
DATE: 5-8-96

REQUIRED PERSONAL PROTECTIVE EQUIPMENT
☒ GLOVES ☐ GOGGLES ☐ RESPIRATOR ☐ HARD HAT
☐ TY-VEK ☐ OTHER

SPECIAL HANDLING PROCEDURES:

WASTE TYPE

☐ TREATMENT SOIL
☒ DISPOSAL SOIL
☐ CONSTRUCTION SOIL
☐ SLUDGE
☐ NON-FRIABLE ASBESTOS
☐ WOOD
☐ ASH
☐ OTHER

GENERATING FACILITY: Former Alameda Max's
1357 High Street
Alameda CA 94501

RECEIVING FACILITY

FORWARD INC. LANDFILL
9999 SOUTH AUSTIN ROAD
MANTECA, CALIFORNIA 95336
(209) 982-4298 PHONE
(209) 982-1009 FAX

TRANSPORTER HAULER MUST COMPLETE

NAME: T F O'Connor & Sons
ADDRESS: P.O. Box 1194
CITY, STATE, ZIP: Pleasanton CA 94566
PHONE: 316-846-7124
SIGNATURE OF AUTHORIZED AGENT OR DRIVER: * Greg Hanna
DATE: 5-8-96

NOTES: 3502639 IUL1102

TRUCK NUMBER: 83-83A

END DUMP ☐ BOTTOM DUMP ☐ TRANSFER ☒
ROLL OFF(S) ☐ FLAT BED ☐ VAN ☐ DRUMS ☐

FACILITY REQUIREMENTS

FORWARD INC. LANDFILL

Forward shall have no obligation to accept the waste if weather or other conditions impair the safe and effective disposal of the waste or if the waste impairs the safe and effective operation of the Landfill. Forward shall use reasonable efforts to promptly notify Disposer of its inability to accept the waste for any reason. If Forward's refusal to accept the waste is based on weather or other site conditions, Forward shall notify the Disposer when site conditions are expected to change such that Forward will be able to accept the waste.

REMARKS:

FACILITY TICKET NUMBER:

SIGNATURE OF AUTHORIZED AGENT: *
DATE: 5-8-96

CUBIC YARDS: 16

DISPOSAL METHOD (TO BE COMPLETED BY FORWARD)

	DISPOSE	BIO	AERATE	STOCKPILE	OTHER
☒ SOIL					
☐ SLUDGE					
☐ NON-FRIABLE ASBESTOS					
☐ WOOD					
☐ ASH					
☐ OTHER					

SCHEDULING MUST BE MADE PRIOR TO 4:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE. TO SCHEDULE CALL (209) 982-4298

MANIFEST # 44060

SALES COPY

** DUPLICATE TICKET **

FORWARD INCORPORATED

P.O. BOX 6336 • STOCKTON, CA 95206
(209) 466-4482 • FAX (209) 465-0631

SITE	TICKET	GRID
01	021204	D-95

WEIGHMASTER
C CARBAJAL

DATE IN	TIME IN
05/08/96	10:57

DATE OUT	TIME OUT
05/08/96	12:21

600722
AQUA SCIENCE ENGINEERS, INC.
SCOTT FERRIMAN
2411 OLD CROW CANYON RD.- # 4
SAN RAMON CA 94583

VEHICLE	ROLL OFF
T.E.O. #83	

REFERENCE	ORIGIN
600722	JAMES A PHILIPSEN

Scale Gross Weight	69800	LB	Inbound - Charge ticket
Scale 2 Tare Weight	29380	LB	
Net Weight	40420	LB	

QTY	DESCRIPTION	AMOUNT
20.21	Class II Soil by Ton per TONS	

MANIFEST # 44060
TRUCK # 3S02639
P.O. # NONE
TRAILER # 1UL1108
Schedule 24 hours in advance directly with the landfill.
Call (209)982-4298 to schedule.
Drive Safely!!

NET AMOUNT
TENDERED
CHANGE

SIGNATURE X _____

recycled p

FORWARD INC.

NON-HAZARDOUS WASTE MANIFEST
WASTE TREATMENT AND DISPOSAL FACILITY

JOB ACCEPTANCE NO. [illegible]

TO BE COMPLETED BY THE GENERATOR

GENERATOR: James A. Phillipsen
MAILING ADDRESS: 311 Marina Drive
CITY, STATE, ZIP: Alameda, CA 94501
PHONE: 510-522-6964
CONTACT PERSON: David Allen, AQUA SCIENCE ENG
SIGNATURE OF AUTHORIZED AGENT / TITLE: * Agent for Phillipsen
DATE: 5-8-96

REQUIRED PERSONAL PROTECTIVE EQUIPMENT
- [x] GLOVES
- [ ] GOGGLES
- [ ] RESPIRATOR
- [ ] HARD HAT
- [ ] TY-VEK
- [ ] OTHER

SPECIAL HANDLING PROCEDURES:

WASTE TYPE
- [ ] TREATMENT SOIL
- [x] DISPOSAL SOIL
- [ ] CONSTRUCTION SOIL
- [ ] SLUDGE
- [ ] NON-FRIABLE ASBESTOS
- [ ] WOOD
- [ ] ASH
- [ ] OTHER

GENERATING FACILITY (STREET ADDRESS)
Former Alameda MAX 5
1251 High Street
Alameda, CA 94501

RECEIVING FACILITY

FORWARD INC. LANDFILL
9999 SOUTH AUSTIN ROAD
MANTECA, CALIFORNIA 95336
(209) 982-4298 PHONE
(209) 982-1009 FAX

TRANSPORTER HAULER MUST COMPLETE

NAME: T.C. O'Connor & Son
ADDRESS: P.O. Box 1164
CITY, STATE, ZIP: Pleasanton, CA 94566
PHONE: 510-846-7124
SIGNATURE OF AUTHORIZED AGENT OR DRIVER: * Jeri Masterson
DATE: 5-8-96

NOTES: 4W03999 XY7565
TRUCK NUMBER: F777

- END DUMP: [ ]
- BOTTOM DUMP: [ ]
- TRANSFER: [x]
- ROLL OFF (S): [ ]
- FLAT BED: [ ]
- VAN: [ ]
- DRUMS: [ ]

FACILITY REQUIREMENTS

FORWARD INC. LANDFILL

Forward shall have no obligation to accept the waste if weather or other conditions impair the safe and effective disposal of the waste or if the waste impairs the safe and effective operation of the Landfill. Forward shall use reasonable efforts to promptly notify Disposer of its inability to accept the waste for any reason. If Forward's refusal to accept the waste is based on weather or other site conditions, Forward shall notify the Disposer when site conditions are expected to change such that Forward will be able to accept the waste.

REMARKS:

FACILITY TICKET NUMBER:

SIGNATURE OF AUTHORIZED AGENT: *
DATE: 5-8-96

CUBIC YARDS: 10

DISPOSAL METHOD	(TO BE COMPLETED BY FORWARD) DISPOSE	BIO	AERATE	STOCKPILE	OTHER
[x] SOIL					
[ ] SLUDGE					
[ ] NON-FRIABLE ASBESTOS					
[ ] WOOD					
[ ] ASH					
[ ] OTHER					

SCHEDULING MUST BE MADE PRIOR TO 4:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE. TO SCHEDULE CALL (209) 982-4298

MANIFEST # 44061

SALES COPY

FORWARD INCORPORATED

P.O. BOX 6336 • STOCKTON, CA 95206
(209) 466-4482 • FAX (209) 465-0631

SITE	TICKET	GRID
01	021200	D-95

WEIGHMASTER
C CARBAJAL

DATE IN	TIME IN
05/08/96	10:39
DATE OUT	**TIME OUT**
05/08/96	11:01

600722
AQUA SCIENCE ENGINEERS, INC.
SCOTT FERRIMAN
2411 OLD CROW CANYON RD.- # 4
SAN RAMON CA 94583

VEHICLE	ROLL OFF
T.E.O. F77	

REFERENCE	ORIGIN
600722	JAMES A PHILIPSEN

Scale Gross Weight 75540 LB Inbound - Charge ticket
Scale 2 Tare Weight 29840 LB
Net Weight 45700 LB

QTY	DESCRIPTION	AMOUNT
22.85	Class II Soil by Ton per TONS	

MANIFEST # 44061
TRUCK # 4W03999
P.O. # NONE
TRAILER # XY7565
Schedule 24 hours in advance directly with the landfill.
Call (209)982-4298 to schedule.
Drive Safely!!

NET AMOUNT
TENDERED
CHANGE

SIGNATURE X _____

recycled pa

FORWARD INC.

NON-HAZARDOUS WASTE MANIFEST
WASTE TREATMENT AND DISPOSAL FACILITY

JOB ACCEPTANCE NO. -6007-27

TO BE COMPLETED BY THE GENERATOR

GENERATOR: James A. Phillipsen
MAILING ADDRESS: 311 Marina Drive
CITY, STATE, ZIP: Alameda, CA 94501
PHONE: 510-532-8964
CONTACT PERSON: David Allen, AQUA SCIENCE ENG.
SIGNATURE OF AUTHORIZED AGENT / TITLE: David Allen, Agent for Phillipsen
DATE: 5-8-96

REQUIRED PERSONAL PROTECTIVE EQUIPMENT:
☒ GLOVES ☐ GOGGLES ☐ RESPIRATOR ☐ HARD HAT
☐ TY-VEK ☐ OTHER

SPECIAL HANDLING PROCEDURES:

WASTE TYPE:
☐ TREATMENT SOIL
☒ DISPOSAL SOIL
☐ CONSTRUCTION SOIL
☐ SLUDGE
☐ NON-FRIABLE ASBESTOS
☐ WOOD
☐ ASH
☐ OTHER

GENERATING FACILITY:
Former Alameda Max's
1357 High Street
Alameda, CA 94501

RECEIVING FACILITY:

FORWARD INC. LANDFILL
9999 SOUTH AUSTIN ROAD
MANTECA, CALIFORNIA 95336
(209) 982-4298 PHONE
(209) 982-1009 FAX

TRANSPORTER (HAULER MUST COMPLETE)

NAME: T E O'Connor & Sons
ADDRESS: PO BOX 1194
CITY, STATE, ZIP: Pleasanton, CA 94566
PHONE: 510-846-7124
SIGNATURE OF AUTHORIZED AGENT OR DRIVER: * Glenn A. Penney
DATE: 5/8/96

NOTES:

TRUCK NUMBER: 83 / 83A
2L73731
UP1201

☐ END DUMP ☐ BOTTOM DUMP ☒ TRANSFER
☐ ROLL-OFF(S) ☐ FLAT BED ☐ VAN ☐ DRUMS

FACILITY REQUIREMENTS

FORWARD INC. LANDFILL

Forward shall have no obligation to accept the waste if weather or other conditions impair the safe and effective disposal of the waste or if the waste impairs the safe and effective operation of the Landfill. Forward shall use reasonable efforts to promptly notify Disposer of its inability to accept the waste for any reason. If Forward's refusal to accept the waste is based on weather or other site conditions, Forward shall notify the Disposer when site conditions are expected to change such that Forward will be able to accept the waste.

REMARKS:

FACILITY TICKET NUMBER:

SIGNATURE OF AUTHORIZED AGENT: *

DATE:

CUBIC YARDS: 18

DISPOSAL METHOD: (TO BE COMPLETED BY FORWARD)

	DISPOSE	BIO	AERATE	STOCKPILE	OTHER
☒ SOIL					
☐ SLUDGE					
☐ NON-FRIABLE ASBESTOS					
☐ WOOD					
☐ ASH					
☐ OTHER					

SCHEDULING MUST BE MADE PRIOR TO 4:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE. TO SCHEDULE CALL (209) 982-4298

MANIFEST # 44062

GENERATOR COPY