aqua science engineers inc.

January 20, 1993

FINAL REPORT
UNDERGROUND STORAGE TANKS REMOVAL

at

John's Mobil
3635 13th ~~Street~~ Av.
Oakland, California 94610

REGISTERED PROFESSIONAL ENGINEER
DAVID M. SCHULTZ
No. 38738
Exp. 4-94
CIVIL
STATE OF CALIFORNIA

Submitted by:

Aqua Science Engineers
2411 Old Crow Canyon Road, #4
San Ramon, California 94583
(510) 820-9391

aqua science engineers inc.

January 25, 1993

Alameda County Health Care Services Agency
80 Swan Way, Room 200
Oakland, California 94621

ATTENTION: Mr. Ronald J. Owcarz, R.E.H.S.
Hazardous Materials Specialist

SUBJECT: Final Report - Tank Pull
John's Mobil
3635 13th ~~Street~~ Av.
Oakland, California

Dear Mr. Owcarz:

Please find attached a copy of Aqua Science Engineers, Inc's. (ASE) subject report detailing the tank pull and associated activities at 3635 13th Street in Oakland California.

If you have any questions or comments, please feel free to give us a call at (510) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

David Allen
Project Manager

1.0 INTRODUCTION

This report documents the removal and related activities of the underground storage tank's removal/disposal performed at John's Mobil, 3635 13th Street in Oakland, California. The following underground storage tanks (UST) were removed and disposed of: (1) 250 gallon, steel, containing [redacted], (1) 500 gallon, steel, containing [redacted] and (1) 1,000 gallon, steel, containing [redacted]. The scope of services provided by Aqua Science Engineers, Inc. (ASE) is in accordance with ASE proposal No. 92-071 and included the following tasks:

- o Obtain necessary permits from appropriate agencies.
- o Remove and dispose of the underground storage tanks.
- o Sample and analyze the soil beneath the tanks.
- o Prepare a report of methods and findings.

2.0 PERMITS

The approvals/permits to remove the underground storage tanks were obtained from the City of Oakland Fire Prevention Bureau, the Alameda County Health Care Services Agency (ACHCSA), the Regional Water Quality Control Board (RWQCB), CAL-OSHA, and the Bay Area Air Quality Management District (BAAQMD). Copies of the permits/approvals are contained in Appendix D.

3.0 MOBILIZATION

After reviewing and endorsing the site specific Health and Safety Plan, ASE mobilized for on-site work on December 14, 1992. ASE project personnel included: Construction Supervisor - Steve DeHope, and support labor - John Sabia. Mr. Ron Owcarz, a representative of the ACHCSA, supervised the majority of ASE's activities. Mr. Robert Dawson of the City of Oakland Fire Prevention Bureau was also present on site during the majority of tank removal activities and soil sampling activities.

4.0 LIQUID REMOVAL

Prior to ground breaking, the tanks' contents were fully removed, and the tanks were triple rinsed. The contents of 5 drums of waste oil were also removed and disposed. Waste Oil Recovery Systems was contracted to handle the liquid removal. The liquid was transported, under manifest, to the Demenno Kerdoon facility in Compton, California where it was properly disposed. Copies of the manifest can be found in Appendix B.

5.0 EXCAVATION

On December 14, 1992, ASE personnel began tank removal exercises by breaking ground (asphalt and concrete) and excavating the overburden soil above and around each of the tanks (see Figure 1, Site Plan). The asphalt and concrete was segregated separately from the overburden soil. The pump islands and associated concrete was also removed and segregated. The removed asphalt and concrete remains on site. ~~Excavated material had a slight petroleum odor.~~ Excavated soils were stockpiled separately around the edge of each excavation; the material was covered pending analytical test results. During excavation, the vent and product-fill lines were removed. Once the tanks were exposed and ready for removal, dry ice was added at the rate of at least 1.5 lbs. per 100 gallons. The tanks LEL (lower explosive limit) were measured by use of Gastech 1314 Oxygen/PPM Meter and was found to have a safe/non-explosive atmosphere.

6.0 TANK REMOVAL

Mr. Robert Dawson, Inspector with the City Oakland Fire Prevention Bureau, arrived on site and verified a safe (LEL) of the tank's atmosphere. Once approval was granted, tank removal activities began with the ~~250-gallon waste oil tank.~~ As Figure 1 depicts, this tank was located inside a building, as was its stockpiled, overburden material. The tank was hoisted from the excavation up to the ground surface, where it was laid on plastic. The tank was inspected for holes, cracks, and corrosion. ~~The tank was noted as to being heavily pitted and had numerous holes.~~ The ~~sidewalls of the excavation~~ were inspected and noted as to having ~~minor soil staining. What appeared to be groundwater~~ (uncertain to the origin of the water, may be surface runoff and/or irrigation runoff) ~~was pooled at the bottom of~~ the excavation. There was not enough water, however, to facilitate the collection of a sample.

The next tank removed was the ~~500 gallon, gasoline tank~~. The tank was verified safe for removal by Mr. Dawson just prior to its removal. This tank was partially beneath the sidewalk surrounding the site. During removal activities the "lifting eye", welded onto the tank, broke off. In order to remove the tank, a hole was made in the top of the tank with the teeth of the backhoe bucket to replace the broken lifting eye. The tank was hoisted from the excavation up to the ground surface, where it was laid on plastic. The tank was inspected for holes, cracks, and corrosion. ~~The tank was noted as to being free of holes or cracks~~ (other than the hole made to remove the tank from the excavation). The ~~sidewalls of the excavation~~ were inspected and noted as to having minor soil staining. ~~What appeared to be groundwater~~ (uncertain to the origin of the water, may be surface runoff and/or irrigation runoff) was ~~pooled at the bottom~~ of the excavation.

Finally, the third tank, ~~1,000 gallon gasoline,~~ was removed. The tank was verified safe for removal by Mr. Dawson just prior to its removal. The tank was hoisted from the excavation up to the ground surface, where it was laid on plastic. The tank was inspected for holes, cracks, and corrosion. The tank was noted as to being ~~free of holes and cracks~~. The ~~sidewalls of the excavation~~ were inspected and noted as to having ~~minor soil staining~~. ~~What appeared to be groundwater~~ (uncertain to the origin of the water, may be surface runoff and/or irrigation runoff) was ~~pooled at the bottom~~ of the excavation.

The tanks were transported, under manifest, to the Erickson Facility, in Richmond, California where they were properly disposed. Copies of the manifests can be found in Appendix B, and 'Certificates of Tank Disposal' can be found in Appendix C.

7.0 SAMPLING AND ANALYSIS

Soil and water samples were collected from the excavation as follows:

SOIL SAMPLE I.D.	LOCATION	FORMER TANK	DEPTH
T1S	Southeast Sidewall	1,000 gal. gas	6 feet
T1N	Northwest Sidewall	1,000 gal. gas	7 feet
T1W	Water in pit	1,000 gal. gas	8 feet
T2S	Southwest Sidewall	500 gal. gas	7 feet
T2N	Northeast Sidewall	500 gal. gas	7 feet
T2W	Water in pit	500 gal. gas	8 feet
WOB	Bottom	Waste Oil	5.5 feet

The soil samples were collected in 2" x 6" brass tubes, covered on both ends with aluminum foil, capped and sealed with tape. Water samples were collected by use of a disposable bailer; the samples were decanted into 40 ml VOA bottles. The samples were labeled and placed in a cooler where they were kept chilled by ice until delivery to the laboratory. The samples were submitted to Priority Environmental Labs in Milpitas, California under a chain of custody record, where they were analyzed for all or a combination of the following: Total Petroleum Hydrocarbons (TPH) as Gasoline (EPA Method 5030/8015), TPH as Diesel (EPA method 3550/8015), the fractions BTEX (EPA method 8020), and Oil and Grease (EPA Method 5520 D&F). Analytical test results are tabulated below in the following tables, and are enclosed in Appendix A.

12-15-92

TABLE ONE

Summary of Chemical Analysis of **SOIL and WATER** Samples
TPH Gas, Diesel, Oil & Grease, and BTEX

Sample No.	TPH Gas (ppm)	TPH Diesel (ppm)	Benzene (ppb)	Toluene (ppb)	Ethyl Benzene (ppb)	Total Xylenes (ppb)	Oil and Grease (ppm)
SOIL							
T 1-N (1,000 gal)	N.D.	---	N.D.	N.D.	N.D.	N.D.	---
T 1-S	37	---	5.5	5.7	8.8	34	---
T 2-N (500 gal)	N.D.	---	N.D.	N.D.	N.D.	N.D.	---
T 2-S	1.0	---	N.D.	5.0	8.0	15	---
W/O-B	[redacted]	N.D.	[redacted]	730	820	2800	[redacted]
WATER							
T 1-W	32	---	47	130	160	210	---
T 2-W	88	---	77	180	290	980	---
EPA METHOD	5030/ 8015	3550/ 8015	8020	8020	8020	8020	5520 D&F

ND - Non Detectable at analytical method limits
ppm - parts per million
ppb - parts per billion
--- - not analyzed

Soil samples were also collected from the stockpiles of excavated material. Samples were collected as follows:

SOIL

SAMPLE I.D.	LOCATION	FORMER TANK	DEPTH
T 1-STKP	Tank 1 Stockpile	1,000 gal. gas	Composite
T 2-STKP	Tank 2 Stockpile	500 gal. gas	Composite
W/O-STKP	Waste Oil Stockpile	250 gal. Waste Oil	Composite

The samples were submitted to Priority Environmental Labs in Milpitas, California under a chain of custody record, where they were analyzed for all or a combination of the following: Total Petroleum Hydrocarbons (TPH) as Gasoline (EPA Method 5030/8015), TPH as Diesel (EPA method 3550/8015), the fractions BTEX (EPA method 8020), Volatile Organics

(EPA Method 8010), the LUFT Metals, and Oil & Grease (EPA Method 5520 D&F). Analytical test results are tabulated below in the following tables, and are enclosed in Appendix A.

TABLE TWO
Summary of Chemical Analysis of SOIL STOCKPILE Samples
TPH Gas, Diesel, Oil & Grease, and BTEX

Sample No.	TPH Gas (ppm)	TPH Diesel (ppm)	Benzene (ppb)	Toluene (ppb)	Ethyl Benzene (ppb)	Total Xylenes (ppb)	Oil and Grease (ppm)
SOIL							
T 1-STKP	5.1	---	N.D.	N.D.	5.6	30	---
T 2-STKP	28	---	5.2	7.7	8.9	39	---
W/O-STKP	24	N.D.	8.4	16	25	57	[illegible]
EPA METHOD	5030/ 8015	3550/ 8015	8020	8020	8020	8020	5520 D&F

ND - Non Detectable at analytical method limits
ppm - parts per million
ppb - parts per billion
--- - not analyzed

TABLE THREE
Summary of Chemical Analysis of SOIL Samples
The LUFT Metals, and Volatile Organics

Sample No.	Cadmium (ppm)	Chromium (ppm)	Lead (ppm)	Nickel (ppm)	Zinc (ppm)	1,1-Di-cl.ethne. (ppb)	1,1,2-Tri-cl.ethne (ppb)
W/O-B	N.D.	32	[illegible]	47	72	[illegible]	[illegible]
W/O-STKP	N.D.	26	[illegible]	41	139	[illegible]	[illegible]
EPA METHOD	7130	7190	7420	7520	7950	8010	8010

ND - Non Detectable at analytical method limits
ppm - parts per million
ppb - parts per billion
--- - not analyzed

8.0 BACKFILLING AND RESURFACING

The former gasoline tank excavations were backfilled with the overburden material once sampling of the excavation had concluded. It was decided by ASE and the County representative, Mr. Owcarz, that it was not safe to leave the excavations open. The waste oil excavation remains open and was not backfilled. It was determined that there was insignificant risk to leaving this excavation open because it was inside a building no longer being used. Resurfacing of the site has not yet been addressed.

9.0 CONCLUSIONS AND RECOMMENDATIONS

As the analytical test results indicate, the excavation sidewalls of the former gasoline tanks are virtually non-contaminated. With minor overexcavation, ASE is confident that what little contamination remains could be removed and disposed of. As for the former waste oil excavation, elevated levels of TPH as Gasoline and Oil & Grease still remain in the surrounding soil. ASE recommends further overexcavation of the immediate area to remove and dispose of the contaminated soil. This task, however, should take place only after the existing building has been removed, allowing better access for equipment and personnel.

any plans?

As for the overburden soil that is now being used as temporary backfill, ASE recommends sampling and profiling of the material for future disposal at a local landfill licensed to remediate contaminated soil.

why? It already was sampled - 28 ppm TPH-g .0052 ppm benz

The results of water samples indicated elevated levels of petroleum contamination. At this time, ASE does not feel that those sample are representative of the site's groundwater. The samples collected should by no means be construed as indicator's of a potential groundwater contamination problem. To fully characterize the site's groundwater, a monitoring well would need to be installed.

9.0 REPORT LIMITATIONS

The results of this investigation represent conditions at the time and specific location at which soil samples were collected, and for the specific parameters analyzed for by the laboratory. It does not fully characterize the site for contamination resulting from sources other than the underground storage tanks at the site, or for parameters not analyzed for by the laboratory. All of the laboratory work cited in this report was prepared under the direction of independent CSDHS certified laboratory. The independent laboratory is solely responsible for the contents and conclusions of the chemical analysis data.

ASE appreciates having the opportunity to provide our services to you. If you have any questions or comments, please feel free to give us a call at (510) 820-9391.

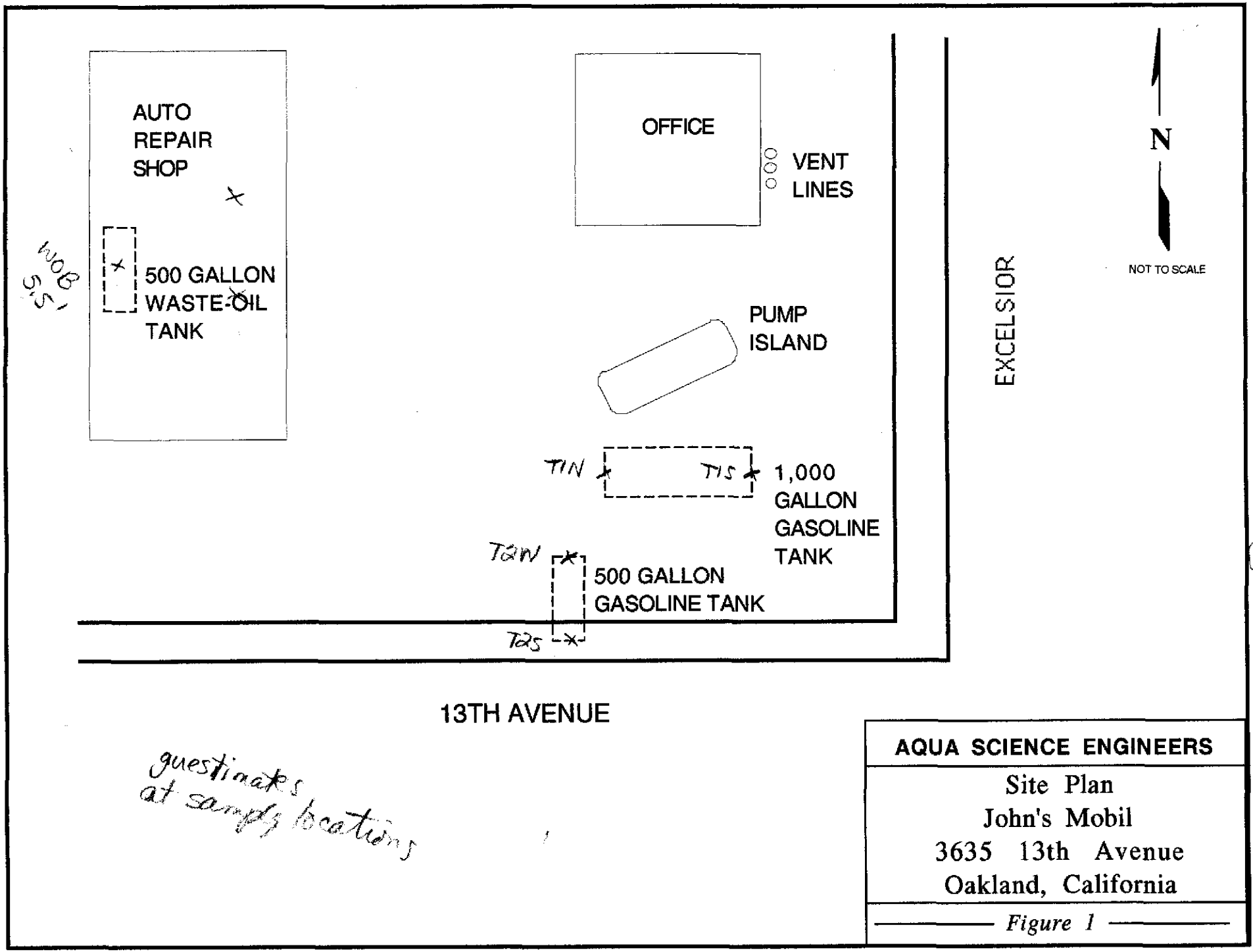
Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

David Allen
Project Manager

Enclosures: Figure 1
Appendices A - D

cc: Mr. John Williamson, Property Owner
Mr. Ronald Owcarz, ACHCSA
Mr. Rich Hiett, RWQCB, San Francisco Bay Region



guestimates at sample locations

AQUA SCIENCE ENGINEERS

Site Plan
John's Mobil
3635 13th Avenue
Oakland, California

Figure 1

APPENDIX A

LABORATORY ANALYSIS
and
CHAIN OF CUSTODY SHEETS

PRIORITY ENVIRONMENTAL LABS

December 19, 1992 PEL # 9212041

AQUA SCIENCE ENGINEERS, INC.

Attn: Steve DeHope
Re: Two water and eight soil samples for Gasoline/BTEX, Diesel, and Oil & Grease analyses.

Project name: Johns Mobil Project number: 2595

Date sampled: Dec 15, 1992 Date submitted: Dec 16, 1992
Date extracted: Dec 16-18, 1992 Date analyzed: Dec 16-18, 1992

RESULTS:

SAMPLE I.D.	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
T 1-W	32000	47	130	160	210
T 2-W	88000	77	180	290	980
Detection Limit	50	0.5	0.5	0.5	0.5
Method of Analysis	5030 / 8015	602	602	602	602

SAMPLE I.D.	Gasoline (mg/Kg)	Diesel (mg/Kg)	Benzene (ug/Kg)	Toluene (ug/Kg)	Ethyl Benzene (ug/Kg)	Total Xylenes (ug/Kg)	Oil & Grease (mg/Kg)
T 1-N	N.D.	---	N.D.	N.D.	N.D.	N.D.	---
T 1-S	27	---	5.5	5.7	8.8	34	---
T 2-N	N.D.	---	N.D.	N.D.	N.D.	N.D.	---
T 2-S	1.0	---	N.D.	5.0	8.0	15	---
T 1-STKP*	5.1	---	N.D.	N.D.	5.6	30	---
T 2-STKP*	28	---	5.2	7.7	8.9	39	---
W/O-B	290	N.D.	140	730	820	2800	8200
W/O-STKP	24	N.D.	8.4	16	25	57	3400
Blank	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Spiked Recovery	89.1%	104.3%	82.4%	87.6%	92.0%	90.9%	---
Duplicate Spiked Recovery	92.6%	90.2%	88.6%	93.5%	91.4%	102.3%	---
Detection limit	1.0	1.0	5.0	5.0	5.0	5.0	50
Method of Analysis	5030 / 8015	3550 / 8015	8020	8020	8020	8020	5520 D & F

* Composited soil samples.

David Duong
Laboratory Director

1764 Houret Court Milpitas, CA. 95035 Tel: 408-946-9636 Fax: 408-946-9663

PRIORITY ENVIRONMENTAL LABS

December 19, 1992

PEL # 9212041

AQUA SCIENCE ENGINEERS, INC.
Project name : Johns Mobil

Attn: Steve DeHope
Project number: 2595

Sample I.D.: W/O-B

Date Sampled: Dec 15, 1992
Date Analyzed: Dec 17-18, 1992

Date Submitted: Dec 16, 1992

Method of Analysis: EPA 8010

Detection limit: 5.0 ug/Kg

COMPOUND NAME	CONCENTRATION (ug/Kg)	SPIKE RECOVERY (%)
Chloromethane	N.D.	-----
Vinyl Chloride	N.D.	87.3
Bromomethane	N.D.	-----
Chloroethane	N.D.	-----
Trichlorofluoromethane	N.D.	-----
1,1-Dichloroethene	150	-----
Methylene Chloride	N.D.	90.1
1,2-Dichloroethene (TOTAL)	N.D.	-----
1,1-Dichloroethane	N.D.	-----
Chloroform	N.D.	95.4
1,1,1-Trichloroethane	N.D.	-----
Carbon Tetrachloride	N.D.	-----
1,2-Dichloroethane	N.D.	-----
Trichloroethene	N.D.	91.6
1,2-Dichloropropane	N.D.	-----
Bromodichloromethane	N.D.	-----
2-Chloroethylvinylether	N.D.	-----
Trans-1,3-Dichloropropene	N.D.	-----
Cis-1,3-Dichloropropene	N.D.	-----
1,1,2-Trichloroethane	28	-----
Tetrachloroethene	N.D.	83.5
Dibromochloromethane	N.D.	-----
Chlorobenzene	N.D.	-----
Bromoform	N.D.	-----
1,1,2,2-Tetrachloroethane	N.D.	-----
1,3-Dichlorobenzene	N.D.	-----
1,4-Dichlorobenzene	N.D.	-----
1,2-Dichlorobenzene	N.D.	-----

David Duong
Laboratory Director

1764 Houret Court Milpitas, CA. 95035 Tel: 408-946-9636 Fax: 408-946-9663

PRIORITY ENVIRONMENTAL LABS

PEL # 9212041

December 19, 1992

AQUA SCIENCE ENGINEERS, INC.
Project name : Johns Mobil

Attn: Steve DeHope
Project number: 2595

Sample I.D.: W/O-STKP

Date Sampled: Dec 15, 1992
Date Analyzed: Dec 17-18, 1992

Date Submitted: Dec 16, 1992

Method of Analysis: EPA 8010

Detection limit: 5.0 ug/Kg

COMPOUND NAME	CONCENTRATION (ug/Kg)	SPIKE RECOVERY (%)
Chloromethane	N.D.	-----
Vinyl Chloride	N.D.	87.3
Bromomethane	N.D.	-----
Chloroethane	N.D.	-----
Trichlorofluoromethane	N.D.	-----
1,1-Dichloroethene	67	-----
Methylene Chloride	N.D.	90.1
1,2-Dichloroethene (TOTAL)	N.D.	-----
1,1-Dichloroethane	N.D.	-----
Chloroform	N.D.	95.4
1,1,1-Trichloroethane	N.D.	-----
Carbon Tetrachloride	N.D.	-----
1,2-Dichloroethane	N.D.	-----
Trichloroethene	N.D.	91.6
1,2-Dichloropropane	N.D.	-----
Bromodichloromethane	N.D.	-----
2-Chloroethylvinylether	N.D.	-----
Trans-1,3-Dichloropropene	N.D.	-----
Cis-1,3-Dichloropropene	N.D.	-----
1,1,2-Trichloroethane	30	-----
Tetrachloroethene	N.D.	83.5
Dibromochloromethane	N.D.	-----
Chlorobenzene	N.D.	-----
Bromoform	N.D.	-----
1,1,2,2-Tetrachloroethane	N.D.	-----
1,3-Dichlorobenzene	N.D.	-----
1,4-Dichlorobenzene	N.D.	-----
1,2-Dichlorobenzene	N.D.	-----

David Duong
Laboratory Director

1764 Houret Court Milpitas, CA. 95035 Tel: 408-946-9636 Fax: 408-946-9663

PRIORITY ENVIRONMENTAL LABS

December 18, 1992 PEL # 9212041

AQUA SCIENCE ENGINEERING, INC.

Attn: Steve DeHope
Re: Two soil samples for Cadmium, Chromium, Lead, Nickel, and Zinc analyses.

Project name: Johns Mobil
Project number: 2595

Date sampled: Dec 15, 1992 Date submitted: Dec 16, 1992
Date extracted: Dec 16-18, 1992 Date analyzed: Dec 16-18, 1992

RESULTS:

SAMPLE I.D.	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Nickel (mg/Kg)	Zinc (mg/Kg)
W/O B	N.D.	32	255	47	72
W/O STKP	N.D.	26	225	41	139
Blank	N.D.	N.D.	N.D.	N.D.	N.D.
Detection limit	0.5	1.0	1.0	1.0	1.0
Method of Analysis	7130	7190	7420	7520	7950

David Duong
Laboratory Director

1764 Houret Court Milpitas, CA. 95035 Tel: 408-946-9636 Fax: 408-946-9663

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

Chain of

PEL # 9212041
INV # 23277

DATE 12-15-92 PAGE 1 OF 1

SAMPLERS (SIGNATURE) (PHONE NO.)
(510) 820-9391

PROJECT NAME Johns Mobil NO. 2555

ADDRESS

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:
Standard turn Around

SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH- GASOLINE (EPA 5030/8015)	TPH- GASOLINE/BTEX (EPA 5030/8015-8020)	TPH- DIESEL (EPA 3510/8015)	PURGABLE AROMATICS (EPA 602/8020)	PURGABLE HALOCARBONS (EPA 601/8010)	VOLATILE ORGANICS (EPA 624/8240)	BASE/NUETRALS, ACIDS (EPA 625/8270)	OIL & GREASE (EPA 5520 E&F or B&F)	LUFT METALS (5) (EPA 6010+7000)	TITLE 22 (CAM 17) (EPA 6010+7000)	TCLP (EPA 1311/1310)	STLC- CAM WET (EPA 1311/1310)	REACTIVITY CORROSIVITY IGNITABILITY
T1-S	12-15		S	1		X											
T1-N	"		S	1		X											
T2-S	"		S	1		X											
T2-N	"		S	1		X	X		X			X	X				
W/O B	"		S	1		X											
T1-STKP	"		S	4		X											
T2-STKP	"		S	4		X											
W/O STKP	"		S	1		X	X		X			X	X				
T2-W	"		W	1		X											
T1-W	"		W	1		X											

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
(signature) (time)	(signature) (time)	(signature) (time)	(signature) (time)	
STEVE Tochlop 1:10			DAVID DUONG 1:10 PM	
(printed name) (date)	(printed name) (date)	(printed name) (date)	(printed name) (date)	
Company- A.S.E. 12/16/92	Company-	Company-	Company- PEL 12/16/92	

APPENDIX B

HAZARDOUS WASTE MANIFESTS

State of California—Health and Welfare Agency
Form Approved OMB No. 2050—0039 (Expires 9-30-91)

See Instructions on Back of Page 6 and Front of Page 7

Department of Health Services
Toxic Substances Control Division
Sacramento, California

Please print or type. *Form designed for use on elite (12-pitch typewriter).*

UNIFORM HAZARDOUS WASTE MANIFEST

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

3. Generator's Name and Mailing Address
4. Generator's Phone ( ) 510 ... 100
A. State Manifest Document Number 910...
B. State Generator's ID
5. Transporter 1 Company Name WASTE OIL RECOVERY
6. US EPA ID Number
C. State Transporter's ID
D. Transporter's Phone 510 533 0750
7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone
9. Designated Facility Name and Site Address
10. US EPA ID Number
G. State Facility's ID
H. Facility's Phone 310 537 7100

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. PETROLEUM OIL NOS. (WASTE ...) COMBUSTIBLE LIQUID NA1270		TT			State 221 EPA/Other N/A
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above
1) H2O / WASTE MOTOR OILS, WASTE OILS

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

15. Special Handling Instructions and Additional Information
ERG # 27
24 HR - 510 533 0750
PROTECTIVE GEAR
MAILING ADDRESS ...

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

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

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

GENERATOR / TRANSPORTER / FACILITY

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

DHS 8022 A
EPA 8700—22
(Rev. 6-89) Previous editions are obsolete.

Do Not Write Below This Line

YELLOW: GENERATOR RETAINS

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. CAC000691744 — Manifest Document No. 11713 — 2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: Johns Mobil, 3633 13 Ave., Oakland CA 94602

4. Generator's Phone ( )

5. Transporter 1 Company Name: [illegible] — 6. US EPA ID Number: CAD009466392

7. Transporter 2 Company Name: — 8. US EPA ID Number:

9. Designated Facility Name and Site Address: Erickson, Inc. 255 Parr Blvd. Richmond, Ca. 94801 — 10. US EPA ID Number: CAD009466392

[redacted]

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
a. Waste Empty Storage Tank NON-RCRA Hazardous Waste Solid.	003	TP	01750	P
b.				
c.				
d.				

[redacted]

15. Special Handling Instructions and Additional Information

Keep away from sources of ignition. Always wear hardhats when working around U.S.T.'s 24 Hr. Contact Name Steve Dellape & Phone (510) 820-7156

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of the 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 federal, state and international laws.

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
Steve Dellape [illegible]	[signature]	12	15	92

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
ALFRED DAVIS	Alfred Davis	12	15	92

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

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.

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

DTSC 8022A (12/91)
EPA 8700—22

Yellow: GENERATOR RETAINS

APPENDIX C

TANK DISPOSAL CERTIFICATION

AY OR NIGHT
TELEPHONE
(510) 235-1393

CERTIFICATE

CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO. 10114

CUSTOMER [redacted]

JOB NO. 10320

FOR: Erickson Inc. TANK NO. 10311

LOCATION: Richmond DATE: 12/13/90 TIME: 1:26:07

TEST METHOD Visual Gastech/1314 OMEN LAST PRODUCT LG

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 1000 Gallon Tank CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9%
LOWER EXPLOSIVE LIMIT LESS THAN 0.1%

"ERICKSON INC. HEREBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS WASTE FACILITY."

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissable concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

K. Nick

REPRESENTATIVE TITLE INSPECTOR

CP5985

DAY OR NIGHT TELEPHONE (510) 235-1393

CERTIFICATE

CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO. 15116

CUSTOMER AQUA SCI

JOB NO. 80323

FOR: Erickson, Inc. TANK NO. 10310

LOCATION: Richmond DATE: 12/16/92 TIME: 15:32:10

TEST METHOD Visual Gastech/1314 SMEN LAST PRODUCT LO

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 500 Gallon Tank CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9%

LOWER EXPLOSIVE LIMIT LESS THAN 0.1%

"ERICKSON INC. HEREBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS WASTE FACILITY."

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissable concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

K. Ada DB

REPRESENTATIVE TITLE INSPECTOR

CP5995

DAY OR NIGHT
TELEPHONE
(510) 235-1393

CERTIFICATE

CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO. 15122

CUSTOMER	
JOB NO.	83320

FOR: Erickson, Inc. TANK NO. 10312

LOCATION: Richmond DATE: 12/21/92 TIME: 10:34:58

TEST METHOD Visual Gastech/1314 SMPN LAST PRODUCT UO

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 250 Gallon Tank CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9%
LOWER EXPLOSIVE LIMIT LESS THAN 0.1%

"ERICKSON INC. HEREBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS WASTE FACILITY."

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissable concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

K Dika

REPRESENTATIVE TITLE INSPECTOR

CP5895

APPENDIX D

PERMITS

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS DIVISION
80 SWAN WAY, ROOM 200
OAKLAND, CA 94621
PHONE NO. 510/271-4320

ACCEPTED
DEPARTMENT OF ENVIRONMENTAL HEALTH
470 - 27th Street, Third Floor
Oakland, CA 94612
Telephone: (415) 874-7237

These plans have been reviewed and found to be acceptable and essentially meet the requirements of State and local health laws. Changes to your plans indicated by this Department are to assure compliance with State and local laws. The project proposed herein is now released for issuance of any required building permits for construction.

One copy of these accepted plans must be on the job and available to all contractors and craftsmen involved with the removal.

Any change or alterations of these plans and specifications must be submitted to this Department and to the Fire and Building Inspection Department to determine if such changes meet the requirements of State and local laws. Notify this Department at least 48 hours prior to the following required inspections:

_____ Removal of Tank and Piping
_____ Sampling
_____ Final Inspection

Issuance of a permit is dependent on compliance with accepted plans and all applicable laws and regulations.

THERE IS A FINANCIAL PENALTY FOR NOT OBTAINING THESE PERMITS.

12/3/92 - See Time Note changes on Pages 4 + 5. P.O.

UNDERGROUND TANK CLOSURE PLAN
*** * * Complete according to attached instructions * * ***

1. Business Name John's Mobil
   Business Owner John Williamson
2. Site Address 3635 13th Street
   City Oakland Zip 94602 Phone 769-0100
3. Mailing Address 1511 Wellington Street
   City Oakland Zip 94602 Phone 769-0100
4. Land Owner John Williamson
   Address 1511 Wellington St City, State Oakland CA Zip 94602
5. Generator name under which tank will be manifested John Williamson

EPA I.D. No. under which tank will be manifested CAC000697744

Permit to Excavate and Install, Repair, or Remove Inflammable Liquid Tanks. No. 9638

Oakland, California, DECEMBER 10, 19 92

PERMISSION IS HEREBY GRANTED TO [redacted] remove [redacted] Gasoline tank and excavate commencing ____ feet inside CURB line

____ side of ____ Street Avenue ____ feet ____ of ____ Street Avenue

No. 3635 - 13TH AVENUE Street Avenue Present Storage ____

JOHN WILLIAMSON Address 1511 WELLINGTON Phone 820-9391

nt AQUA SCIENCE ENGINEERS Address 2411 OLD CROW CANYON RD. #4 94583 Phone 820-9391

ions of street (sidewalk) surface to be disturbed ____ X ____ Number of Tanks 1/2 Capacity 1000/500 Gallons, each.

This Permit is granted in accordance with existing City Ordinances.
Owner hereby agrees to remove tanks on discontinuance of use or when notified by the City Authorities.
When installing, removing or repairing tanks, no open flame to be on or near premises.

red ____ Fire Marshal

ed ____ Drainage Division Engineering Dept.

N / W / E / S

EXCAVATING PERMIT

Issued in accordance with Ord. No. 278 CMS, Sec. 6-2.04

____ square feet of digging or removal granted.

ceipt of $____ special deposit is hereby acknowledged.

GENERAL DEPOSIT.

BUREAU OF PERMITS AND LICENSES.

CERTIFICATE OF TANK AND EQUIPMENT INSPECTION

Inspected and passed on ____ 19 ____

By ____ Fire Marshal

ion Fee Paid . . . . . $ 80.00 CK#015209 REC 675881

ed by V. ARNOLD
FIRE PREVENTION BUREAU

NOTICE

Before Covering Tanks, Above Certificate Must Be Signed.

When ready for inspection notify Fire Prevention Bureau, 273-3851

THIS PERMIT MUST BE LEFT ON THE WORK AS AUTHORITY THEREFOR

(6-67)

CITY OF OAKLAND
REPORT OF FIRE INSPECTION

ENGINE CO #726

ADDRESS 3635 - 13th Avenue

NAME Aqua Science - Tnk Removal - 3 Tnks

GENERAL INSPECTION	PERMIT OTHER ✓	HAZARD NOTED	HAZARD ABATED
NOTICE LEFT LETTER	1st NOTICE	2nd NOTICE	FINAL

DATE	VIOLATION	O.K.	CONTACTED
12/15/92	Witnessed Removal of one 350 Gallon, one 500 Gallon and one Thousand Gallon Underground Fuel Storage Tanks. Inspection Also Witnessed by Alameda Inspector R.T. Ontiveros. Inspection Approved		Steve Kellogg

A RE-INSPECTION SHALL BE MADE WITHIN ____ DAYS

FIRE PREVENTION BUREAU — PHONE 238-3851