



17895 Sky Park Circle, Suite E, Irvine, CA 92714
Tel 714/833-3667 • Fax 714/833-3468

November 18, 1992

PROJECT REPORT
for
FORMER WASTE OIL TANK
OVEREXCAVATION ACTIVITIES AND RESULTS
at
The Goodman Property
2501 Santa Clara Avenue
Alameda, California 94501

Prepared for:
Ms. Helen Goodman
3239 Thompson Avenue
Alameda, California 94501

Prepared by:
AQUA SCIENCE ENGINEERS, INC.
2411 Old Crow Canyon Road, #4
San Ramon, CA 94583



November 18, 1992

Ms. Helen Goodman
3239 Thompson Avenue
Alameda, California 94501

SUBJECT: Overexcavation of Former Waste Oil Tank Pit
Goodman Property
2501 Santa Clara Avenue
Alameda, CA 94501

INTRODUCTION

On September 25, 1992 Aqua Science Engineers, Inc. (ASE) arrived on site to perform overexcavation activities on the former waste oil tank excavation (see Figure 1, Site Plan). This scope of work was initiated by the property owner, Ms. Helen Goodman, per Alameda County Health Care Services Agency (ACHCSA) requirements. During original tank removal operations, an excavation-bottom soil sample was collected and analyzed for Total Petroleum Hydrocarbons as Gasoline and Diesel, BTEX, and Oil and Grease. Analytical testing resulted in detectable levels of contaminants in the sample submitted (39 ppm TPH-Gas, 250 ppm TPH-Diesel, and 12,000 ppm Oil & Grease).

OVEREXCAVATION

ASE personnel, Steve DeHope - Construction Supervisor, arrived on site on September 25, 1992 and began overexcavation activities by use of a backhoe. Excavated material was stockpiled on site at the edge of the excavation. Shortly after overexcavation activities began, Ms. Juliet Shin, ACHCSA Hazardous Materials Specialist, arrived on site. The excavation pit, which was originally 6' x 6' x 5' deep, was enlarged to the dimensions of 8' x 9' x 11' deep (approximately 30 cubic yards). By use of a hand-held Organic Vapor Meter (OVM) and visual inspection, it was determined that the extent of soil contamination had been excavated and stockpiled.

SAMPLING AND ANALYSIS

Four soil sidewall samples were collected at points requested by Ms. Shin, see Figure 2, Sampling Plan. The following soil samples were collected:

SAMPLE ID.	DEPTH
OE-E	7 1/2' below ground surface
OE-N	8' below ground surface
OE-S	7 1/2' below ground surface
OE-W	8' below ground surface

These soil samples were collected from the backhoe bucket in 2" x 6" sterile, brass tubes, covered on both ends with aluminum foil, capped, and taped. The samples were labeled and stored in an ice chest for cold storage prior to delivery to Priority Laboratory in Milpitas, California, a State of California Certified Laboratory. The samples were submitted for analysis of Total Petroleum Hydrocarbons as Gasoline (EPA 5030/8015), Total Petroleum Hydrocarbons as Diesel (EPA 3550/8015), BTEX (EPA 8020), and Oil & Grease (EPA 5520 D&F). Copies of the analytical report are attached in Appendix A; results are tabulated below in Table One.

TABLE ONE
Overexcavation Soil Sample Results

Sample ID.	TPH Gasoline (ppm)	TPH Diesel (ppm)	Benzene (ppb)	Toluene (ppb)	Ethyl Benzene (ppb)	Total Xylenes (ppb)	Oil and Grease (ppm)
OE-E	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
OE-N	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
OE-S	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
OE-W	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Test 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

CONCLUSIONS

It is the opinion of Aqua Science Engineers that any and all soil contamination affecting the area within the former waste oil tank excavation has been removed and stockpiled on site. ASE recommends that backfilling and resurfacing activities commence upon written approval of such tasks by the ACHCSA.

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 former underground storage tank 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.

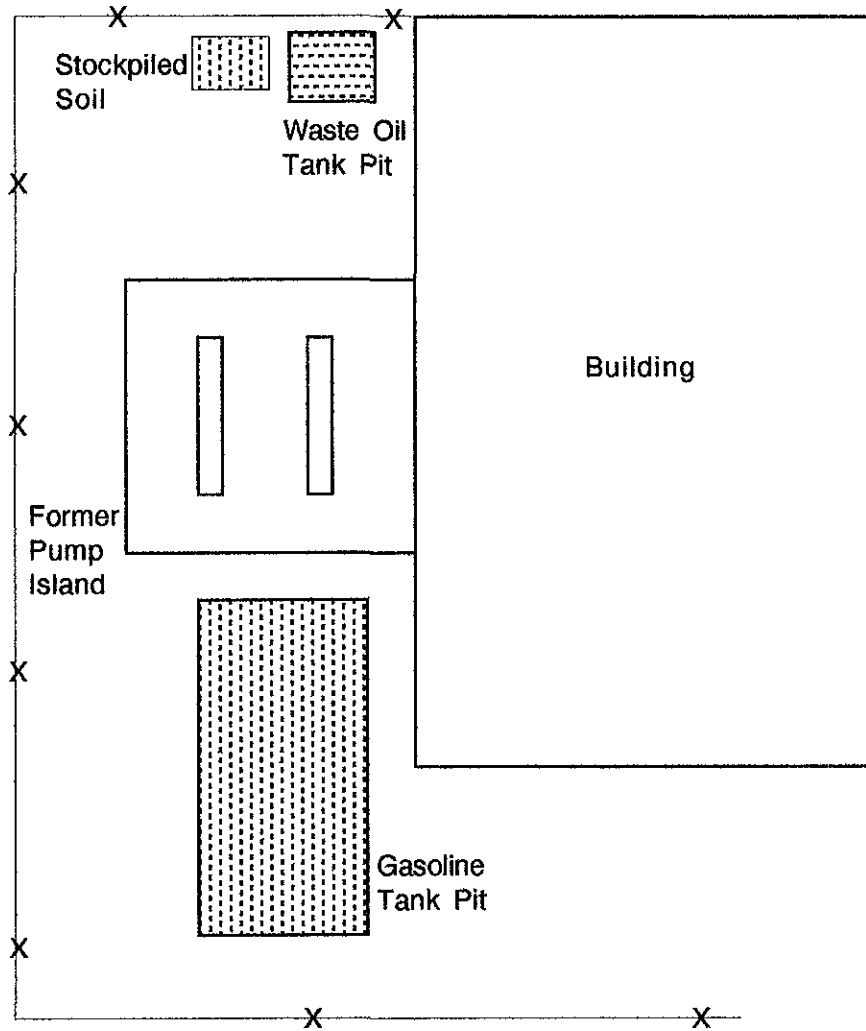


David Allen
Project Manager

cc: Ms. Juliet Shin, Alameda County Health Care Services Agency
Mr. Rich Hiatt, RWQCB, San Francisco Bay Region

Everett Street

Santa Clara Avenue



NOT TO SCALE

LEGEND

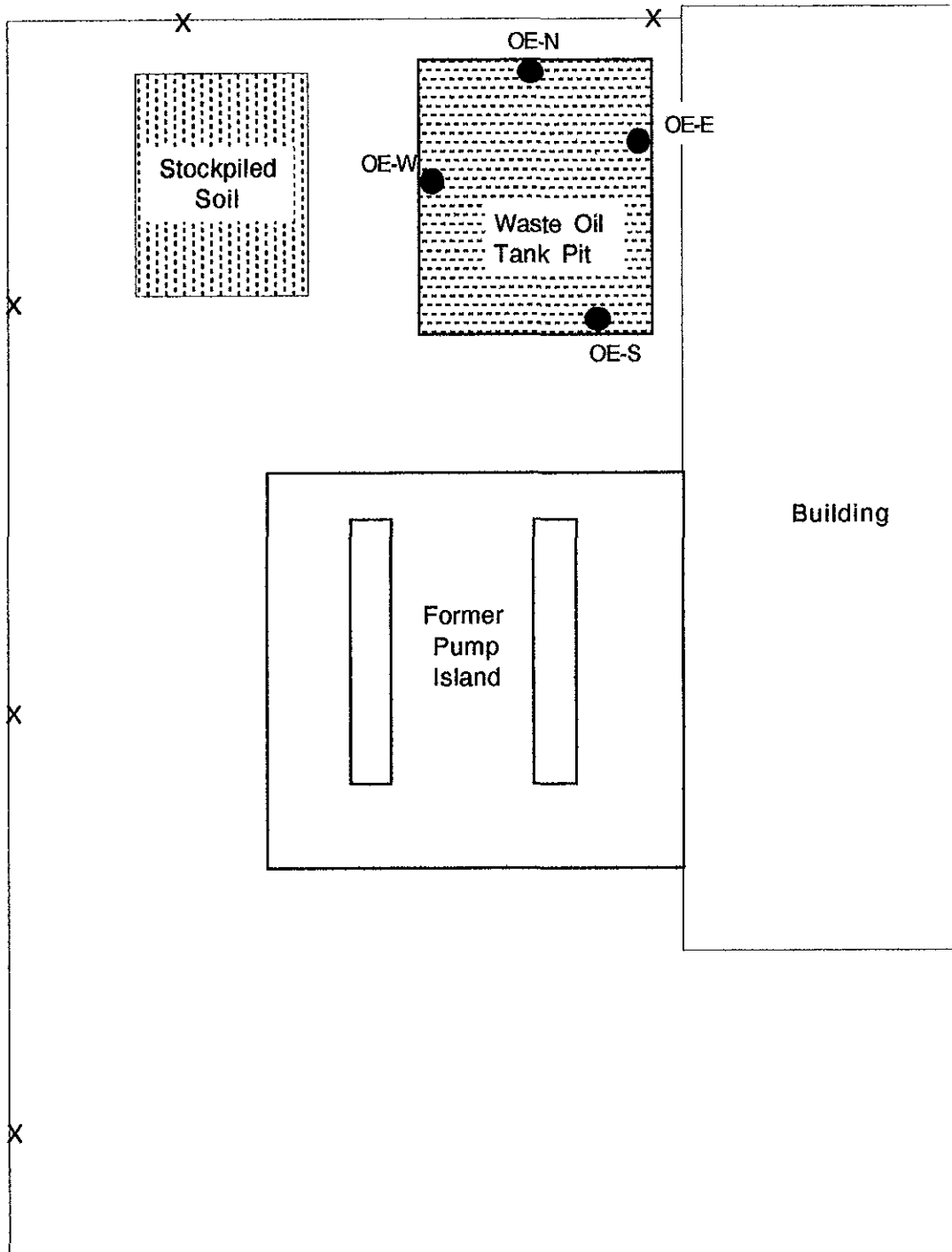
— X — X — Fence

SITE PLAN

Goodman Property
2501 Santa Clara Avenue
Alameda, California

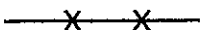

Aqua Science Engineers

Figure 1



NOT TO SCALE

LEGEND

 Fence
 OE-N Sidewall Soil Sample

<h2>SAMPLING PLAN</h2>	
Goodman Property 2501 Santa Clara Avenue Alameda, California	
Aqua Science Engineers	Figure 2

APPENDIX A

**California EPA Certified
Laboratory Report of Soil Samples**



PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

September 30, 1992

PEL # 9209051

AQUA SCIENCE ENGINEERS, INC.

Attn: Dave Allen

Re: Four soil samples for Gasoline/BTEX, Diesel, and Oil & Grease analyses.

Project name: Goodman

Project location: 2501 Santa Clara Ave.

Project number: 2558

Date sampled: Sep 27, 1992

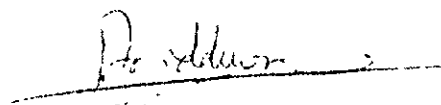
Date submitted: Sep 29, 1992

Date extracted: Sep 29-30, 1992

Date analyzed: Sep 29-30, 1992

RESULTS:

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)
OE-E	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
OE-N	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
OE-S	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
OE-W	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Blank	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Spiked Recovery	95.1%	85.6%	90.5%	86.8%	94.0%	102.5%	---
Duplicate Spiked Recovery	87.4%	83.2%	83.5%	90.0%	89.9%	93.5%	---
Detection limit	1.0	1.0	5.0	5.0	5.0	5.0	10
Method of Analysis	5030 / 8015	3550 / 8015	8020	8020	8020	8020	5520 D & F


 David Duong
 Laboratory Director

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

Chain of Custody

PEL # 9209051

INV # 23096

DATE 9-28-92 PAGE 1 OF 1

SAMPLERS (SIGNATURE) [Signature] (PHONE NO.) (510) 820-9391 PROJECT NAME Goodman NO. 2558
 ADDRESS 2501 Santa Clara Ave

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:
Composite STKP-1,2,3

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/NEUTRALS, ACIDS (EPA 625/8270)	OIL & GREASE (EPA 5520 E&F OF B&F)	PCB (EPA 608/8080)	PHENOLS (EPA 604/8040)	LUFT METALS (5) (EPA 6010+7000)	PRIORITY POLLUT. (13) (EPA 6010 ICP + 7000)	TITLE 22 (CAM 17) (EPA 6010+7000)	TCLP (EPA 1311/1310)	STLC- CAM WET (EPA 1311/1310)	REACTIVITY	CORROSIIVITY	IGNITABILITY	
STKP-1	9-27		S	4		X																	
STKP-2	9-27		S	4		X																	
STKP-3	9-27		S	4		X																	
OE-W			S	1		X	X					X											
OE-E			S	1		X	X					X											
OE-S			S	1		X	X					X											
OE-N			S	1		X	X					X											

RELINQUISHED BY: <u>[Signature]</u> (signature) (time)	RECEIVED BY: <u>[Signature]</u> (signature) (time)	RELINQUISHED BY: <u>[Signature]</u> (signature) (time)	RECEIVED BY LABORATORY: <u>[Signature]</u> 8:00 AM (signature) (time)	COMMENTS:
DAVID ALLEN 9/29/92 (printed name) (date)			DAVID DUONG 09/29/92 (printed name) (date)	
Company- ASE	Company-	Company-	Company- PEL	