aqua science engineers inc.

RO 2656
HONING AREA

ENVIRONMENTAL PROTECTION

95 AUG -7 PM 3:44

August 3, 1995

FINAL REPORT
for
SOIL OVEREXCAVATION AND
SUBSURFACE ASSESSMENT, NO. 2868
at
The Former Charles Lowe Facility
1400 Park Avenue
Emeryville, CA

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

REGISTERED PROFESSIONAL ENGINEER
DAVID M. SCHULTZ
No. 38738
Exp. 4-97
CIVIL
STATE OF CALIFORNIA

1.0 INTRODUCTION

This report documents the methods and findings of Aqua Science Engineer's, Inc. (ASE) overexcavation activities and limited soil and groundwater investigation at the former Charles Lowe facility located at 1400 Park Avenue in Emeryville, California (Figure 1). The field activities were conducted to address the concerns raised by Mr. Brian Oliva of the Alameda County Health Care Services Agency (ACHCSA) as detailed in his inspection report dated April 8, 1995 (Appendix A).

ASE was contracted to perform the overexcavation and assessment activities by the Thomas A. Short Company (TASCO) who recently purchased the assets of the Charles Lowe Company. The subsurface soil and groundwater issues still remain the property of the Charles Lowe Company.

2.0 SITE HISTORY

The current property and building owner is Emeryville Properties of San Francisco, CA. The Charles Lowe Company occupied the property since the late 1970s, operating a machine shop that repaired, serviced and overhauled pumps, turbines, compressors, valves and the like.

Six (6) groundwater monitoring wells have been installed at the site by others to investigate for the presence of metals and volatile organic compounds (VOCs).

3.0 SCOPE OF WORK (SOW)

Based on the site history, the requirements as stated in the ACHCSA letter, and the site walk with TASCO and Charles Lowe Company representatives, ASE's SOW was as follows:

1. Prepare a site-specific health and safety plan.

2. Inspect the below-grade concrete areas for any discernable failures or cracks after areas have been thoroughly cleaned of residual debris and properly disposed of (Figure 2).

3. Excavate the accessible soil from below and around the floor of the former truck dock. Excavation boundaries were limited horizontally by the walls and foundation of the truck dock, and vertically by groundwater.

4. Using a vacuum truck service, evacuate groundwater from the excavation pit, as necessary, to allow for removal of additional contaminated soil.

5. Stockpile all overexcavated soil on plastic in the rear of the property.

6. Sample the native soil within the excavation pit. Samples were collected and chemically analyzed for all of the following: total extractable petroleum hydrocarbons (TEPH) as diesel and honing oil by EPA Method 3550/8015, oil and grease by EPA Method 5520 E & F, volatile organic compounds (VOCs) by EPA Method 8010, and CAM 17 metals by EPA Method 6000 series.

7. Sample the groundwater. Grab groundwater samples were collected and chemically analyzed for all of the following: TEPH as diesel and honing oil by EPA Method 3550/8015, oil and grease by EPA Method 5520 E & F, volatile organic compounds (VOCs) by EPA Method 8010, and CAM 17 metals by EPA Method 6000 series. Metals samples were filtered by the laboratory prior to analyses.

8. Sample the overburden/stockpiled soil. A composited sample was collected and chemically analyzed for all of the following: TPH-G and BTEX by EPA Method 5030/8015-8020, TEPH as diesel and honing oil by EPA Method 3550/8015, volatile organic compounds (VOCs) by EPA Method 8010, oil and grease by EPA Method 5520 E & F, semi-VOCs by EPA Method 8270, reactivity, corrosivity and ignitability (RCI), and for the LUFT five metals cadmium, chromium, lead, nickel and zinc by EPA Method 6000 series.

9. Manifest and dispose of all evacuated groundwater at a licensed recycling facility.

10. Backfill and compact the excavation with clean, imported, highly-compactable, sub-base granular fill.

11. Profile contaminated/stockpiled soil for acceptance into landfill facility.

12. Offhaul contaminated soil to appropriate landfill.

13. Resurface the excavation with concrete. Resurface the below-grade concrete areas with concrete.

14. Prepare a summary report detailing the methods and findings of the project.

4.0 PRE-EXCAVATION ACTIVITIES

Workplan and Health and Safety Plan

Prior to any field work, ASE prepared a workplan detailing the proposed scope of work at the subject site. Included in the workplan was a detailed health and safety plan identifying any and all potential hazards at the site. The workplan was submitted to and approved by Mr. Brian Oliva of the ACHCSA.

5.0 EXCAVATION ACTIVITIES

Project personnel at the site included David Allen and Steve Labar of ASE, Ms. Gwen Telligen representing the property owner, and Mr. Brian Oliva of the ACHCSA. Charles Lowe Company and TASCO representatives periodically visited the site.

On June 21, 1995, ASE mobilized to the site with a backhoe and operator to conduct overexcavation activities of the honing-process area (Figure 2). The honing process area took place in one of the buildings several truck bays. To gain access to the underlying soil beneath the truck bay floor, a breaker was used to destroy then remove the 6-8 inch thick concrete and rebar floor. The concrete was later hauled to Specialty Crushing Company in Emeryville where it was recycled.

Using the backhoe, obviously contaminated soil (odorous and heavily stained) was removed from the excavation to a depth of 9-feet below ground surface. The odorous and stained soil was found from just below the concrete floor to the total depth excavated; the same depth of groundwater, 9.0-feet. The excavation limits were 15-feet by 15-feet which is the area of the truck bay. Excavated soil was removed from the pit, loaded onto a dump truck, transported to the rear of the property and then stockpiled and covered with plastic.

Several times during the excavation activities, pooled groundwater was removed from the excavation by Waste Oil Recovery Services (WORS), a local vacuum truck service. All totaled, WORS removed 275 gallons of groundwater from the excavation. The water was later disposed of at a local recycling facility. A copy of the manifest is attached in Appendix A.

A total of 75 yards of contaminated soil was removed from the excavation. It appeared that stained and odorous soils no longer existed at depths below the static groundwater depth of 9.0-feet (see photographs 1 & 2). However, the sidewalls of the excavation still appeared to contain elevated levels of petroleum hydrocarbons based on visual inspection. Due to the proximity of the street, building and walls of the truck bay, the sidewalls could not be further overexcavated.

6.0 SAMPLE COLLECTION AND ANALYSES

Excavation Sidewall Soil Samples

After all the accessible, contaminated soil had been removed from the excavation, ASE collected soil samples from the sidewalls and bottom of the excavation. For a description and location of soil samples collected, see Table One and Figure 3.

All four sidewall soil samples were collected at a depth of 6-feet bgs. The 6-foot depth was selected because it best represented the soil contamination that could not be removed due to the proximity of the street, building and walls of the truck bay. The sidewall soil samples consisted of dark-gray to black, damp, silty clay.

Excavation Bottom Soil Samples

Bottom of excavation soil samples were collected at a depth of 10-feet bgs, after the pooled groundwater had been evacuated. The 10-foot depth was selected because it best represented the non-contaminated soil below the former honing area. It appeared that soil contamination did not exist below the groundwater depth of 9-feet bgs. The bottom of excavation soil samples collected at 10-feet bgs consisted of light brown,saturated to wet silty sand.

Stockpiled/Contaminated Soil Samples

A four-point composite soil sample was collected from the stockpiled/contaminated soil. From four different locations on the pile, a discrete sample was collected. Upon receipt by the laboratory, the four samples were composited into one prior to analyses.

The afore-mentioned soil samples were collected then placed into a 6-ounce, pre-cleaned, glass sample jar supplied by the analytical laboratory. Each sample was sealed with a plastic threaded cap, discretely labeled, placed in a plastic bag and stored on wet ice in a cooler for delivery to a CAL-EPA certified laboratory for chemical analysis under proper chain of

custody procedures. ASE also collected duplicates of each soil sample for Ms. Telligen.

Soil Analyses

Soil samples were analyzed at American Environmental Network of Pleasant Hill, CA (DOHS No. 1172) for all of the following: total extractable petroleum hydrocarbons (TEPH) as diesel and honing oil by EPA Method 3550/8015, oil and grease by EPA Method 5520 E & F, volatile organic compounds (VOCs) by EPA Method 8010, and CAM 17 metals by EPA Method 6000 series.

Grab Groundwater Sample

After allowing groundwater to recharge back into the excavation, ASE collected a grab groundwater sample. For a description and location of the water samples collected, see Table One and Figure 3. The groundwater was collected in 40-ml glass volatile organic analysis (VOA) vials, 1-liter amber glass bottles, and plastic bottles supplied by the laboratory. The samples were labeled and stored on wet ice for transport to the analytical laboratory under proper chain of custody procedures. ASE also collected duplicates of the water sample for Ms. Telligen.

Water Analyses

The grab groundwater samples were analyzed at American Environmental Network of Pleasant Hill, CA (DOHS No. 1172) for all of the following: TEPH as diesel and honing oil by EPA Method 3550/8015, oil and grease by EPA Method 5520 E & F, volatile organic compounds (VOCs) by EPA Method 8010, and CAM 17 metals by EPA Method 6000 series. Metals samples were filtered by the laboratory prior to analyses.

Analytical results for the soil and groundwater samples are tabulated in Table Two thru Table Six. Copies of the certified analytical reports are attached in Appendix B.

7.0 BACKFILLING AND RESURFACING

On June 21 and July 13, 1995, imported backfill material was placed into the truck-bay excavation and compacted. Backfill material consisted of 118 tons of highly-compactable, sub-base, granular fill. The fill material was placed into the excavation in lifts and compacted. See Appendix C for a copy of the backfill tonnage. Upon completion of backfilling activities, the excavation was resurfaced with 6-8 inches of rebar-reinforced concrete.

ASE inspected the below-grade concrete areas for any discernable failures or cracks after they had been thoroughly cleaned of residual debris. All of the below-grade concrete areas appeared to in reasonably good shape without any obvious holes, cracks or integrity failures. ASE did not see any reason to warrant the need for subsurface sampling below any of the below-grade concrete areas. Therefore, each of the below-grade concrete areas were filled completely with wire-mesh and/or rebar-reinforced concrete to the surface of the existing concrete floor.

8.0 OFFHAUL OF CONTAMINATED SOIL

Based on the analytical results of the stockpiled soil, ASE profiled the material into the Forward, Inc. landfill in Manteca, CA. The elevated concentrations of petroleum hydrocarbons require disposal of the stockpiled material at a Class II facility, which Forward's Manteca site is. On July 13, 1995, 112.36 tons of contaminated soil was transported to the Forward, Inc. landfill in Manteca, CA where it was disposed. See Appendix D for copies of the Acceptance Letter and manifests.

9.0 CONCLUSIONS

112.36 tons of extractable range-petroleum hydrocarbons were excavated, then disposed of off-site, from the former honing area at the Charles Lowe facility in Emeryville, CA.

Elevated concentrations of extractable range-petroleum hydrocarbons and hydrocarbon oil & grease (as high as 870 parts per million (ppm) and 1400 ppm respectively) still remain in the sidewalls of the excavation. Further excavation and removal of these areas is not warranted due to the relation of the truck-bay walls, the street and the sidewalk.

Groundwater within the excavation contains elevated concentrations of extractable range-petroleum hydrocarbons (as high as 7,000 ppb total), hydrocarbon oil & grease (as high as 10,000 ppb), and volatile organic compounds (as high as 100 ppb trichloroethene). Since there were no VOCs detected in any soil samples collected from within the excavation and there is known groundwater VOC contamination from neighboring sites, it is believed that the trichloroethene and other VOCs found in the excavation pit water are the result of neighboring properties.

None of the excavation soil samples contained concentrations of CAM 17 metals above the TTLC for each metal.

10.0 RECOMMENDATIONS

Since all accessible contaminated soil within the honing process area has been removed from the site, ASE recommends no further soil excavation activities.

Due to the elevated concentrations of extractable-range petroleum hydrocarbons, oil & grease, and VOCs detected in the excavation pit water, the ACHCSA will most likely require the installation of a groundwater monitoring well downgradient of the former honing process area. ASE would propose to the ACHCSA that only one well be installed and that analyses be limited to only the oil range hydrocarbons found within the excavation. ASE would be able to use gradient information from the 6 existing monitoring wells to insure the proper placement of any additional wells.

Aqua Science Engineers appreciates the opportunity to assist TASCO and the Charles Lowe Company with their 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.

David Allen, R.E.A.
Project Manager

REGISTERED ENVIRONMENTAL ASSESSOR
DAVID ALLEN
No. REA-06211
Expires: 6·96
STATE OF CALIFORNIA

Attachments: Figures 1, 2 & 3
Tables One thru Six
Appendix A-D
Photographs 1 & 2

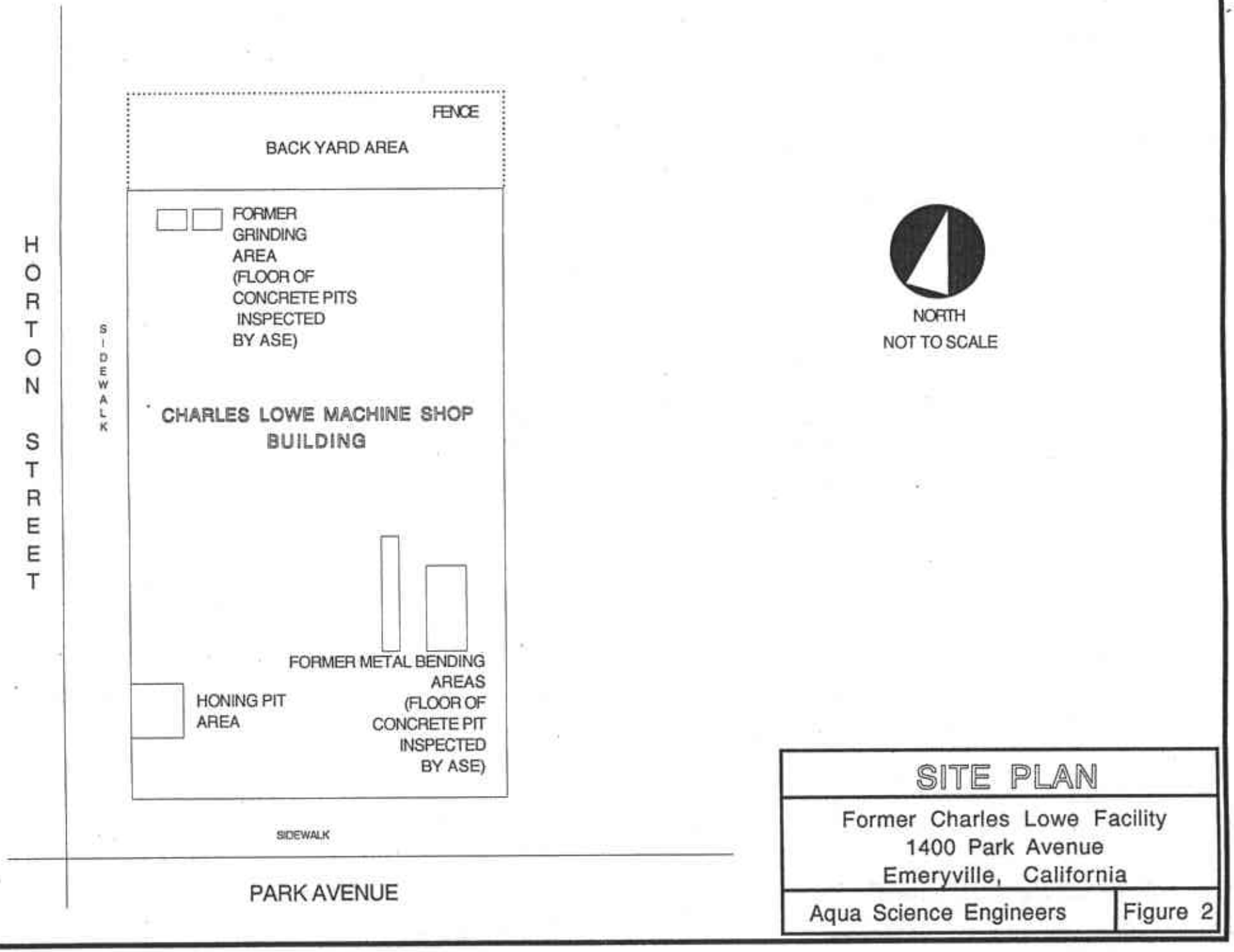
cc: Mr. Thomas D. LaFlamme, TASCO President
Mr. Steve Slade, Former Charles Lowe Company President
Mr. Brian Oliva, ACHCSA
Ms. Gwen Telligen, Environmental Oversight for Property Owner
Ms. Kari Erickson, Attorney for TASCO

NORTH

LOCATION MAP

Former Charles Lowe Facility
1400 Park Avenue
Emeryville, California

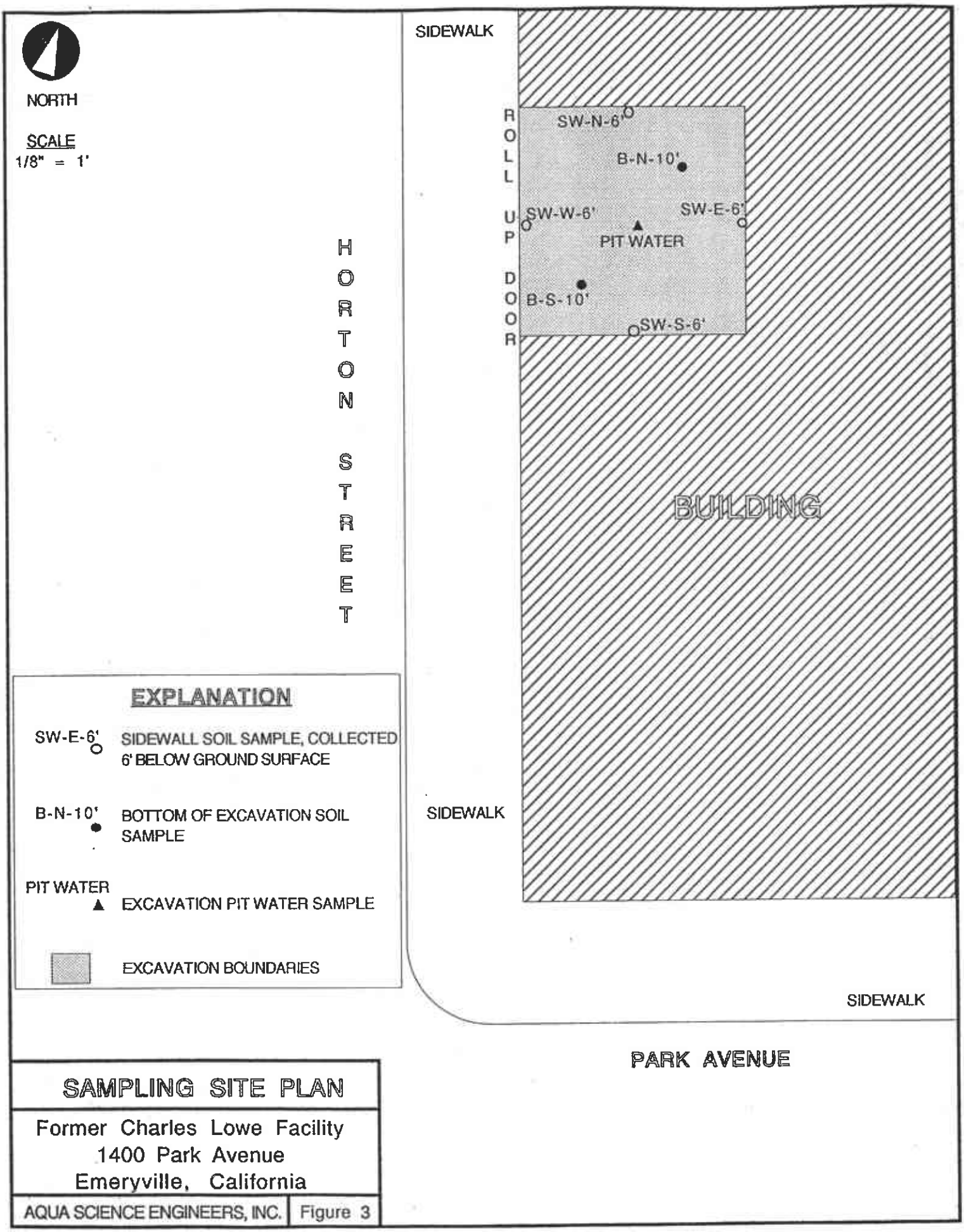
Aqua Science Engineers | Figure 1



SITE PLAN

Former Charles Lowe Facility
1400 Park Avenue
Emeryville, California

Aqua Science Engineers | Figure 2



SAMPLING SITE PLAN

Former Charles Lowe Facility
1400 Park Avenue
Emeryville, California

AQUA SCIENCE ENGINEERS, INC. | Figure 3

TABLE ONE

SAMPLE LOCATIONS - EXCAVATION PIT and STOCKPILE

Sample Identification (BGS)	Location	Depth
SW-N-6'	Northern Sidewall	6'
SW-S-6'	Southern Sidewall	6'
SW-W-6'	Western Sidewall	6'
SW-E-6'	Eastern Sidewall	6'
B-N-10'	Northern Bottom	10'
B-S-10'	Southern Bottom	10'
STKP	Stockpiled Soil	
PIT WATER	Groundwater within Excavation	10'

TABLE TWO

SOIL AND WATER SAMPLE RESULTS

TOTAL EXTRACTABLE HYDROCARBONS

All Results [redacted]

Sample Id.	Mineral Spirit/ Kerosene Range Hydrocarbons (C8-C14)	Diesel Range Hydrocarbons (C14-C22)	Light Oil Range Hydrocarbons (C22-C32)	Motor Oil/ Asphalt Range Hydrocarbons (C32-C44)	Total Hydrocarbons
SOIL					
SW-N-6'	320	370	140	40	[redacted]
SW-S-6'	540	140	62	14	
SW-W-6'	100	180	120	30	430
SW-E-6'	92	340	150	40	[redacted]
B-N-10'	<10	<10	<10	<10	<10
B-S-10'	<10	<10	<10	<10	<10
STKP	890	390	200	<50	[redacted]
WATER					
PIT WATER	1.6	3.0	2.0	0.4	7.0
EPA METHOD	3550/ 8015	3550/ 8015	3550/ 8015	3550/ 8015	3550/ 8015

TABLE THREE
SOIL SAMPLE RESULTS
OIL & GREASE AND VOCs
All Results in Parts Per Million

Sample Id.	Total Oil & Grease	Hydrocarbon Oil & Grease	All VOCs
SOIL			
SW-N-6'	970	850	<0.005-0.02
SW-S-6'	1100	890	<0.005-0.02
SW-W-6'	970	810	<0.005-0.02
SW-E-6'	1600	1400	<0.005-0.02
B-N-10'	20	20	<0.005-0.02
B-S-10'	20	20	<0.005-0.02
STKP	1900	1900	<0.005-0.02
EPA METHOD	5520E	5520E&F	8010

TABLE FOUR
WATER SAMPLE RESULTS
OIL & GREASE AND VOCs
All Results in Parts Per Billion

Sample Id.	Total Oil & Grease	Hydrocarbon Oil & Grease	All VOCs
WATER			
PIT WATER	11,000	10,000	1,2-Dichloroben[redacted] cis1,2-Dichloroethene @ [redacted] trans-1,2-Dichloroethene @ [redacted] Tetrachloroethene @ 19.0 Trichloroethene [redacted] Vinyl Chloride [redacted] All Others @ <2
EPA METHOD	5520C	5520C&F	8010

TABLE FIVE
SOIL AND WATER SAMPLE RESULTS
CAM 17 METALS
All Results in **Parts Per Million**

CCR 17 Metal	SW-W-6'	SW-E-6'	B-N-10'	PIT WATER
Silver	<0.1	<0.1	<0.1	<0.005
Arsenic	1	2.9	17	0.002
Barium	180	160	90	0.10
Beryllium	0.6	0.5	0.4	<0.002
Cadmium	<0.2	<0.2	<0.2	<0.005
Cobalt	7.9	6.5	11	<0.005
Chromium	36	34	34	<0.01
Copper	16	16	18	<0.01
Mercury	<0.006	<0.006	<0.006	<0.0002
Molybdenum	<0.2	<0.2	0.2	<0.01
Nickel	31	29	40	0.02
lead	6	6	6	<0.04
Antimony	<1	<1	<1	<0.02
Selenium	<1	<1	<1	<0.004
Thallium	3	4	4	<0.05
Vanadium	28	26	39	<0.005
Zinc	32	31	38	0.03
EPA	6000/ 7000	6000/ 7000	6000/ 7000	6000/ 7000

TABLE SIX
STOCKPILED SOIL SAMPLE RESULTS
All Results in Parts Per Million

TPH GASOLINE, BTEX

Sample Id.	TPH Gasoline	Benzene	Toluene	Ethyl Benzene	Total Xylenes
STKP	25	<0.005	<0.005	<0.005	<0.005
EPA METHOD	5030/ 8015	8020	8020	8020	8020

FIVE METALS

Sample Id.	Cadmium	Chromium	Lead	Nickel	Zinc
STKP	<0.2	41	12	54	39
EPA METHOD	6010	6010	6010	6010	6010

SEMI-VOLATILE ORGANIC COMPOUNDS

Sample Id.	Bis-Phthalate	All Other SVOCs
STKP	2.4	<0.33-1.6

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-94)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAD981391945 | Manifest Document No. 3014616 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: CHARLES LOWE COMPANY, 11100 PARK AVE, EMERYVILLE CALIFORNIA 94608
4. Generator's Phone (510) 655 9375

A. State Manifest Document Number: 93730466
B. State Generator's ID:
C. State Transporter's ID: 431164
D. Transporter's Phone: 5105330750
E. State Transporter's ID:
F. Transporter's Phone:
G. State Facility's ID:
H. Facility's Phone: 4082622715

5. Transporter 1 Company Name: WASTE OIL RECOVERY | 6. US EPA ID Number: CAL000137592 CAD010
7. Transporter 2 Company Name | 8. US EPA ID Number
9. Designated Facility Name and Site Address: ALVISO INDEPENDENT OIL, 5002 ARCHER STREET, ALVISO, CA 95002 | 10. US EPA ID Number: P.O. BOX 124 CAL000D485771

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. USED OIL, NON RCRA HAZARDOUS WASTE, LIQUID	001	T	00275	G	State 221 EPA/Other NON-RCRA
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above: (a.) WASTE OIL AND WATER

K. Handling Codes for Wastes Listed Above: a. 01 b. c. d.

15. Special Handling Instructions and Additional Information
WEAR PERSONAL PROTECTIVE EQUIPMENT
24 HOUR EMERGENCY 5105330750
ERG# 27

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
DAVID ALLEN, Agent for Alviso		06	21	95

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
MONICA FALCON		06	21	95

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

DO NOT WRITE BELOW THIS LINE.

GENERATOR

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

DTSC 8022A (9/93)
EPA 8700—22

Yellow: GENERATOR RETAINS

APPENDIX B

Certified Analytical Report
for
Soil and Groundwater Samples

American Environmental Network

Certificate of Analysis

DOHS Certification: 1172 AIHA Accreditation: 11134

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

ATTN: DAVID ALLEN
CLIENT PROJ. ID: 2868
CLIENT PROJ. NAME: TASCO-LOWE

REPORT DATE: 07/07/95

DATE(S) SAMPLED: 06/21/95

DATE RECEIVED: 06/22/95

AEN WORK ORDER: 9506303

PROJECT SUMMARY:

On June 22, 1995, this laboratory received 9 (8 soil and 1 water) sample(s).

Client requested eight samples be analyzed for organic and inorganic parameters; one sample was placed on hold. Portion for reactivity was subcontracted to a DOHS certified laboratory; subcontract report will be forwarded at a later date. Results of analysis are summarized on the following pages. Please see quality control report for a summary of QC data pertaining to this project.

Samples will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Samples may be archived by prior arrangement.

If you have any questions, please contact Client Services at (510) 930-9090.

Larry Klein
Laboratory Director

AQUA SCIENCE ENGINEERS, INC.

AEN JOB NO: 9506303
DATE SAMPLED: 06/21/95
DATE RECEIVED: 06/22/95
CLIENT PROJ. ID: 2868

Client Sample Id	AEN Lab Id	Purgeable Hydrocarbons as Gasoline (mg/kg)	Oil & Grease (mg/kg)	Hydrocarbons (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)
SW-N-6'	01	---	970	850	---	---	---	---
SW-S-6'	02	---	1,100	890	---	---	---	---
SW-W-6'	03	---	970	810	---	---	---	---
SW-E-6'	04	---	1,600	1,400	---	---	---	---
B-N-10'	06	---	20	20	---	---	---	---
B-S-10'	07	---	20	20	---	---	---	---
STKP	08	25	1,900	1,900	ND	ND	ND	ND
Reporting Limit:		1	10	10	0.005	0.005	0.005	0.02

Client Sample Id	AEN Lab Id	Purgeable Hydrocarbons as Gasoline (ug/L)	Oil & Grease (ug/L)	Hydrocarbons (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)
PITWATER	09	---	11,000	10,000	---	---	---	---
Reporting Limit:			500	500				
EPA Method:		5030 GCFID	5520C	5520F	8020	8020	8020	8020
Date Extracted:		NA	06/26/95 06/29/95 (08) 06/28/95 (09)	06/26/95 06/29/95 (08) 06/28/95 (09)	NA	NA	NA	NA
Date Analyzed:		06/26/95	06/27/95 06/29/95 (08) 06/28/95 (09)	06/28/95 06/29/95 (08) 06/28/95 (09)	06/26/95	06/26/95	06/26/95	06/26/95

Reporting limits were elevated for gasoline/BTEX due to high levels of non-target compounds; sample was run at a dilution.
NA = Not Applicable
ND = Not Detected

AQUA SCIENCE ENGINEERS, INC.

AEN JOB NO: 9506303
DATE SAMPLED: 06/21/95
DATE RECEIVED: 06/22/95
CLIENT PROJ. ID: 2868

Client Sample Id.	AEN Lab Id.	Mineral Spirit/ Kerosene Range Hydrocarbons C8 - C14 (mg/kg)	Diesel Range Hydrocarbons C14 - C22 (mg/kg)	Light Oil Range Hydrocarbons C22 - C32 (mg/kg)	Motor Oil/ Asphalt Range Hydrocarbons C32 - C44 (mg/kg)	Total (mg/kg)
SW-N-6'	01	320	370	140	40	870
SW-S-6'	02	540	140	62	14	750
SW-W-6'	03	100	180	120	30	430
SW-E-6'	04	92	340	150	40	620
B-N-10'	06	ND	ND	ND	ND	ND
B-S-10'	07	ND	ND	ND	ND	ND
STKP	08	890 (10)	390 (10)	200 (50)	ND (50)	1500
Reporting Limit: (unless otherwise noted by parentheses)		1	1	1	5	

EPA Method: EPA 3550 GCFID

Client Sample Id.	AEN Lab Id.	Mineral Spirit/ Kerosene Range Hydrocarbons C8 - C14 (ug/L)	Diesel Range Hydrocarbons C14 - C22 (ug/L)	Light Oil Range Hydrocarbons C22 - C32 (ug/L)	Motor Oil/ Asphalt Range Hydrocarbons C32 - C44 (ug/L)	Total (ug/L)
PITWATER	09	1,600	3,000	2,000	400	7,000
Reporting Limit:		0.05	0.05	0.2	0.2	

EPA Method: EPA 3510 GCFID

Date Extracted: 06/23/95
06/29/95 (02)

Date Analyzed: 06/26-27/95
07/01/95 (02)

ND = Not Detected

AQUA SCIENCE ENGINEERS, INC

SAMPLE ID: SW-N-6'
AEN LAB NO: 9506303-01
AEN WORK ORDER: 9506303
CLIENT PROJ. ID: 2868

DATE SAMPLED: 06/21/95
DATE RECEIVED: 06/22/95
REPORT DATE: 07/07/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8010 - Soil matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.005	mg/kg	06/27/95
Bromoform	75-25-2	ND	0.005	mg/kg	06/27/95
Bromomethane	74-83-9	ND	0.02	mg/kg	06/27/95
Carbon Tetrachloride	56-23-5	ND	0.005	mg/kg	06/27/95
Chlorobenzene	108-90-7	ND	0.005	mg/kg	06/27/95
Chloroethane	75-00-3	ND	0.02	mg/kg	06/27/95
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.005	mg/kg	06/27/95
Chloroform	67-66-3	ND	0.005	mg/kg	06/27/95
Chloromethane	74-87-3	ND	0.02	mg/kg	06/27/95
Dibromochloromethane	124-48-1	ND	0.005	mg/kg	06/27/95
1,2-Dichlorobenzene	95-50-1	ND	0.005	mg/kg	06/27/95
1,3-Dichlorobenzene	541-73-1	ND	0.005	mg/kg	06/27/95
1,4-Dichlorobenzene	106-46-7	ND	0.005	mg/kg	06/27/95
Dichlorodifluoromethane	75-71-8	ND	0.02	mg/kg	06/27/95
1,1-Dichloroethane	75-34-3	ND	0.005	mg/kg	06/27/95
1,2-Dichloroethane	107-06-2	ND	0.005	mg/kg	06/27/95
1,1-Dichloroethene	75-35-4	ND	0.005	mg/kg	06/27/95
cis-1,2-Dichloroethene	156-59-2	ND	0.005	mg/kg	06/27/95
trans-1,2-Dichloroethene	156-60-5	ND	0.005	mg/kg	06/27/95
1,2-Dichloropropane	78-87-5	ND	0.005	mg/kg	06/27/95
cis-1,3-Dichloropropene	10061-01-5	ND	0.005	mg/kg	06/27/95
trans-1,3-Dichloropropene	10061-02-6	ND	0.005	mg/kg	06/27/95
Methylene Chloride	75-09-2	ND	0.02	mg/kg	06/27/95
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.005	mg/kg	06/27/95
Tetrachloroethene	127-18-4	ND	0.005	mg/kg	06/27/95
1,1,1-Trichloroethane	71-55-6	ND	0.005	mg/kg	06/27/95
1,1,2-Trichloroethane	79-00-5	ND	0.005	mg/kg	06/27/95
Trichloroethene	79-01-6	ND	0.005	mg/kg	06/27/95
Trichlorofluoromethane	75-69-4	ND	0.02	mg/kg	06/27/95
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.005	mg/kg	06/27/95
Vinyl Chloride	75-01-4	ND	0.02	mg/kg	06/27/95

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

AQUA SCIENCE ENGINEERS, INC

SAMPLE ID: SW-S-6'
AEN LAB NO: 9506303-02
AEN WORK ORDER: 9506303
CLIENT PROJ. ID: 2868

DATE SAMPLED: 06/21/95
DATE RECEIVED: 06/22/95
REPORT DATE: 07/07/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8010 - Soil matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.005	mg/kg	06/27/95
Bromoform	75-25-2	ND	0.005	mg/kg	06/27/95
Bromomethane	74-83-9	ND	0.02	mg/kg	06/27/95
Carbon Tetrachloride	56-23-5	ND	0.005	mg/kg	06/27/95
Chlorobenzene	108-90-7	ND	0.005	mg/kg	06/27/95
Chloroethane	75-00-3	ND	0.02	mg/kg	06/27/95
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.005	mg/kg	06/27/95
Chloroform	67-66-3	ND	0.005	mg/kg	06/27/95
Chloromethane	74-87-3	ND	0.02	mg/kg	06/27/95
Dibromochloromethane	124-48-1	ND	0.005	mg/kg	06/27/95
1,2-Dichlorobenzene	95-50-1	ND	0.005	mg/kg	06/27/95
1,3-Dichlorobenzene	541-73-1	ND	0.005	mg/kg	06/27/95
1,4-Dichlorobenzene	106-46-7	ND	0.005	mg/kg	06/27/95
Dichlorodifluoromethane	75-71-8	ND	0.02	mg/kg	06/27/95
1,1-Dichloroethane	75-34-3	ND	0.005	mg/kg	06/27/95
1,2-Dichloroethane	107-06-2	ND	0.005	mg/kg	06/27/95
1,1-Dichloroethene	75-35-4	ND	0.005	mg/kg	06/27/95
cis-1,2-Dichloroethene	156-59-2	ND	0.005	mg/kg	06/27/95
trans-1,2-Dichloroethene	156-60-5	ND	0.005	mg/kg	06/27/95
1,2-Dichloropropane	78-87-5	ND	0.005	mg/kg	06/27/95
cis-1,3-Dichloropropene	10061-01-5	ND	0.005	mg/kg	06/27/95
trans-1,3-Dichloropropene	10061-02-6	ND	0.005	mg/kg	06/27/95
Methylene Chloride	75-09-2	ND	0.02	mg/kg	06/27/95
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.005	mg/kg	06/27/95
Tetrachloroethene	127-18-4	ND	0.005	mg/kg	06/27/95
1,1,1-Trichloroethane	71-55-6	ND	0.005	mg/kg	06/27/95
1,1,2-Trichloroethane	79-00-5	ND	0.005	mg/kg	06/27/95
Trichloroethene	79-01-6	ND	0.005	mg/kg	06/27/95
Trichlorofluoromethane	75-69-4	ND	0.02	mg/kg	06/27/95
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.005	mg/kg	06/27/95
Vinyl Chloride	75-01-4	ND	0.02	mg/kg	06/27/95

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

AQUA SCIENCE ENGINEERS, INC

SAMPLE ID: SW-W-6'
AEN LAB NO: 9506303-03
AEN WORK ORDER: 9506303
CLIENT PROJ. ID: 2868

DATE SAMPLED: 06/21/95
DATE RECEIVED: 06/22/95
REPORT DATE: 07/07/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion, Metals by GFAA	EPA 3050	-		Prep Date	06/22/95
#Digestion, Metals AA/ICP	EPA 3050	-		Prep Date	06/22/95
CCR 17 Metals					
Ag Silver	EPA 6010	ND	0.1	mg/kg	06/25/95
As Arsenic	EPA 7060	1.0 *	0.5	mg/kg	06/23/95
Ba Barium	EPA 6010	180 *	1	mg/kg	06/25/95
Be Beryllium	EPA 6010	0.6 *	0.1	mg/kg	06/25/95
Cd Cadmium	EPA 6010	ND	0.2	mg/kg	06/25/95
Co Cobalt	EPA 6010	7.9 *	0.2	mg/kg	06/25/95
Cr Chromium	EPA 6010	36 *	0.5	mg/kg	06/25/95
Cu Copper	EPA 6010	16 *	0.5	mg/kg	06/25/95
Hg Mercury	EPA 7471	ND	0.06	mg/kg	06/23/95
Mo Molybdenum	EPA 6010	ND	0.2	mg/kg	06/25/95
Ni Nickel	EPA 6010	31 *	1	mg/kg	06/25/95
Pb Lead	EPA 6010	6 *	1	mg/kg	06/25/95
Sb Antimony	EPA 6010	ND	1	mg/kg	06/25/95
Se Selenium	EPA 7740	ND	1	mg/kg	06/23/95
Tl Thallium	EPA 6010	3 *	1	mg/kg	06/25/95
V Vanadium	EPA 6010	28 *	0.5	mg/kg	06/25/95
Zn Zinc	EPA 6010	32 *	1	mg/kg	06/25/95
EPA 8010 - Soil matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.005	mg/kg	06/27/95
Bromoform	75-25-2	ND	0.005	mg/kg	06/27/95
Bromomethane	74-83-9	ND	0.02	mg/kg	06/27/95
Carbon Tetrachloride	56-23-5	ND	0.005	mg/kg	06/27/95
Chlorobenzene	108-90-7	ND	0.005	mg/kg	06/27/95
Chloroethane	75-00-3	ND	0.02	mg/kg	06/27/95
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.005	mg/kg	06/27/95
Chloroform	67-66-3	ND	0.005	mg/kg	06/27/95
Chloromethane	74-87-3	ND	0.02	mg/kg	06/27/95
Dibromochloromethane	124-48-1	ND	0.005	mg/kg	06/27/95
1,2-Dichlorobenzene	95-50-1	ND	0.005	mg/kg	06/27/95
1,3-Dichlorobenzene	541-73-1	ND	0.005	mg/kg	06/27/95
1,4-Dichlorobenzene	106-46-7	ND	0.005	mg/kg	06/27/95
Dichlorodifluoromethane	75-71-8	ND	0.02	mg/kg	06/27/95
1,1-Dichloroethane	75-34-3	ND	0.005	mg/kg	06/27/95
1,2-Dichloroethane	107-06-2	ND	0.005	mg/kg	06/27/95
1,1-Dichloroethene	75-35-4	ND	0.005	mg/kg	06/27/95
cis-1,2-Dichloroethene	156-59-2	ND	0.005	mg/kg	06/27/95

AQUA SCIENCE ENGINEERS, INC

SAMPLE ID: SW-W-6'
AEN LAB NO: 9506303-03
AEN WORK ORDER: 9506303
CLIENT PROJ. ID: 2868

DATE SAMPLED: 06/21/95
DATE RECEIVED: 06/22/95
REPORT DATE: 07/07/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
trans-1,2-Dichloroethene	156-60-5	ND	0.005	mg/kg	06/27/95
1,2-Dichloropropane	78-87-5	ND	0.005	mg/kg	06/27/95
cis-1,3-Dichloropropene	10061-01-5	ND	0.005	mg/kg	06/27/95
trans-1,3-Dichloropropene	10061-02-6	ND	0.005	mg/kg	06/27/95
Methylene Chloride	75-09-2	ND	0.02	mg/kg	06/27/95
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.005	mg/kg	06/27/95
Tetrachloroethene	127-18-4	ND	0.005	mg/kg	06/27/95
1,1,1-Trichloroethane	71-55-6	ND	0.005	mg/kg	06/27/95
1,1,2-Trichloroethane	79-00-5	ND	0.005	mg/kg	06/27/95
Trichloroethene	79-01-6	ND	0.005	mg/kg	06/27/95
Trichlorofluoromethane	75-69-4	ND	0.02	mg/kg	06/27/95
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.005	mg/kg	06/27/95
Vinyl Chloride	75-01-4	ND	0.02	mg/kg	06/27/95

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

AQUA SCIENCE ENGINEERS, INC

SAMPLE ID: SW-E-6'
AEN LAB NO: 9506303-04
AEN WORK ORDER: 9506303
CLIENT PROJ. ID: 2868

DATE SAMPLED: 06/21/95
DATE RECEIVED: 06/22/95
REPORT DATE: 07/07/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion, Metals by GFAA	EPA 3050	-		Prep Date	06/22/95
#Digestion, Metals AA/ICP	EPA 3050	-		Prep Date	06/22/95
CCR 17 Metals					
Ag Silver	EPA 6010	ND	0.1	mg/kg	06/25/95
As Arsenic	EPA 7060	2.9 *	0.5	mg/kg	06/23/95
Ba Barium	EPA 6010	160 *	1	mg/kg	06/25/95
Be Beryllium	EPA 6010	0.5 *	0.1	mg/kg	06/25/95
Cd Cadmium	EPA 6010	ND	0.2	mg/kg	06/25/95
Co Cobalt	EPA 6010	6.5 *	0.2	mg/kg	06/25/95
Cr Chromium	EPA 6010	34 *	0.5	mg/kg	06/25/95
Cu Copper	EPA 6010	16 *	0.5	mg/kg	06/25/95
Hg Mercury	EPA 7471	ND	0.06	mg/kg	06/23/95
Mo Molybdenum	EPA 6010	ND	0.2	mg/kg	06/25/95
Ni Nickel	EPA 6010	29 *	1	mg/kg	06/25/95
Pb Lead	EPA 6010	6 *	1	mg/kg	06/25/95
Sb Antimony	EPA 6010	ND	1	mg/kg	06/25/95
Se Selenium	EPA 7740	ND	1	mg/kg	06/23/95
Tl Thallium	EPA 6010	4 *	1	mg/kg	06/25/95
V Vanadium	EPA 6010	26 *	0.5	mg/kg	06/25/95
Zn Zinc	EPA 6010	31 *	1	mg/kg	06/25/95
EPA 8010 - Soil matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.005	mg/kg	06/27/95
Bromoform	75-25-2	ND	0.005	mg/kg	06/27/95
Bromomethane	74-83-9	ND	0.02	mg/kg	06/27/95
Carbon Tetrachloride	56-23-5	ND	0.005	mg/kg	06/27/95
Chlorobenzene	108-90-7	ND	0.005	mg/kg	06/27/95
Chloroethane	75-00-3	ND	0.02	mg/kg	06/27/95
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.005	mg/kg	06/27/95
Chloroform	67-66-3	ND	0.005	mg/kg	06/27/95
Chloromethane	74-87-3	ND	0.02	mg/kg	06/27/95
Dibromochloromethane	124-48-1	ND	0.005	mg/kg	06/27/95
1,2-Dichlorobenzene	95-50-1	ND	0.005	mg/kg	06/27/95
1,3-Dichlorobenzene	541-73-1	ND	0.005	mg/kg	06/27/95
1,4-Dichlorobenzene	106-46-7	ND	0.005	mg/kg	06/27/95
Dichlorodifluoromethane	75-71-8	ND	0.02	mg/kg	06/27/95
1,1-Dichloroethane	75-34-3	ND	0.005	mg/kg	06/27/95
1,2-Dichloroethane	107-06-2	ND	0.005	mg/kg	06/27/95
1,1-Dichloroethene	75-35-4	ND	0.005	mg/kg	06/27/95
cis-1,2-Dichloroethene	156-59-2	ND	0.005	mg/kg	06/27/95

AQUA SCIENCE ENGINEERS, INC

SAMPLE ID: SW-E-6'
AEN LAB NO: 9506303-04
AEN WORK ORDER: 9506303
CLIENT PROJ. ID: 2868

DATE SAMPLED: 06/21/95
DATE RECEIVED: 06/22/95
REPORT DATE: 07/07/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
trans-1,2-Dichloroethene	156-60-5	ND	0.005	mg/kg	06/27/95
1,2-Dichloropropane	78-87-5	ND	0.005	mg/kg	06/27/95
cis-1,3-Dichloropropene	10061-01-5	ND	0.005	mg/kg	06/27/95
trans-1,3-Dichloropropene	10061-02-6	ND	0.005	mg/kg	06/27/95
Methylene Chloride	75-09-2	ND	0.02	mg/kg	06/27/95
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.005	mg/kg	06/27/95
Tetrachloroethene	127-18-4	ND	0.005	mg/kg	06/27/95
1,1,1-Trichloroethane	71-55-6	ND	0.005	mg/kg	06/27/95
1,1,2-Trichloroethane	79-00-5	ND	0.005	mg/kg	06/27/95
Trichloroethene	79-01-6	ND	0.005	mg/kg	06/27/95
Trichlorofluoromethane	75-69-4	ND	0.02	mg/kg	06/27/95
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.005	mg/kg	06/27/95
Vinyl Chloride	75-01-4	ND	0.02	mg/kg	06/27/95

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

AQUA SCIENCE ENGINEERS, INC

SAMPLE ID: B-N-10'
AEN LAB NO: 9506303-06
AEN WORK ORDER: 9506303
CLIENT PROJ. ID: 2868

DATE SAMPLED: 06/21/95
DATE RECEIVED: 06/22/95
REPORT DATE: 07/07/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion, Metals by GFAA	EPA 3050	-		Prep Date	06/22/95
#Digestion, Metals AA/ICP	EPA 3050	-		Prep Date	06/22/95
CCR 17 Metals					
Ag Silver	EPA 6010	ND	0.1	mg/kg	06/25/95
As Arsenic	EPA 7060	17 *	0.5	mg/kg	06/23/95
Ba Barium	EPA 6010	90 *	1	mg/kg	06/25/95
Be Beryllium	EPA 6010	0.4 *	0.1	mg/kg	06/25/95
Cd Cadmium	EPA 6010	ND	0.2	mg/kg	06/25/95
Co Cobalt	EPA 6010	11 *	0.2	mg/kg	06/25/95
Cr Chromium	EPA 6010	34 *	0.5	mg/kg	06/25/95
Cu Copper	EPA 6010	18 *	0.5	mg/kg	06/25/95
Hg Mercury	EPA 7471	ND	0.06	mg/kg	06/23/95
Mo Molybdenum	EPA 6010	0.2 *	0.2	mg/kg	06/25/95
Ni Nickel	EPA 6010	40 *	1	mg/kg	06/25/95
Pb Lead	EPA 6010	6 *	1	mg/kg	06/25/95
Sb Antimony	EPA 6010	ND	1	mg/kg	06/25/95
Se Selenium	EPA 7740	ND	1	mg/kg	06/23/95
Tl Thallium	EPA 6010	4 *	1	mg/kg	06/25/95
V Vanadium	EPA 6010	39 *	0.5	mg/kg	06/25/95
Zn Zinc	EPA 6010	38 *	1	mg/kg	06/25/95
EPA 8010 - Soil matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.005	mg/kg	06/27/95
Bromoform	75-25-2	ND	0.005	mg/kg	06/27/95
Bromomethane	74-83-9	ND	0.02	mg/kg	06/27/95
Carbon Tetrachloride	56-23-5	ND	0.005	mg/kg	06/27/95
Chlorobenzene	108-90-7	ND	0.005	mg/kg	06/27/95
Chloroethane	75-00-3	ND	0.02	mg/kg	06/27/95
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.005	mg/kg	06/27/95
Chloroform	67-66-3	ND	0.005	mg/kg	06/27/95
Chloromethane	74-87-3	ND	0.02	mg/kg	06/27/95
Dibromochloromethane	124-48-1	ND	0.005	mg/kg	06/27/95
1,2-Dichlorobenzene	95-50-1	ND	0.005	mg/kg	06/27/95
1,3-Dichlorobenzene	541-73-1	ND	0.005	mg/kg	06/27/95
1,4-Dichlorobenzene	106-46-7	ND	0.005	mg/kg	06/27/95
Dichlorodifluoromethane	75-71-8	ND	0.02	mg/kg	06/27/95
1,1-Dichloroethane	75-34-3	ND	0.005	mg/kg	06/27/95
1,2-Dichloroethane	107-06-2	ND	0.005	mg/kg	06/27/95
1,1-Dichloroethene	75-35-4	ND	0.005	mg/kg	06/27/95
cis-1,2-Dichloroethene	156-59-2	ND	0.005	mg/kg	06/27/95

AQUA SCIENCE ENGINEERS, INC

SAMPLE ID: B-N-10'
AEN LAB NO: 9506303-06
AEN WORK ORDER: 9506303
CLIENT PROJ. ID: 2868

DATE SAMPLED: 06/21/95
DATE RECEIVED: 06/22/95
REPORT DATE: 07/07/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
trans-1,2-Dichloroethene	156-60-5	ND	0.005	mg/kg	06/27/95
1,2-Dichloropropane	78-87-5	ND	0.005	mg/kg	06/27/95
cis-1,3-Dichloropropene	10061-01-5	ND	0.005	mg/kg	06/27/95
trans-1,3-Dichloropropene	10061-02-6	ND	0.005	mg/kg	06/27/95
Methylene Chloride	75-09-2	ND	0.02	mg/kg	06/27/95
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.005	mg/kg	06/27/95
Tetrachloroethene	127-18-4	ND	0.005	mg/kg	06/27/95
1,1,1-Trichloroethane	71-55-6	ND	0.005	mg/kg	06/27/95
1,1,2-Trichloroethane	79-00-5	ND	0.005	mg/kg	06/27/95
Trichloroethene	79-01-6	ND	0.005	mg/kg	06/27/95
Trichlorofluoromethane	75-69-4	ND	0.02	mg/kg	06/27/95
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.005	mg/kg	06/27/95
Vinyl Chloride	75-01-4	ND	0.02	mg/kg	06/27/95

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

AQUA SCIENCE ENGINEERS, INC

SAMPLE ID: B-S-10'
AEN LAB NO: 9506303-07
AEN WORK ORDER: 9506303
CLIENT PROJ. ID: 2868

DATE SAMPLED: 06/21/95
DATE RECEIVED: 06/22/95
REPORT DATE: 07/07/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8010 - Soil matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.005	mg/kg	06/27/95
Bromoform	75-25-2	ND	0.005	mg/kg	06/27/95
Bromomethane	74-83-9	ND	0.02	mg/kg	06/27/95
Carbon Tetrachloride	56-23-5	ND	0.005	mg/kg	06/27/95
Chlorobenzene	108-90-7	ND	0.005	mg/kg	06/27/95
Chloroethane	75-00-3	ND	0.02	mg/kg	06/27/95
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.005	mg/kg	06/27/95
Chloroform	67-66-3	ND	0.005	mg/kg	06/27/95
Chloromethane	74-87-3	ND	0.02	mg/kg	06/27/95
Dibromochloromethane	124-48-1	ND	0.005	mg/kg	06/27/95
1,2-Dichlorobenzene	95-50-1	ND	0.005	mg/kg	06/27/95
1,3-Dichlorobenzene	541-73-1	ND	0.005	mg/kg	06/27/95
1,4-Dichlorobenzene	106-46-7	ND	0.005	mg/kg	06/27/95
Dichlorodifluoromethane	75-71-8	ND	0.02	mg/kg	06/27/95
1,1-Dichloroethane	75-34-3	ND	0.005	mg/kg	06/27/95
1,2-Dichloroethane	107-06-2	ND	0.005	mg/kg	06/27/95
1,1-Dichloroethene	75-35-4	ND	0.005	mg/kg	06/27/95
cis-1,2-Dichloroethene	156-59-2	ND	0.005	mg/kg	06/27/95
trans-1,2-Dichloroethene	156-60-5	ND	0.005	mg/kg	06/27/95
1,2-Dichloropropane	78-87-5	ND	0.005	mg/kg	06/27/95
cis-1,3-Dichloropropene	10061-01-5	ND	0.005	mg/kg	06/27/95
trans-1,3-Dichloropropene	10061-02-6	ND	0.005	mg/kg	06/27/95
Methylene Chloride	75-09-2	ND	0.02	mg/kg	06/27/95
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.005	mg/kg	06/27/95
Tetrachloroethene	127-18-4	ND	0.005	mg/kg	06/27/95
1,1,1-Trichloroethane	71-55-6	ND	0.005	mg/kg	06/27/95
1,1,2-Trichloroethane	79-00-5	ND	0.005	mg/kg	06/27/95
Trichloroethene	79-01-6	ND	0.005	mg/kg	06/27/95
Trichlorofluoromethane	75-69-4	ND	0.02	mg/kg	06/27/95
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.005	mg/kg	06/27/95
Vinyl Chloride	75-01-4	ND	0.02	mg/kg	06/27/95

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

AQUA SCIENCE ENGINEERS, INC

SAMPLE ID: STKP
AEN LAB NO: 9506303-08
AEN WORK ORDER: 9506303
CLIENT PROJ. ID: 2868

DATE SAMPLED: 06/21/95
DATE RECEIVED: 06/22/95
REPORT DATE: 07/07/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Corrosivity in soil (pH)	EPA 9045	8.3		S.U.	06/26/95
Ignitability in solid	CFR40/261.21	NEGATIVE		@	06/28/95
#Digestion, Metals AA/ICP	EPA 3050	-		Prep Date	06/22/95
Cadmium	EPA 6010	ND	0.2	mg/kg	06/25/95
Chromium	EPA 6010	41 *	0.5	mg/kg	06/25/95
Lead	EPA 6010	12 *	1	mg/kg	06/25/95
Nickel	EPA 6010	54 *	1	mg/kg	06/25/95
Zinc	EPA 6010	39 *	1	mg/kg	06/25/95
#Extraction for BNAs	EPA 3550	-		Extrn Date	06/23/95
Semi-Volatile Organics	EPA 8270				
Acenaphthene	83-32-9	ND	0.33	mg/kg	06/28/95
Acenaphthylene	208-96-8	ND	0.33	mg/kg	06/28/95
Anthracene	120-12-7	ND	0.33	mg/kg	06/28/95
Benzidine	92-87-5	ND	1.6	mg/kg	06/28/95
Benzoic Acid	65-85-0	ND	1.6	mg/kg	06/28/95
Benzo(a)anthracene	56-55-3	ND	0.33	mg/kg	06/28/95
Benzo(b)fluoranthene	205-99-2	ND	0.33	mg/kg	06/28/95
Benzo(k)fluoranthene	207-08-9	ND	0.33	mg/kg	06/28/95
Benzo(g,h,i)perylene	191-24-2	ND	0.33	mg/kg	06/28/95
Benzo(a)pyrene	50-32-8	ND	0.33	mg/kg	06/28/95
Benzyl Alcohol	100-51-6	ND	0.66	mg/kg	06/28/95
Bis(2-chloroethoxy)methane	111-91-1	ND	0.33	mg/kg	06/28/95
Bis(2-choroethyl) Ether	111-44-4	ND	0.33	mg/kg	06/28/95
Bis(2-chloroisopropyl) Ether	108-60-1	ND	0.33	mg/kg	06/28/95
Bis(2-ethylhexyl) Phthalate	117-81-7	2.4 *	0.33	mg/kg	06/28/95
4-Bromophenyl Phenyl Ether	101-55-3	ND	0.33	mg/kg	06/28/95
Butylbenzyl Phthalate	85-68-7	ND	0.33	mg/kg	06/28/95
4-Chloroaniline	106-47-8	ND	0.66	mg/kg	06/28/95
2-Chloronaphthalene	91-58-7	ND	0.33	mg/kg	06/28/95
4-Chlorophenyl Phenyl Ether	7005-72-3	ND	0.33	mg/kg	06/28/95
Chrysene	218-01-9	ND	0.33	mg/kg	06/28/95
Dibenzo(a,h)anthracene	53-70-3	ND	0.33	mg/kg	06/28/95
Dibenzofuran	132-64-9	ND	0.33	mg/kg	06/28/95

AQUA SCIENCE ENGINEERS, INC

SAMPLE ID: STKP
AEN LAB NO: 9506303-08
AEN WORK ORDER: 9506303
CLIENT PROJ. ID: 2868

DATE SAMPLED: 06/21/95
DATE RECEIVED: 06/22/95
REPORT DATE: 07/07/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Di-n-butyl Phthalate	84-74-2	ND	0.33	mg/kg	06/28/95
1,2-Dichlorobenzene	95-50-1	ND	0.33	mg/kg	06/28/95
1,3-Dichlorobenzene	541-73-1	ND	0.33	mg/kg	06/28/95
1,4-Dichlorobenzene	106-46-7	ND	0.33	mg/kg	06/28/95
3,3'-Dichlorobenzidine	91-94-1	ND	0.66	mg/kg	06/28/95
Diethyl Phthalate	84-66-2	ND	0.33	mg/kg	06/28/95
Dimethyl Phthalate	131-11-3	ND	0.33	mg/kg	06/28/95
2,4-Dinitrotoluene	121-14-2	ND	0.33	mg/kg	06/28/95
2,6-Dinitrotoluene	606-20-2	ND	0.33	mg/kg	06/28/95
Di-n-octyl Phthalate	117-84-0	ND	0.33	mg/kg	06/28/95
Fluoranthene	206-44-0	ND	0.33	mg/kg	06/28/95
Fluorene	86-73-7	ND	0.33	mg/kg	06/28/95
Hexachlorobenzene	118-74-1	ND	0.33	mg/kg	06/28/95
Hexachlorobutadiene	87-68-3	ND	0.33	mg/kg	06/28/95
Hexachlorocyclopentadiene	77-47-4	ND	0.33	mg/kg	06/28/95
Hexachloroethane	67-72-1	ND	0.33	mg/kg	06/28/95
Indeno(1,2,3-cd)pyrene	193-39-5	ND	0.33	mg/kg	06/28/95
Isophorone	78-59-1	ND	0.33	mg/kg	06/28/95
2-Methylnaphthalene	91-57-6	ND	0.33	mg/kg	06/28/95
Naphthalene	91-20-3	ND	0.33	mg/kg	06/28/95
2-Nitroaniline	88-74-4	ND	1.6	mg/kg	06/28/95
3-Nitroaniline	99-09-2	ND	1.6	mg/kg	06/28/95
4-Nitroaniline	100-01-6	ND	1.6	mg/kg	06/28/95
Nitrobenzene	98-95-3	ND	0.33	mg/kg	06/28/95
N-Nitrosodiphenylamine	86-30-6	ND	0.33	mg/kg	06/28/95
N-Nitrosodi-n-propylamine	621-64-7	ND	0.33	mg/kg	06/28/95
Phenanthrene	85-01-8	ND	0.33	mg/kg	06/28/95
Pyrene	129-00-0	ND	0.33	mg/kg	06/28/95
1,2,4-Trichlorobenzene	120-82-1	ND	0.33	mg/kg	06/28/95
4-Chloro-3-methylphenol	59-50-7	ND	0.33	mg/kg	06/28/95
2-Chlorophenol	95-57-8	ND	0.33	mg/kg	06/28/95
2,4-Dichlorophenol	120-83-2	ND	0.33	mg/kg	06/28/95
2,4-Dimethylphenol	105-67-9	ND	0.33	mg/kg	06/28/95
4,6-Dinitro-2-methylphenol	534-52-1	ND	1.6	mg/kg	06/28/95
2,4-Dinitrophenol	51-28-5	ND	1.6	mg/kg	06/28/95
2-Methylphenol	95-48-7	ND	0.33	mg/kg	06/28/95
4-Methylphenol	106-44-5	ND	0.33	mg/kg	06/28/95
2-Nitrophenol	88-75-5	ND	0.33	mg/kg	06/28/95
4-Nitrophenol	100-02-7	ND	1.6	mg/kg	06/28/95
Pentachlorophenol	87-86-5	ND	1.6	mg/kg	06/28/95
Phenol	108-95-2	ND	0.33	mg/kg	06/28/95
2,4,5-Trichlorophenol	95-95-4	ND	0.33	mg/kg	06/28/95
2,4,6-Trichlorophenol	88-06-2	ND	0.33	mg/kg	06/28/95

AQUA SCIENCE ENGINEERS, INC

SAMPLE ID: STKP
AEN LAB NO: 9506303-08
AEN WORK ORDER: 9506303
CLIENT PROJ. ID: 2868

DATE SAMPLED: 06/21/95
DATE RECEIVED: 06/22/95
REPORT DATE: 07/07/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8010 - Soil matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.005	mg/kg	06/27/95
Bromoform	75-25-2	ND	0.005	mg/kg	06/27/95
Bromomethane	74-83-9	ND	0.02	mg/kg	06/27/95
Carbon Tetrachloride	56-23-5	ND	0.005	mg/kg	06/27/95
Chlorobenzene	108-90-7	ND	0.005	mg/kg	06/27/95
Chloroethane	75-00-3	ND	0.02	mg/kg	06/27/95
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.005	mg/kg	06/27/95
Chloroform	67-66-3	ND	0.005	mg/kg	06/27/95
Chloromethane	74-87-3	ND	0.02	mg/kg	06/27/95
Dibromochloromethane	124-48-1	ND	0.005	mg/kg	06/27/95
1,2-Dichlorobenzene	95-50-1	ND	0.005	mg/kg	06/27/95
1,3-Dichlorobenzene	541-73-1	ND	0.005	mg/kg	06/27/95
1,4-Dichlorobenzene	106-46-7	ND	0.005	mg/kg	06/27/95
Dichlorodifluoromethane	75-71-8	ND	0.02	mg/kg	06/27/95
1,1-Dichloroethane	75-34-3	ND	0.005	mg/kg	06/27/95
1,2-Dichloroethane	107-06-2	ND	0.005	mg/kg	06/27/95
1,1-Dichloroethene	75-35-4	ND	0.005	mg/kg	06/27/95
cis-1,2-Dichloroethene	156-59-2	ND	0.005	mg/kg	06/27/95
trans-1,2-Dichloroethene	156-60-5	ND	0.005	mg/kg	06/27/95
1,2-Dichloropropane	78-87-5	ND	0.005	mg/kg	06/27/95
cis-1,3-Dichloropropene	10061-01-5	ND	0.005	mg/kg	06/27/95
trans-1,3-Dichloropropene	10061-02-6	ND	0.005	mg/kg	06/27/95
Methylene Chloride	75-09-2	ND	0.02	mg/kg	06/27/95
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.005	mg/kg	06/27/95
Tetrachloroethene	127-18-4	ND	0.005	mg/kg	06/27/95
1,1,1-Trichloroethane	71-55-6	ND	0.005	mg/kg	06/27/95
1,1,2-Trichloroethane	79-00-5	ND	0.005	mg/kg	06/27/95
Trichloroethene	79-01-6	ND	0.005	mg/kg	06/27/95
Trichlorofluoromethane	75-69-4	ND	0.02	mg/kg	06/27/95
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.005	mg/kg	06/27/95
Vinyl Chloride	75-01-4	ND	0.02	mg/kg	06/27/95

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

AQUA SCIENCE ENGINEERS, INC

SAMPLE ID: PIT WATER
AEN LAB NO: 9506303-09
AEN WORK ORDER: 9506303
CLIENT PROJ. ID: 2868

DATE SAMPLED: 06/21/95
DATE RECEIVED: 06/22/95
REPORT DATE: 07/07/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	06/22/95
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	06/26/95
#Digestion, Metals ICP/AA	EPA 3010	-		Prep Date	06/27/95
CCR 17 Metals					
Ag Silver	EPA 6010	ND	0.005	mg/L	06/28/95
As Arsenic	EPA 7060	0.002 *	0.002	mg/L	06/28/95
Ba Barium	EPA 6010	0.10 *	0.01	mg/L	06/28/95
Be Beryllium	EPA 6010	ND	0.002	mg/L	06/28/95
Cd Cadmium	EPA 6010	ND	0.005	mg/L	06/28/95
Co Cobalt	EPA 6010	ND	0.005	mg/L	06/28/95
Cr Chromium	EPA 6010	ND	0.01	mg/L	06/28/95
Cu Copper	EPA 6010	ND	0.01	mg/L	06/28/95
Hg Mercury	EPA 7470	ND	0.0002	mg/L	06/26/95
Mo Molybdenum	EPA 6010	ND	0.01	mg/L	06/28/95
Ni Nickel	EPA 6010	0.02 *	0.01	mg/L	06/28/95
Pb Lead	EPA 6010	ND	0.04	mg/L	06/28/95
Sb Antimony	EPA 6010	ND	0.02	mg/L	06/28/95
Se Selenium	EPA 7740	ND	0.004	mg/L	06/28/95
Tl Thallium	EPA 6010	ND	0.05	mg/L	06/28/95
V Vanadium	EPA 6010	ND	0.005	mg/L	06/28/95
Zn Zinc	EPA 6010	0.03 *	0.01	mg/L	06/28/95
EPA 8010 - Water matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	06/29/95
Bromoform	75-25-2	ND	0.5	ug/L	06/29/95
Bromomethane	74-83-9	ND	2	ug/L	06/29/95
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	06/29/95
Chlorobenzene	108-90-7	ND	0.5	ug/L	06/29/95
Chloroethane	75-00-3	ND	2	ug/L	06/29/95
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5	ug/L	06/29/95
Chloroform	67-66-3	ND	0.5	ug/L	06/29/95
Chloromethane	74-87-3	ND	2	ug/L	06/29/95
Dibromochloromethane	124-48-1	ND	0.5	ug/L	06/29/95
1,2-Dichlorobenzene	95-50-1	1 *	0.5	ug/L	06/29/95
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	06/29/95
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	06/29/95
Dichlorodifluoromethane	75-71-8	ND	2	ug/L	06/29/95
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	06/29/95
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	06/29/95

AQUA SCIENCE ENGINEERS, INC

SAMPLE ID: PIT WATER
AEN LAB NO: 9506303-09
AEN WORK ORDER: 9506303
CLIENT PROJ. ID: 2868

DATE SAMPLED: 06/21/95
DATE RECEIVED: 06/22/95
REPORT DATE: 07/07/95

ANALYTE	METHOD/ CAS#	RESULT		REPORTING LIMIT	UNITS	DATE ANALYZED
1,1-Dichloroethene	75-35-4	ND		0.5	ug/L	06/29/95
cis-1,2-Dichloroethene	156-59-2	49	*	0.5	ug/L	06/29/95
trans-1,2-Dichloroethene	156-60-5	3	*	0.5	ug/L	06/29/95
1,2-Dichloropropane	78-87-5	ND		0.5	ug/L	06/29/95
cis-1,3-Dichloropropene	10061-01-5	ND		0.5	ug/L	06/29/95
trans-1,3-Dichloropropene	10061-02-6	ND		0.5	ug/L	06/29/95
Methylene Chloride	75-09-2	ND		2	ug/L	06/29/95
1,1,2,2-Tetrachloroethane	79-34-5	ND		0.5	ug/L	06/29/95
Tetrachloroethene	127-18-4	19	*	0.5	ug/L	06/29/95
1,1,1-Trichloroethane	71-55-6	ND		0.5	ug/L	06/29/95
1,1,2-Trichloroethane	79-00-5	ND		0.5	ug/L	06/29/95
Trichloroethene	79-01-6	100	*	0.5	ug/L	06/29/95
Trichlorofluoromethane	75-69-4	ND		2	ug/L	06/29/95
1,1,2Trichlorotrifluoroethane	76-13-1	ND		0.5	ug/L	06/29/95
Vinyl Chloride	75-01-4	11	*	2	ug/L	06/29/95

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

AEN (CALIFORNIA)
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9506303

CLIENT PROJECT ID: 2868

Quality Control and Project Summary

All laboratory quality control parameters were found to be within established limits.

Definitions

Laboratory Control Sample (LCS)/Method Spike(s): Control samples of known composition. LCS and Method Spike data are used to validate batch analytical results.

Matrix Spike(s): Aliquot of a sample (aqueous or solid) with added quantities of specific compounds and subjected to the entire analytical procedure. Matrix spike and matrix spike duplicate QC data are advisory.

Method Blank: An analytical control consisting of all reagents, internal standards, and surrogate standards carried through the entire analytical process. Used to monitor laboratory background and reagent contamination.

Not Detected (ND): Not detected at or above the reporting limit.

Relative Percent Difference (RPD): An indication of method precision based on duplicate analysis.

Reporting Limit (RL): The lowest concentration routinely determined during laboratory operations. The RL is generally 1 to 10 times the Method Detection Limit (MDL). Reporting limits are matrix, method, and analyte dependent and take into account any dilutions performed as part of the analysis.

Surrogates: Organic compounds which are similar to analytes of interest in chemical behavior, but are not found in environmental samples. Surrogates are added to all blanks, calibration and check standards, samples, and spiked samples. Surrogate recovery is monitored as an indication of acceptable sample preparation and instrumental performance.

D: Surrogates diluted out.

#: Indicates result outside of established laboratory QC limits.

QUALITY CONTROL DATA

METHOD: EPA 3510 GCFID

AEN JOB NO: 9506303
DATE EXTRACTED: 06/23/95
INSTRUMENT: C
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery n-Pentacosane
06/27/95	PITWATER	09	117
QC Limits:			59-118

DATE EXTRACTED: 06/22/95
DATE ANALYZED: 06/24/95
SAMPLE SPIKED: DI WATER
INSTRUMENT: C

Method Spike Recovery Summary

Analyte	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Diesel	1.82	90	2	65-103	12

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

METHOD: EPA 3550 GCFID

AEN JOB NO: 9506303
DATE(S) EXTRACTED: 06/23/95; 06/29/95
INSTRUMENT: C
MATRIX: SOIL

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery n-Pentacosane
06/26/95	SW-N-6'	01	99
07/01/95	SW-S-6'	02	100
06/26/95	SW-W-6'	03	110
06/26/95	SW-E-6'	04	86
06/27/95	B-N-10'	06	98
06/26/95	B-S-10'	07	95
06/27/95	STKP	08	100
QC Limits:			45-110

DATE EXTRACTED: 06/23/95
DATE ANALYZED: 06/26/95
SAMPLE SPIKED: 9506303-07
INSTRUMENT: C

Matrix Spike Recovery Summary

Analyte	Spike Added (mg/kg)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Diesel	36.3	87	3	44-108	13

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

METHOD: SM 5520

AEN JOB NO: 9506303
DATE EXTRACTED: 06/26/95
DATE ANALYZED: 06/27/95
SAMPLE SPIKED: 9506265-13
INSTRUMENT: IR
MATRIX: SOIL

Matrix Spike Recovery Summary

Analyte	Spike Added (mg/kg)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Oil	221	94	<1	61-127	14

DATE EXTRACTED: 06/26/95
DATE ANALYZED: 06/26/95
INSTRUMENT: IR
MATRIX: WATER

Method Spike Recovery Summary

Analyte	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Oil	6.6	94	2	80-109	5

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

METHOD: EPA 8010

AEN JOB NO: 9506303
INSTRUMENT: G
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery: Bromochloro-methane	Percent Recovery: 1-Bromo-3-chloro-propane
06/29/95	PITWATER	09	102	94
QC Limits:			70-130	70-130

DATE ANALYZED: 06/20/95
SAMPLE SPIKED: 9506191-02
INSTRUMENT: G

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/L)	Average Percent Recovery	RPD	QC Limits: Percent Recovery	QC Limits: RPD
1,1-Dichloroethene	50	96	<1	37-156	20
Trichloroethene	50	95	4	54-122	20
Chlorobenzene	50	89	<1	54-141	20

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

METHOD: EPA 8010

AEN JOB NO: 9506303
INSTRUMENT: G
MATRIX: SOIL

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery Bromochloro-methane	Percent Recovery 1-Bromo-3-chloro-propane
06/27/95	SW-N-6'	01	78	91
06/27/95	SW-S-6'	02	73	89
06/27/95	SW-W-6'	03	78	86
06/27/95	SW-E-6'	04	82	99
06/27/95	B-N-10'	06	76	85
06/27/95	B-S-10'	07	80	90
06/27/95	STKP	08	82	88
QC Limits:			70-130	70-130

DATE ANALYZED: 06/28/95
SAMPLE SPIKED: 9506285-04
INSTRUMENT: G

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/kg)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
1,1-Dichloroethene	50	84	1	37-156	20
Trichloroethene	50	109	3	54-122	20
Chlorobenzene	50	97	4	54-141	20

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9506303
INSTRUMENT: E
MATRIX: SOIL

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery Fluorobenzene
06/26/95	STKP	08	108
QC Limits:			92-110

DATE ANALYZED: 06/26/95
SAMPLE SPIKED: 9506234-14
INSTRUMENT: E

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/kg)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Benzene	36.8	103	4	79-113	26
Toluene	101.2	101	3	84-110	20
Hydrocarbons as Gasoline	1000	90	1	60-126	20

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

METHOD: EPA 8270

AEN JOB NO: 9506303
DATE EXTRACTED: 06/23/95
INSTRUMENT: 11
MATRIX: SOIL

Surrogate Standard Recovery Summary

			Percent Recovery					
Date Analyzed	Client Id.	Lab Id.	Nitro-benzene-d_5	2-Fluoro-biphenyl	Terphenyl-d_{14}	Phenol-d_5	2-Fluoro-phenol	2,4,6-Tribromo-phenol
06/28/95	STKP	08	67	69	63	55	67	122
QC Limits:			23-120	30-115	18-137	24-113	25-121	19-122

DATE EXTRACTED: 06/19/95
DATE ANALYZED: 06/20/95
SAMPLE SPIKED: 9506151-01
INSTRUMENT: 11

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/kg)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Phenol	3630	52	14	39-102	36
2-Chlorophenol	3470	73	12	20-123	37
1,4-Dichlorobenzene	3430	61	12	20-108	14
N-Nitrosodi-n-propylamine	3500	63	<1	0-156	41
1,2,4-Trichlorobenzene	3450	69	10	31-101	33
4-Chloro-3-methylphenol	3380	89	4	37-136	38
Acenaphthene	3330	81	11	48-115	18
4-Nitrophenol	3560	90	15	18-131	35
2,4-Dinitrotoluene	3480	60	8	34-101	33
Pentachlorophenol	3450	85	12	0-140	30
Pyrene	3580	73	24	26-148	24

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

AEN JOB NO: 9506303
SAMPLE SPIKED: DI WATER
DATE(S) ANALYZED: 06/26-28/95
MATRIX: WATER

Method Spike Recovery Summary

Analyte	Inst./ Method	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Ag, Silver	ICP/6010	0.025	88	4	80-119	10
As, Arsenic	4000/7060	0.04	115	5	84-118	12
Ba, Barium	ICP/6010	1.0	110	2	93-112	5
Cd, Cadmium	ICP/6010	0.05	100	6	90-113	9
Cr, Chromium	ICP/6010	0.10	109	1	87-117	7
Cu, Copper	ICP/6010	0.13	108	3	83-114	5
Hg, Mercury	Hg/7470	2.0 ug/L	104	<1	91-117	7
Ni, Nickel	ICP/6010	0.25	108	2	91-113	5
Pb, Lead	ICP/6010	0.50	107	3	94-115	6
Se, Selenium	4000/7740	0.08	95	5	80-114	14
Zn, Zinc	ICP/6010	0.25	106	2	92-113	5

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

AEN JOB NO: 9506303
SAMPLE SPIKED: SAND
DATE(S) ANALYZED: 06/23-25/95
MATRIX: SOIL

Method Spike Recovery Summary

Analyte	Inst./ Method	Spike Added (mg/kg)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Ag, Silver	ICP/6010	10	86	1	33- 95	5
As, Arsenic	4000/7060	10	116	4	76-128	15
Ba, Barium	ICP/6010	100	98	1	91-107	5
Cd, Cadmium	ICP/6010	10	98	2	87-108	5
Cr, Chromium	ICP/6010	50	98	1	88-110	5
Cu, Copper	ICP/6010	50	100	1	91-108	5
Hg, Mercury	Hg/7471	0.4	107	3	80-117	5
Ni, Nickel	ICP/6010	50	101	1	88-109	5
Pb, Lead	ICP/6010	50	101	1	88-110	5
Se, Selenium	4000/7740	20	95	2	70-125	14
Zn, Zinc	ICP/6010	50	95	1	85-105	5

Daily method blanks for all associated runs showed no contamination over the reporting limit.

*** END OF REPORT ***

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

American Environmental Net.
3440 Vincent Road
Pleasant Hill, CA 94523

Attention: Denise Harrington

Client Proj. ID: 9506303
Sample Descript: STKP
Matrix: SOLID
Analysis Method: Comb
Lab Number: 9506F62-01

Sampled: 06/21/95
Received: 06/23/95

Analyzed: 06/26/95
Reported: 07/05/95

QC Batch Number: IN062695084600A

Reactivity

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Reactivity:		
Sulfide	13	N.D.
Cyanide	0.50	N.D.
Reaction with Water		N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mark Cargasacchi
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

American Environmental Network
3440 Vincent Road
Pleasant Hill, CA 94523
Attention: Denise Harrington

Client Project ID: 9506303
Matrix: Solid
Work Order #: 9506F62 -01
Reported: Jul 5, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Reactive Cyanide	Reactive Sulfide
QC Batch#:	IN062695084600A	IN062695084600A
Analy. Method:	SW-846	SW-846
Prep. Method:	N/A	N/A
Analyst:	A. Pina	K. Newberry
MS/MSD #:	-	-
Sample Conc.:	-	-
Prepared Date:	-	-
Analyzed Date:	-	-
Instrument I.D.#:	-	-
Conc. Spiked:	-	-
Result:	-	-
MS % Recovery:	-	-
Dup. Result:	-	-
MSD % Recov.:	-	-
RPD:	-	-
RPD Limit:	-	-

LCS #:	LCS062695	LCS062695
Prepared Date:	6/26/95	6/26/95
Analyzed Date:	6/26/95	6/26/95
Instrument I.D.#:	Manual	Manual
Conc. Spiked:	0.20 mg/L	10 mg/L
LCS Result:	0.069	9.8
LCS % Recov.:	34	98

MS/MSD LCS Control Limits	6.5-40	80-120

SEQUOIA ANALYTICAL

Mark J. Cargasacchi
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

R-1,5-B R-5,5-B 950630

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 6-21-95 PAGE 1 OF 1

SAMPLERS (SIGNATURE) (PHONE NO.) 820-9391

PROJECT NAME TASCO-LOWE NO. 2868

ADDRESS EMERYVILLE

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:
Changes to COC per client FAX on 6/23/95 - DSH

	SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH-GASOLINE (EPA 5030/8015)	TPH-GASOLINE/BTEX (EPA 5030/8015-8020)	TPH-DIESEL EXTRACTABLE (EPA 3510/8015)	PURGABLE AROMATICS (EPA 602/8020)	PURGABLE HALOCARBONS (EPA 601(8010) per client DSH)	VOLATILE ORGANICS (EPA 624/8240)	BASE/NUETRALS, ACIDS (EPA 625/8270)	OIL & GREASE (EPA 5520 B&F OR B&F)	LUFT METALS (5) (EPA 6010+7000)	TITLE 22 (CAM 17) (EPA 6010+7000)	TCLP (EPA 1311/1310)	STLC-CAM WET (EPA 1311/1310)	REACTIVITY CORROSIVITY IGNITABILITY	8270	CADMIUM, CHROMIUM, LEAD, NICKEL, ZINC	FILTER & PRESERVE PLASTIC BOTTLE		
1A	SW-N-6'	6/21	15:22	Soil	1			X		X			X		X	DSH	- NO CAM-17 per client			6/23			
2A	SW-S-6'		15:25	Soil	1			X		X			X		X	DSH	- NO CAM-17 per client			6/23			
3A	SW-W-6'		15:30	Soil	1			X		X			X		X								
4A	SW-E-6'		15:20	Soil	1			X		X			X		X								
5A	SW-E-9'		15:15	Soil	1			X		X			X		X	DSH	- no analyses per client 6/23						
6A	B-N-10'		15:35	Soil	1			X		X			X		X								
7A	B-S-10'		15:38	Soil	1			X		X			X		X	DSH	- NO CAM-17 per client			6/23			
8A	STKP		16:40	Soil	4		X	X		X			X					X	X	X			
A-G	PIT WATER	↓	15:16	WATER	7			X		X			X		X						X		

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
(signature) 10:00	(signature) 10:00	(signature) 10:25	(signature) Anna Gillespie 1025	STANDARD T.A.T. *
(printed name) D. Allen (time) 6-22-95	(printed name) C. HERRICK (time) 6/22/95	(printed name) N. HERRICK (time) 6-22-95	(printed name) Anna Gillespie (time) 6/24/95	* 5 day TAT on all AEN analyses Reactivity on standard TAT — DSH 6/23
Company- ASE	Company- AEN	Company-	Company- AEN	

APPENDIX C

Certified Report
for
Imported Backfill Material

T. E. O'CONNOR
AND SONS, INC.
P.O. Box 1194 • Pleasanton, CA 94566 • 846-7124

July 19, 1995

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

Attn: Dave Allen

Dear Dave:

At your request, our trucking company imported material to 1400 Park Avenue in Emeryville at the corner of Park and Horton.

On 6/21/95 the total import to that job site was 48.36 tons of sub base (product code 401). On 7/13/95 we imported a total of 69.84 tons of sub base (product code 401).

Sincerely,

T. E. O'Connor & Sons

Chris Lewis

Chris Lewis

APPENDIX D

Acceptance Letter
Manifests and Weight Tags
for
Forward Landfill, Inc.

FORWARD INC.

FORWARD INCORPORATED

P.O. BOX 6336
STOCKTON, CA 95206

(209) 466-4482
FAX (209) 465-0631

July 18, 1995

Aqua Science Engineers, Inc.
2411 Old Crow Canyon Road, #4
San Ramon, California 94583

Attention: Dave Allen

RE: *FORWARD, INC.* Approval No. CMM-4369
Contaminated Soil
1400 Park Avenue, Emeryville, California

Dear Mr. Allen:

FORWARD, INC. is pleased to confirm the disposal of 112.36 tons of soil as referenced above. The material was received at our Manteca, California facility for disposal on July 13, 1995. The waste was placed in a Class II waste management unit.

Approval for this material was based on the information provided in the waste profile and associated materials submitted by Aqua Science Engineers, Inc., dated July 7, 1995 on behalf of the Charles Lowe Company. Acceptance of the waste is subject to the "Terms and Conditions" agreed to and signed by Charles Lowe Company (whoever signed waste profile form) in the waste profile.

Thank you for the opportunity to be of service. Should you have any questions regarding this matter, please do not hesitate to contact myself or Fay Williams at (209) 466-4482.

Sincerely,

FORWARD, INC.

Corrina M. Mathews/frw

Corrina M. Mathews
Account Manager

/frw

FORWARD INCORPORATED

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

SITE	TICKET	GRID
01	007602	D94

WEIGHMASTER: NANCY S

DATE IN	TIME IN
07/13/95	16:04

DATE OUT	TIME OUT
07/13/95	16:05

004369
AQUA SCIENCE ENGINEERS
DAVE ALLEN
2411 OLD CROW CANYON ROAD- #4
SAN RAMON, CA 94583

VEHICLE	ROLL OFF
T.E.O. J12	

REFERENCE	ORIGIN
CMM-4369	CHARLES LOWE CO.

Manual Gross Weight	73520	LB	Inbound - Charge ticket
Manual Tare Weight	31060	LB	
Net Weight	42460	LB	

QTY	DESCRIPTION	AMOUNT
21.23	Class II Soil by Ton per ton	

NET AMOUNT
TENDERED
CHANGE

Trailer # CHARLES LOWE CO.
P.O. # NONE
Manifest # 44027
Schedule 24 hours in advance directly with the landfill.
Call (209)982-4298 to schedule.
Drive Safely!!

SIGNATURE X _____

recycled paper

FORWARD INCORPORATED

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

SITE	TICKET	GRID
01	007600	D94

WEIGHMASTER

NANCY S

DATE IN	TIME IN
07/13/95	15:59

DATE OUT	TIME OUT
07/13/95	16:00

004369
AQUA SCIENCE ENGINEERS
DAVE ALLEN
2411 OLD CROW CANYON ROAD- #4
SAN RAMON, CA 94583

VEHICLE	ROLL OFF
T.E.O. #9	

REFERENCE	ORIGIN
CMM-4369	CHARLES LOWE CO.

Manual Gross Weight	80540	LB	Inbound - Charge ticket
Manual Tare Weight	31040	LB	
Net Weight	49500	LB	

QTY	DESCRIPTION	AMOUNT
24.75	Class II Soil by Ton per ton	

Trailer # CHARLES LOWE CO.
P.O. # NONE
Manifest # 44028
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
INCORPORATED

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

SITE	TICKET	GRID
01	007588	D94

WEIGHMASTER

DATE IN	TIME IN
07/13/95	11:45
DATE OUT	**TIME OUT**
07/13/95	11:45

004369
AQUA SCIENCE ENGINEERS
DAVE ALLEN
2411 OLD CROW CANYON ROAD- #4
SAN RAMON, CA 94583

VEHICLE	ROLL OFF
T.E.O.5150	

REFERENCE	ORIGIN
CMM-4369	CHARLES LOWE CO.

Manual Gross Weight	59120	LB	Inbound - Charge ticket
Manual Tare Weight	30960	LB	
Net Weight	28160	LB	

QTY	DESCRIPTION	AMOUNT
14.08	Class II Soil by Ton per ton	

Manifest # 44029
Generator CHARLES LOWE CO.
P.O. # NONE

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 INCORPORATED

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

SITE	TICKET	GRID
01	007586	D94

WEIGHMASTER

DATE IN	TIME IN
07/13/95	11:44

DATE OUT	TIME OUT
07/13/95	11:44

004369
AQUA SCIENCE ENGINEERS
DAVE ALLEN
2411 OLD CROW CANYON ROAD- #4
SAN RAMON, CA 94583

VEHICLE	ROLL OFF
T.E.O. #9	

REFERENCE	ORIGIN
CMM-4369	CHARLES LOWE CO.

Manual Gross Weight	61420	LB	Inbound - Charge ticket
Manual Tare Weight	31040	LB	
Net Weight	30380	LB	

QTY	DESCRIPTION	AMOUNT
15.19	Class II Soil by Ton per ton	

Manifest # 44030
Generator CHARLES LOWE CO.
P.O. # NONE

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 INCORPORATED

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

SITE	TICKET	GRID
01	007587	D94

WEIGHMASTER

DATE IN	TIME IN
07/13/95	11:44
DATE OUT	**TIME OUT**
07/13/95	11:45

004369
AQUA SCIENCE ENGINEERS
DAVE ALLEN
2411 OLD CROW CANYON ROAD- #4
SAN RAMON, CA 94583

VEHICLE	ROLL OFF
T.E.O. J12	

REFERENCE	ORIGIN
CMM-4369	CHARLES LOWE CO.

Manual Gross Weight	66080	LB	Inbound - Charge ticket
Manual Tare Weight	31060	LB	
Net Weight	35020	LB	

QTY	DESCRIPTION	AMOUNT
17.51	Class II Soil by Ton per ton	

Manifest # 44031
Generator CHARLES LOWE CO.
P.O. # NONE

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 INCORPORATED

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

SITE	TICKET	GRID
01	007594	D94

WEIGHMASTER

DATE IN	TIME IN
07/13/95	14:07

DATE OUT	TIME OUT
07/13/95	14:07

004369
AQUA SCIENCE ENGINEERS
DAVE ALLEN
2411 OLD CROW CANYON ROAD- #4
SAN RAMON, CA 94583

VEHICLE	ROLL OFF
T.E.O. #16	

REFERENCE	ORIGIN
CMM-4369	CHARLES LOWE CO.

Manual Gross Weight	70160	LB	Inbound - Charge ticket
Manual Tare Weight	30960	LB	
Net Weight	39200	LB	

QTY	DESCRIPTION	AMOUNT
19.60	Class II Soil by Ton per ton	

Manifest # 44032
Generator CHARLES LOWE CO.
P.O. # NONE

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. Emm-4289

TO BE COMPLETED BY THE GENERATOR

GENERATOR: Charles Lowe Company (CLC)
MAILING ADDRESS: 1400 Park Avenue
CITY, STATE, ZIP: Emeryville CA 94608
PHONE: 510-655-9375
CONTACT PERSON: Steve Slade
SIGNATURE OF AUTHORIZED AGENT / TITLE: * Agent for CLC
DATE: 7-13-95

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

SPECIAL HANDLING PROCEDURES:
11240 LB
31020 LB
15740 LB
14920 LB
3:37P 7-13-95
73520 LB T6

21.23T
3,060

WASTE TYPE
- [ ] TREATMENT SOIL
- [X] 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: Charlee Lowe Company, 1400 Park Avenue, Emeryville, CA 94608

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: * John E. Bryan
DATE: 7-13-95

NOTES:
TRUCK NUMBER: 1-12

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: 7-13-95

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 # 44027

SALES COPY

FORWARD INC.

NON-HAZARDOUS WASTE MANIFEST
WASTE TREATMENT AND DISPOSAL FACILITY

JOB ACCEPTANCE NO. [redacted]

TO BE COMPLETED BY THE GENERATOR

GENERATOR: Charles Lowe Company (CLC)
MAILING ADDRESS: 1400 Park Avenue
CITY STATE ZIP: Emeryville CA 94608
PHONE: 510-655-9375
CONTACT PERSON: Steve Slade
SIGNATURE OF AUTHORIZED AGENT / TITLE: * Agent for CLC
DATE: 7-13-95

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

SPECIAL HANDLING PROCEDURES:
None
13040 LB
31880 LB
18000 LB
17620 LB
3:35P 7-13-95
80540 LB T6

24.75 T
3/11/94/21

WASTE TYPE
- [ ] TREATMENT SOIL
- [X] 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
Charles Lowe Company
1400 Park Avenue
Emeryville CA 94608

TRANSPORTER HAULER MUST COMPLETE

NAME: J.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: * Jerry Knight
DATE: 7-13-95

NOTES:
TRUCK NUMBER:

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: 7-13-95

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 # 44028

SALES COPY

FORWARD INC.

NON-HAZARDOUS WASTE MANIFEST
WASTE TREATMENT AND DISPOSAL FACILITY

JOB ACCEPTANCE NO. [redacted]

TO BE COMPLETED BY THE GENERATOR

GENERATOR: Charles Cole Company (CLC)
MAILING ADDRESS: 1400 Park Avenue
CITY, STATE, ZIP: Emeryville, CA 94608
PHONE: 510-655-9375
CONTACT PERSON: Steve Slade
SIGNATURE OF AUTHORIZED AGENT / TITLE: * Agent for CLC
DATE: 7-13-95

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

SPECIAL HANDLING PROCEDURES:

11960 LB
24700 LB
11260 LB
11200 LB
10:25A 7-13-95
59120 LB T6

9460 LB
11840 LB
5300 LB
4360 LB
10:52A 7-13-95
[illegible] LB T6

WASTE TYPE

- [ ] TREATMENT SOIL
- [X] 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: Charles Cole ~~Company~~ Company
1400 Park Ave
Emeryville CA 94608

TRANSPORTER HAULER MUST COMPLETE

NAME: TF O'Connor & Sons
ADDRESS: PO Box 1194
CITY, STATE, ZIP: Pleasanton CA 94566
PHONE: 510-846-7124
SIGNATURE OF AUTHORIZED AGENT OR DRIVER: * Lewis L Ford
DATE: 7-13-95

NOTES:

TRUCK NUMBER: 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: 7/13/95

CUBIC YARDS: 11

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 # 44029

SALES COPY

FORWARD INC.

NON-HAZARDOUS WASTE MANIFEST
WASTE TREATMENT AND DISPOSAL FACILITY

JOB ACCEPTANCE NO. [redacted]

TO BE COMPLETED BY THE GENERATOR

GENERATOR: Charles Lowe Company (CLC)
MAILING ADDRESS: 1400 Park Avenue
CITY, STATE, ZIP: Emeryville CA 94608
PHONE: 510-655-9375
CONTACT PERSON: Steve Stock
SIGNATURE OF AUTHORIZED AGENT / TITLE: * Agent for CLC
DATE: 7-13-95

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

SPECIAL HANDLING PROCEDURES:
11700 LB
23600 LB
13600 LB
12520 LB
10:23A 7-13-95
61420 LB T6

10120 LB
11340 LB
5260 LB
4320 LB
10:42A 7-13-95
31040 LB T6

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: Charles Lowe Company
1400 Park Avenue
Emeryville CA 94608

TO BE COMPLETED BY TRANSPORTER HAULER MUST COMPLETE

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

NOTES:
TRUCK NUMBER: #9

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: 7-12-95

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 # 44030

SALES COPY

FORWARD INC.

NON-HAZARDOUS WASTE MANIFEST
WASTE TREATMENT AND DISPOSAL FACILITY

JOB ACCEPTANCE NO. Granco - 4654

TO BE COMPLETED BY THE GENERATOR

GENERATOR: Charles Lowe Company (CLC)
MAILING ADDRESS: 1400 Park Avenue
CITY, STATE, ZIP: Emeryville, CA 94608
PHONE: 510-655-9375
CONTACT PERSON: Steve Slade
SIGNATURE OF AUTHORIZED AGENT / TITLE: * Agent for CLC
DATE: 7-13-95

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

SPECIAL HANDLING PROCEDURES:
Dump
12400 LB
25940 LB
14400 LB
13340 LB
10:26A 7-13-95
66080 LB T6

10140 LB
11720 LB
5220 LB
3980 LB
10:49A 7-13-95
31060 LB T6

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: Charles Lowe Company
1400 Park Avenue
Emeryville CA 94608

TRANSPORTER HAULER MUST COMPLETE

NAME: T.E. O'Connor
ADDRESS: P.O. Box 1141
CITY, STATE, ZIP: Pleasanton CA 94566
PHONE: 510-846-7129
SIGNATURE OF AUTHORIZED AGENT OR DRIVER: * John O'Bryan
DATE: 7-13-95

NOTES:
TRUCK NUMBER: 1-12

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: 7-13-95

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 # 44031

SALES COPY

FORWARD INC.

NON-HAZARDOUS WASTE MANIFEST
WASTE TREATMENT AND DISPOSAL FACILITY

JOB ACCEPTANCE NO. [redacted]

TO BE COMPLETED BY THE GENERATOR

GENERATOR: Charles Lowe Company (CLC)
MAILING ADDRESS: 1400 Park Avenue
CITY, STATE, ZIP: Emeryville, CA 94608
PHONE: 510-655-9875
CONTACT PERSON: Steve Slade
SIGNATURE OF AUTHORIZED AGENT / TITLE: * Agent for CLC
DATE: 7-13-95

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

SPECIAL HANDLING PROCEDURES:
12160 LB
[illegible] LB
14480 LB 9380 LB
14180 LB 12280 LB
12:33P 7-13-95 5140 LB
70160 LB T6
4160 LB
12:50P 7-13-95

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

GENERATING FACILITY: Charles Lowe Company / 1400 Park Ave / Emeryville, CA 94608

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 1191
CITY, STATE, ZIP: Pleasanton CA 94566
PHONE: 510-846-7154
SIGNATURE OF AUTHORIZED AGENT OR DRIVER: *
DATE: 7-13-95

NOTES:

TRUCK NUMBER: 16

- [ ] 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: 7-13-95

CUBIC YARDS: 16

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 # 44032

SALES COPY