

ALL ENVIRONMENTAL, INC.

Environmental Engineering & Construction

March 1, 1996

Job No. 1031

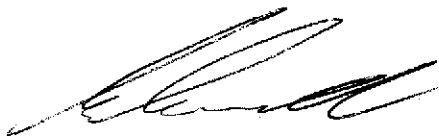
Ms. Jennifer Eberle
Alameda County Health Care Services Agency
1131 Harbour Way Parkway, 2nd Floor
Alameda, CA 94502-6577

**Subject: First Biannual Groundwater Monitoring Report
3635 13th Avenue, Oakland, California.**

Dear Ms. Eberle:

We are enclosing one copy of the referenced report for your review, which presents results of the first biannual groundwater sampling at 3635 13th Avenue, Oakland, California. If you have any questions or comments regarding the findings presented in this report, please call me at (510) 820-3224.

Sincerely,
ALL ENVIRONMENTAL, INC.



Bryan Campbell
Project Geologist

**FIRST BIENNIAL
GROUNDWATER
MONITORING REPORT**

3635 13th Avenue
Oakland, CA

Prepared For

Mr. John Williamson
1511 Wellington Street
Oakland, CA 94602

Prepared By

All Environmental, Inc.
2641 Crow Canyon Road, Suite 5
San Ramon, CA 94583

February 28, 1996

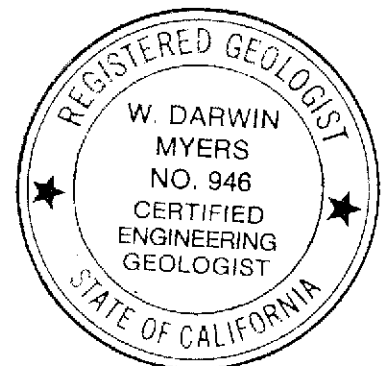


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1.0 INTRODUCTION

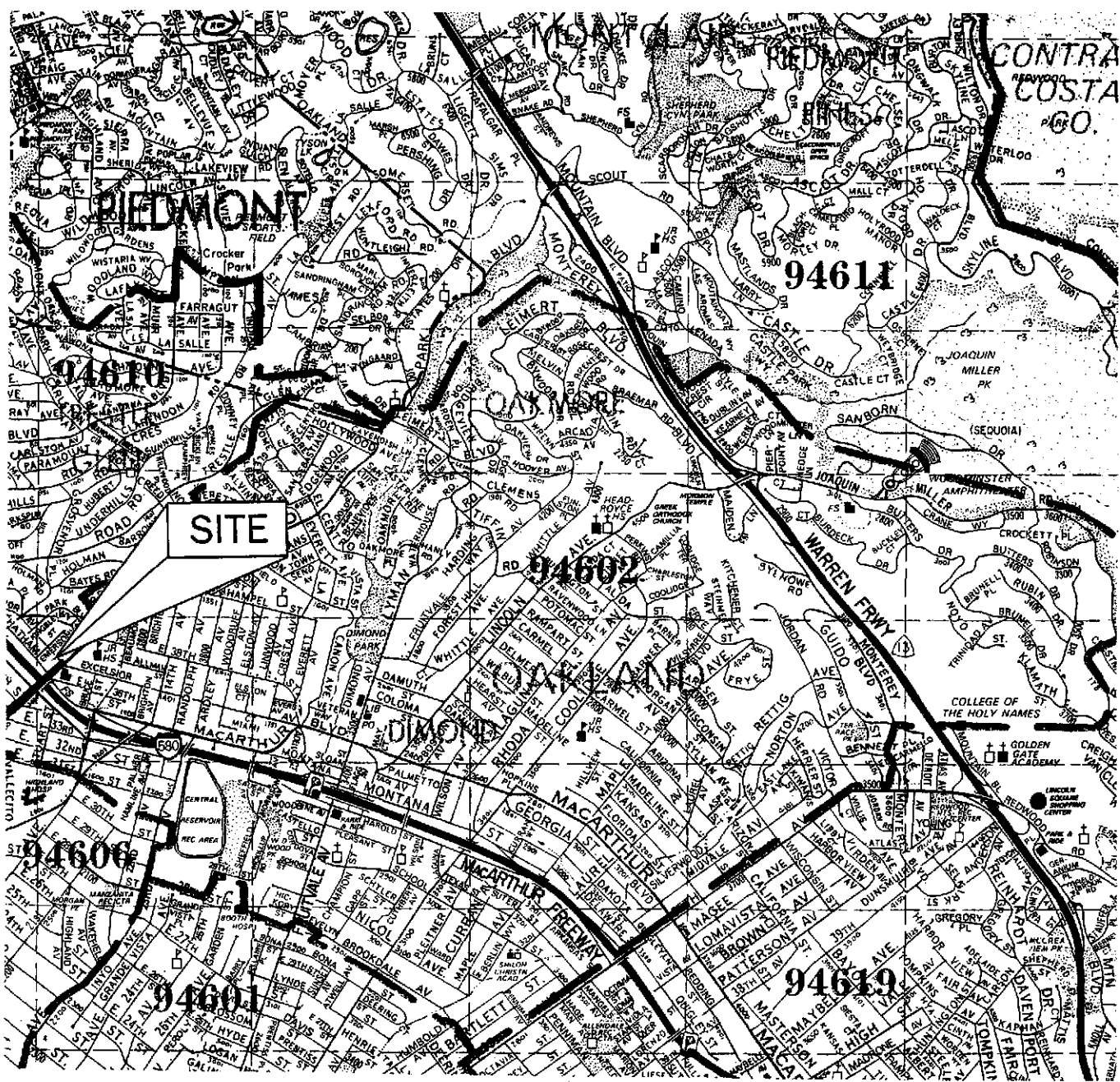
This report presents the results of the first biannual sampling episode conducted at 3635 13th Avenue in Oakland, California on February 7, 1996. The purpose of this activity is to monitor groundwater quality in the vicinity of previous underground storage tanks. This biannual monitoring program is being conducted at the request of the Alameda County Health Care Services Agency (ACHCSA). The monitoring was accomplished using three monitoring wells which were installed by All Environmental Inc. (AEI) on March 24, 1994, as reported by AEI (Ref. 1).

2.0 SITE DESCRIPTION

The site is located in a largely residential zone of Oakland approximately 100 yards east of Highway 580, at the northwest corner of 13th Avenue and Excelsior, as shown in Figure 1, Site Location Map. The property slopes gently toward the southeast, is currently paved with asphalt, and is surrounded by a cyclone fence. The nearest significant surface water is Lake Merritt, located approximately one mile to the west.

3.0 BACKGROUND

All Environmental, Inc. (AEI) was contracted by John Williamson to conduct a soil and groundwater investigation at 3635 13th Avenue in Oakland, California. Two underground gasoline tanks, with capacities of 500 and 1000 gallons, and one 250-gallon waste oil tank were removed from the site by Aqua Science Engineers, Inc. in December, 1992 (Ref. 2). Excavation



FROM
 SAN FRANCISCO/ALAMEDA/
 CONTRA COSTA COUNTIES
 THOMAS BROS. MAPS
 1994 EDITION



ALL ENVIRONMENTAL, INC.	
2641 CROW CANYON ROAD, SAN RAMON, CA	
SCALE: 1 INCH : 1/4 MILE	REVISED BY:
DATE: 15 NOV 1995	APPROVED BY:
SITE LOCATION MAP	
3635 13th Avenue, Oakland	FIGURE 1

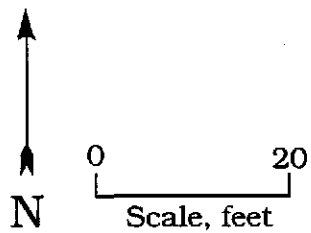
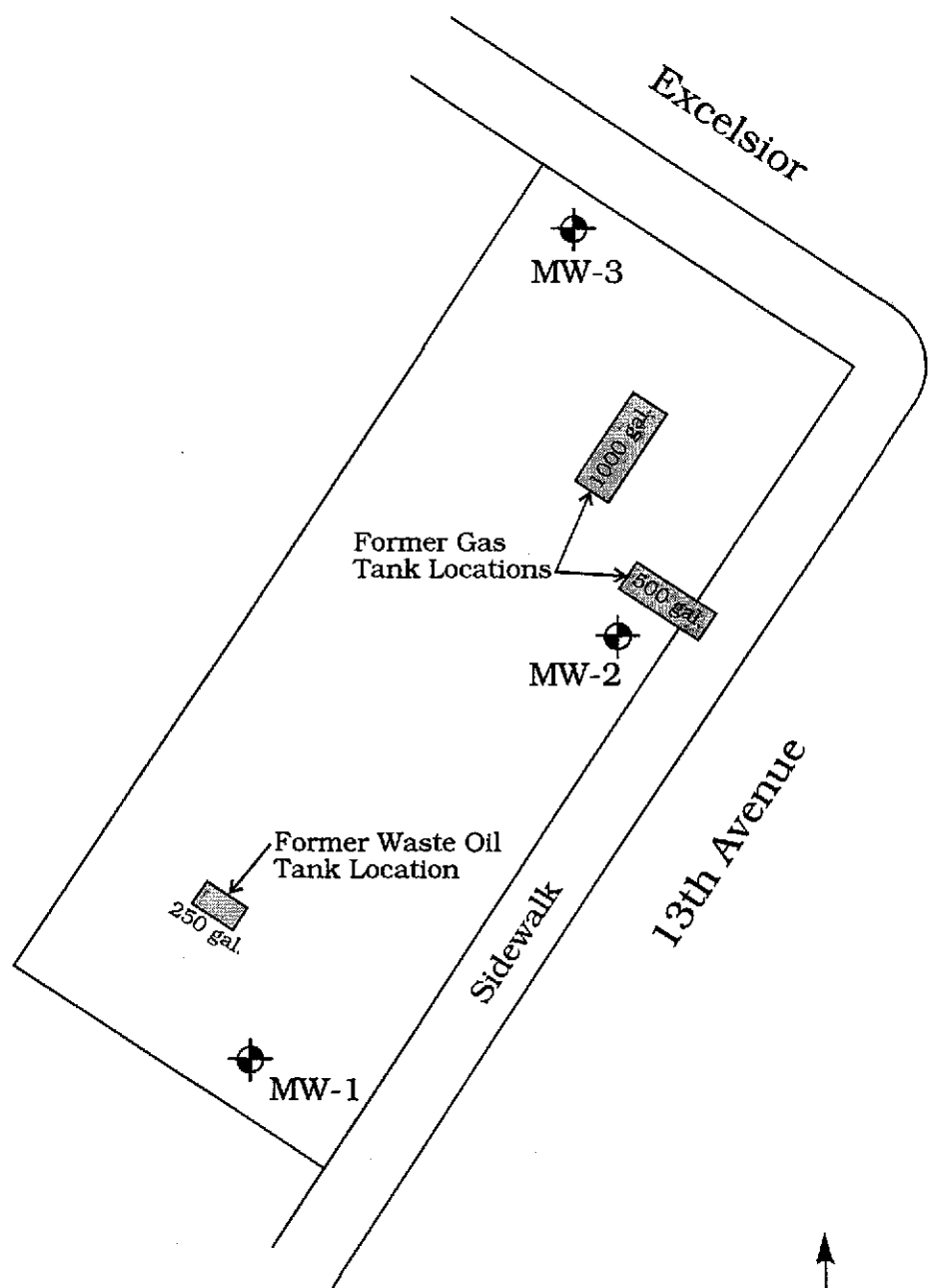
and removal of an additional 360 cubic yards of soil was performed by AEI in September, 1993 (Ref. 3). The initial levels of contamination found in the soils during the tank removal and subsequent excavation led to the requirement of performing this groundwater investigation, as per the orders of the ACHCSA. Three monitoring wells, MW-1 through MW-3, were installed on the site for the purpose of monitoring groundwater contamination.

The three monitoring wells were installed by AEI on March 24, 1994 at the locations shown in Figure 2, Site Plan. Due to delays, the wells were not developed and sampled until November, 1994, which was the first quarter of groundwater sampling. Groundwater sampling continued, on a quarterly basis, for three additional quarters (Ref. 4, 5, 6). The wells were last sampled on August 18, 1995. After the fourth quarter, the ACHCSA required the continuation of groundwater monitoring on a biannual basis.


4.0 SITE GEOLOGY

The geology at the site consists of early Pleistocene older alluvium deposits of mostly silty and sandy clay. Based on the borings drilled at the site, the subsurface materials consist mostly of silty and sandy clays of relatively low permeability, with discontinuous layers of silty sand, up to 4 feet thick.

The direction of the groundwater flow direction, based on the most recent measurements, is toward the southeast, as shown in Figure 3, Groundwater Gradient. The flow direction has remained essentially the same in all four quarterly groundwater episodes. Groundwater level measurements are tabulated in Table 1 below.

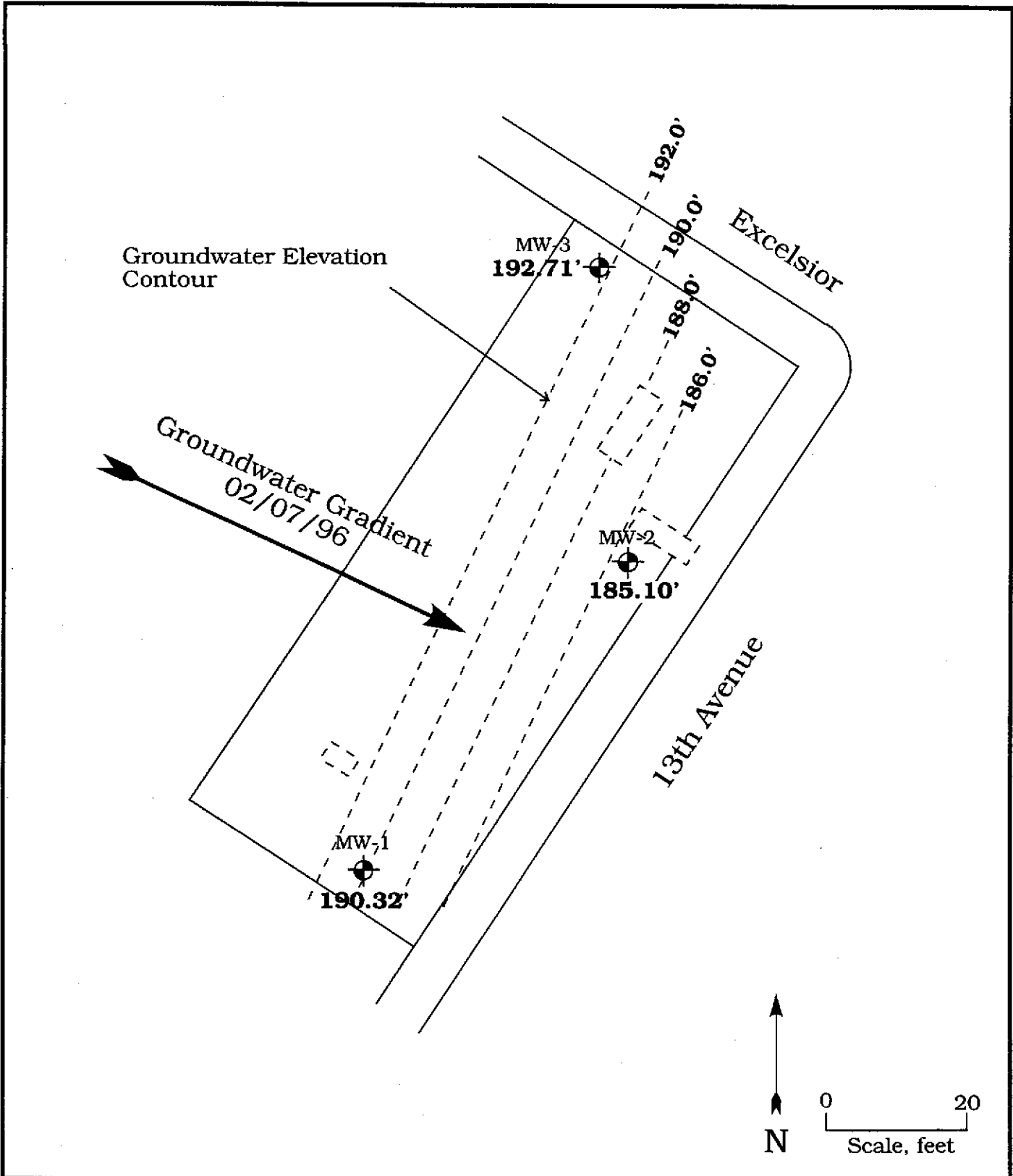


Explanation


Monitoring Well, Installed by AEI on 3/24/94.

Note: Well locations and property boundaries surveyed accurately, tank locations approximate.

ALL ENVIRONMENTAL, INC. 2641 CROW CANYON ROAD, SAN RAMON, CA		
DRAWN BY:		REVISED BY:
DATE:		APPROVED BY:
SITE PLAN		
3635 13th Avenue, Oakland		FIGURE 2



190.32' = Groundwater Elevation
 = Monitoring Well
 MW-1 = Monitoring Well Number

ALL ENVIRONMENTAL, INC.
 2641 CROW CANYON ROAD, SAN RAMON, CA

<small>DRAWN BY:</small>	<small>REVISED BY:</small>
<small>DATE:</small>	<small>APPROVED BY:</small>

Groundwater Gradient

3635 13th Avenue, Oakland	FIGURE 3
---------------------------	----------

Table 1 - Water Level Measurements

Well Number	Groundwater Elevations (Feet Above Mean Sea Level)				
	November 1994	February 1995	May 1995	August 1995	February 1996
MW-1	183.83	184.17	183.81	180.23	190.32
MW-2	183.90	184.09	184.33	178.19	185.10
MW-3	187.40	187.04	181.22	182.79	192.71

5.0 GROUNDWATER SAMPLE ANALYSES

Groundwater samples were collected from the three wells on February 7, 1996. A log detailing the well sampling is included in Appendix A, Current Laboratory Analyses and Chain of Custody Documentation. The groundwater samples were analyzed by Priority Environmental Labs (State Certification #1708) in Milpitas, California. Samples from all three wells were analyzed for Total Petroleum Hydrocarbons as gasoline (TPHg) (EPA Method 5030/8015); Total Petroleum Hydrocarbons as diesel (TPHd) (EPA Method 3510/8015); benzene, toluene, ethylbenzene, and total xylenes (BTEX) (EPA Method 8020/602); and Total Oil & Grease (TOG) (EPA Method 5520 C&F).

Groundwater was checked for sheen and free product prior to purging and sampling. Although free product was not noted in any of the groundwater samples, a strong hydrocarbon odor and a sheen were both recorded for groundwater samples collected from well MW-2. The groundwater samples were collected using a clean disposable bailer. Water was poured from the bailer into

amber liter bottles and 40 ml VOA vials and capped so that no head space or visible air bubbles were within the sample containers. The samples were labeled and placed on ice in an ice chest for transportation to Priority Environmental Labs (State Certification #1708) under chain of custody protocol for analysis.

6.0 ANALYTICAL RESULTS OF SAMPLES

Sample analyses indicated elevated levels of TPHg for well MW-2 and moderate levels of TPHg for well MW-3. BTEX was detected at moderate levels in wells MW-2 and MW-3. Benzene was detected at levels of up to 17 ppb. TPHd and TOG were at low or non-detect levels in samples from all wells. Samples from well MW-1 were measured below detectable concentrations for all constituents. Current groundwater sample analyses with chain of custody documentation are included in Appendix A. Analytical data and chain of custody documentation for the previous sampling are included in Appendix B.

Tables 2 through 4 present the results of the current sampling episode and previous sampling episodes.

Table 2 - Water Sample Analysis Results, Well No. MW-1

Constituent/Date	November 1994	February 1995	May 1995	August 1995	February 1996
TPHg (ug/L)	210	140	ND	2,800	ND
TPHd (ug/L)	ND	ND	ND	ND	ND
Benzene (ug/L)	ND	ND	ND	25	ND
Toluene (ug/L)	ND	ND	ND	6.2	ND
Et. Benz. (ug/L)	ND	0.6	ND	22	ND
Xylene (ug/L)	2.3	1.5	ND	30	ND
Oil & Grease (mg/L)	ND	1.2	ND	ND	ND

Total Petroleum Hydrocarbons as gasoline = TPHg
 Total Petroleum Hydrocarbons as diesel = TPHd
 ug/L = ppb

Table 3 - Water Sample Analysis Results, Well No. MW-2

Constituent/Date	November 1994	February 1995	May 1995	August 1995	February 1996
TPH-G (ug/L)	11,000	4,400	8,600	7,200	11,000
TPH-D (ug/L)	ND	ND	ND	ND	ND
Benzene (ug/L)	35	ND	95	43	17
Toluene (ug/L)	21	ND	37	21	11
Et. Benz. (ug/L)	7.2	2.5	37	21	9.3
Xylene (ug/L)	50	5.7	70	71	25
Oil & Grease (mg/L)	ND	1.6	ND	ND	0.6

Total Petroleum Hydrocarbons as gasoline = TPHg
 Total Petroleum Hydrocarbons as diesel = TPHd
 ug/L = ppb

Table 4 - Water Sample Analysis Results, Well No. MW-3

Constituent/Date	November 1994	February 1995	May 1995	August 1995	February 1996
TPH-G (ug/L)	200	1500	710	310	400
TPH-D (ug/L)	ND	ND	ND	ND	ND
Benzene (ug/L)	ND	6.6	2.5	3.1	1.4
Toluene (ug/L)	ND	6.4	3.2	2.1	2.5
Et. Benz. (ug/L)	ND	4.2	3.1	2.2	2.2
Xylene (ug/L)	2.0	13	16	11	7.0
Oil & Grease (mg/L)	3.0	0.9	ND	ND	2.2

Total Petroleum Hydrocarbons as gasoline = TPHg
 Total Petroleum Hydrocarbons as diesel = TPHd
 ug/L = ppb

7.0 CONCLUSIONS AND RECOMMENDATIONS

The first biannual sampling of the three groundwater monitoring wells occurred on February 7, 1996. Prior to this sampling episode the well was sampled on a quarterly basis for four consecutive quarters. The groundwater samples analyzed indicate nondetectable to elevated levels of TPHg, nondetectable levels of TPHd, low levels of TOG, and moderate levels of BTEX. Benzene was detected at levels of up to 17 ppb. Maximum Contaminant Level for benzene in drinking water according to Title 22 of the California Code of Regulations is 1 ppb. However, the groundwater below the site is not potable. For the most part, the concentrations of BTEX have decreased from the previous sampling episode, however elevated concentrations of TPHg were found in MW-2.

Table 2 - Water Sample Analysis Results, Well No. MW-1

Constituent/Date	November 1994	February 1995	May 1995	August 1995	February 1994
TPHg (ug/L)	210	140	ND	2,800	ND
TPHd (ug/L)	ND	ND	ND	ND	ND
Benzene (ug/L)	ND	ND	ND	25	ND
Toluene (ug/L)	ND	ND	ND	6.2	ND
Et. Benz. (ug/L)	ND	0.6	ND	22	ND
Xylene (ug/L)	2.3	1.5	ND	30	ND
Oil & Grease (mg/L)	ND	1.2	ND	ND	ND

Total Petroleum Hydrocarbons as gasoline = TPHg
 Total Petroleum Hydrocarbons as diesel = TPHd
 ug/L = ppb

Table 3 - Water Sample Analysis Results, Well No. MW-2

Constituent/Date	November 1994	February 1995	May 1995	August 1995	February 1994
TPH-G (ug/L)	11,000	4,400	8,600	7,200	11,000
TPH-D (ug/L)	ND	ND	ND	ND	ND
Benzene (ug/L)	35	ND	95	43	17
Toluene (ug/L)	21	ND	37	21	11
Et. Benz. (ug/L)	7.2	2.5	37	21	9.3
Xylene (ug/L)	50	5.7	70	71	25
Oil & Grease (mg/L)	ND	1.6	ND	ND	0.6

Total Petroleum Hydrocarbons as gasoline = TPHg
 Total Petroleum Hydrocarbons as diesel = TPHd
 ug/L = ppb

Table 4 - Water Sample Analysis Results, Well No. MW-3

Constituent/Date	November 1994	February 1995	May 1995	August 1995	February 1994
TPH-G (ug/L)	200	1500	710	310	400
TPH-D (ug/L)	ND	ND	ND	ND	ND
Benzene (ug/L)	ND	6.6	2.5	3.1	1.4
Toluene (ug/L)	ND	6.4	3.2	2.1	2.5
Et. Benz. (ug/L)	ND	4.2	3.1	2.2	2.2
Xylene (ug/L)	2.0	13	16	11	7.0
Oil & Grease (mg/L)	3.0	0.9	ND	ND	2.2

Total Petroleum Hydrocarbons as gasoline = TPHg
 Total Petroleum Hydrocarbons as diesel = TPHd
 ug/L = ppb

7.0 CONCLUSIONS AND RECOMMENDATIONS

The first biannual sampling of the three groundwater monitoring wells occurred on February 7, 1996. Prior to this sampling episode the well was sampled on a quarterly basis for four consecutive quarters. The groundwater samples analyzed indicate nondetectable to elevated levels of TPHg, nondetectable levels of TPHd, low levels of TOG, and moderate levels of BTEX. Benzene was detected at levels of up to 17 ppb. Maximum Contaminant Level for benzene in drinking water according to Title 22 of the California Code of Regulations is 1 ppb. However, the groundwater below the site is not potable. For the most part, the concentrations of BTEX have decreased from the previous sampling episode, however elevated concentrations of TPHg were found in MW-2.

All Environmental, Inc. recommends continued biannual groundwater monitoring of the well. The next monitoring episode is scheduled for July, 1996, as per the requirements of the ACHCSA.

8.0 REFERENCES

1. Soil Boring and Monitoring Well Installation Final Report - dated December 14, 1994.
Prepared by All Environmental, Inc.
2. Underground Storage Tanks Removal Final Report - dated January 20, 1993.
Prepared by Aqua Science Engineers, Inc.
3. Contaminated Soil Over-Excavation Final Report - dated November 18, 1993.
Prepared by All Environmental, Inc.
4. Second Quarterly Monitoring Report - dated March 10, 1995.
Prepared by All Environmental, Inc.
5. Third Quarterly Groundwater Monitoring Report - dated June 19, 1995.
Prepared by All Environmental, Inc.
6. Fourth Quarterly Groundwater Monitoring Report - dated August 29, 1995.
Prepared by All Environmental, Inc.

9.0 REPORT LIMITATIONS

This report presents a summary of work completed by All Environmental, Inc., including observations and descriptions of site conditions. Where appropriate, it includes analytical results

for samples taken during the course of the work. The number and location of samples are chosen to provide required information, but it cannot be assumed that they are entirely representative of all areas not sampled. All conclusions and recommendations are based on these analyses, observations, and governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document.

AEI warrants that all services were performed in accordance with the generally accepted practices in the environmental engineering and construction field which existed at the time and location of the work.

ALL ENVIRONMENTAL INC. -- GROUNDWATER MONITORING WELL FIELD SAMPLING FORM	
Monitoring Well Number: MW-1	
Project Name	Williamson
Job Number	1031
Project Address	3635 13th Avenue, Oakland, CA
Date of Sampling	02/07/96
Name of Sampler	Dusty Roy
MONITORING WELL DATA	
Well Casing Diameter (2"/4"/6")	2"
Seal at Grade -- Type and Condition	Good
Well Cap & Lock -- OK/Replace	OK
Elevation of Top of Casing	194.75
Depth of Well	23.10
Depth to Water	4.43
Water Elevation	190.32
Three Well Volumes (gallons)*	
2" casing: (TD - DTW)(0.16)(3)	
4" casing: (TD - DTW)(0.65)(3)	
6" casing: (TD - DTW)(1.44)(3)	
Actual Volume Purged (gallons)	15
Appearance of Purge Water	Slightly Turbid
GROUNDWATER SAMPLES	
Number of Samples/Container Size	2 liters / 2 VOAs
Groundwater Temp/pH/Conductivity #1:	66.8°/6.70/1701
Groundwater Temp/pH/Conductivity #2:	66.0°/6.76/1673
Groundwater Temp/pH/Conductivity #3:	66.0°/6.76/1672
Appearance of Groundwater Samples	Clear
COMMENTS (i.e., sample odor, well recharge time & percent, etc.)	
No odor, rapid well recharge.	

TD - Total Depth of Well
DTW - Depth To Water

ALL ENVIRONMENTAL INC. -- GROUNDWATER MONITORING WELL FIELD SAMPLING FORM	
Monitoring Well Number: MW-2	
Project Name	Williamson
Job Number	1031
Project Address	3635 13th Avenue, Oakland, CA
Date of Sampling	02/07/96
Name of Sampler	Dusty Roy
MONITORING WELL DATA	
Well Casing Diameter (2"/4"/6")	2"
Seal at Grade -- Type and Condition	Good
Well Cap & Lock -- OK/Replace	OK
Elevation of Top of Casing	194.44
Depth of Well	36.03
Depth to Water	9.34
Water Elevation	185.1
Three Well Volumes (gallons)*	
2" casing: (TD - DTW)(0.16)(3)	
4" casing: (TD - DTW)(0.65)(3)	
6" casing: (TD - DTW)(1.44)(3)	
Actual Volume Purged (gallons)	20
Appearance of Purge Water	Clear
GROUNDWATER SAMPLES	
Number of Samples/Container Size	2 liters / 2 VOAs
Groundwater Temp/pH/Conductivity #1:	79.0°/6.82/1666
Groundwater Temp/pH/Conductivity #2:	77.7°/6.80/1618
Groundwater Temp/pH/Conductivity #3:	77.5°/6.80/1611
Appearance of Groundwater Samples	Clear with a sheen
COMMENTS (i.e., sample odor, well recharge time & percent, etc.)	
Strong hydrocarbon odor escaped from well under pressure.	
Sheen. Pumped dry at 20 gallons. Slow recharge.	

TD - Total Depth of Well
DTW - Depth To Water

ALL ENVIRONMENTAL INC. -- GROUNDWATER MONITORING WELL FIELD SAMPLING FORM	
Monitoring Well Number: MW-3	
Project Name	Williamson
Job Number	1031
Project Address	3635 13th Avenue, Oakland, CA
Date of Sampling	02/07/96
Name of Sampler	Dusty Roy
MONITORING WELL DATA	
Well Casing Diameter (2"/4"/6")	2"
Seal at Grade -- Type and Condition	Good
Well Cap & Lock -- OK/Replace	OK
Elevation of Top of Casing	198.93
Depth of Well	35.51
Depth to Water	6.22
Water Elevation	192.71
Three Well Volumes (gallons)*	
2" casing: (TD - DTW)(0.16)(3)	
4" casing: (TD - DTW)(0.65)(3)	
6" casing: (TD - DTW)(1.44)(3)	
Actual Volume Purged (gallons)	15
Appearance of Purge Water	Clear with a Sheen
GROUNDWATER SAMPLES	
Number of Samples/Container Size	2 liters / 2 VOAs
Groundwater Temp/pH/Conductivity #1:	73.2°/7.33/806
Groundwater Temp/pH/Conductivity #2:	72.8°/7.41/763
Groundwater Temp/pH/Conductivity #3:	72.8°/7.44/757
Appearance of Groundwater Samples	
COMMENTS (i.e., sample odor, well recharge time & percent, etc.)	
No odor. Pumped dry at 15 gallons. Slow well recharge rate.	

TD - Total Depth of Well
DTW - Depth To Water



PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

February 09, 1996

PEL # 9602010

ALL ENVIRONMENTAL, INC.

Attn: Dusty Roy

Re: Three water samples for Gasoline/BTEX, Diesel, and Oil & Grease analyses.

Project name: Williamson

Project number: 1031

Date sampled: Feb 07, 1996

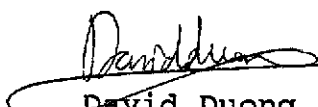
Date submitted: Feb 08, 1996

Date extracted: Feb 08-09, 1996

Date analyzed: Feb 08-09, 1996

RESULTS:

SAMPLE I.D.	Gasoline (ug/L)	Diesel (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylene (ug/L)	Oil & Grease (mg/L)
MW-1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
MW-2	11000	N.D.	17	11	9.3	25	0.6
MW-3	400	N.D.	1.4	2.5	2.2	7.0	2.2
Blank	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Spiked Recovery	105.4%	87.0%	90.0%	87.3%	90.2%	87.4%	---
Detection limit	50	50	0.5	0.5	0.5	0.5	0.5
Method of Analysis	5030 / 8015	3510 / 8015	602	602	602	602	5520 C & F


David Duong
Laboratory Director

ALL ENVIRONMENTAL, INC.
 2641 Crow Canyon Road, Ste. 5
 San Ramon, CA 94583
 (510) 820-3224 FAX: (510) 838-2687

PEL # 9602010
 INV # 26775

Chain of Custody

DATE: 2/2/96 PAGE: 1 OF 1

AEI PROJECT MANAGER: Dusty Roy
 PROJECT NAME: Williamson
 PROJECT NUMBER: 1031
 SIGNATURE: Dusty Roy
 TOTAL # OF CONTAINERS: 12
 RECD. GOOD COND./COLD: yes

ANALYSIS REQUEST

SAMPLE I.D.	DATE	TIME	MATRIX	ANALYSIS REQUEST										NUMBER OF CONTAINERS			
				TPH Gasoline (EPA 9000-8015)	TPH Gasoline (EPA 8080-8015) w/ BTX (EPA 802-8020)	TPH Diesel (EPA 3510/5550-8015)	FURCABLE AROMATICS BTX (EPA 802-8020)	TOTAL OIL & GREASE (EPA 550-5.06)	TOTAL LEAD (AA) (EPA 7420)	VOLATILE ORGANIC COMPOUNDS (EPA 8240)	LUFT Metals (EPA 7430/7460/7480/7490)	STLC CUM 17 (EPA 1310/6010)	ACTIVITY CORROSIIVITY (EPA 1310/6010)				
MW-1	2/2/96		W		X	X		X									4
MW-2	↓		↓		X	X		X									4
MW-3	↓		↓		X	X		X									4

ANALYTICAL LAB: _____
 ADDRESS: _____
 PHONE: () _____ FAX: () _____
 INSTRUCTIONS/COMMENTS:

RELINQUISHED BY: 1
Dusty Roy
 Signature
Dusty Roy
 Printed Name
 AEI
 Company
 Time: 9:30 am Date: 2/2/96

RECEIVED BY: 1
[Signature]
 Signature
THOMAS LITON
 Printed Name
 PEL
 Company
 Time: 9:31 Date: 2/2/96

RELINQUISHED BY: 2

 Signature

 Printed Name

 Company

 Date

RECEIVED BY: 2

 Signature

 Printed Name

 Company

 Date



PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

August 22, 1995

PEL # 9508061

ALL ENVIRONMENTAL, INC.

Attn: Mike Killoran

Re: Three water samples for Gasoline/BTEX, Diesel, and Oil & Grease analyses.

Project name: Williamson

Project number: 1031

Date sampled: Aug 18, 1995

Date submitted: Aug 19, 1995

Date extracted: Aug 19-21, 1995

Date analyzed: Aug 19-21, 1995

RESULTS:

SAMPLE I.D.	Gasoline (ug/L)	Diesel (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylene (ug/L)	Oil & Grease (mg/L)
MW-1	2800	N.D.	25	6.2	22	30	N.D.
MW-2	7200	N.D.	43	21	21	71	N.D.
MW-3	310	N.D.	3.1	2.1	2.2	11	N.D.
Blank	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Spiked Recovery	109.4%	83.2%	105.7%	97.0%	97.9%	91.1%	---
Detection limit	50	50	0.5	0.5	0.5	0.5	10
Method of Analysis	5030 / 8015	3510 / 8015	602	602	602	602	5520 C & F

David Duong
Laboratory Director

PRIORITY ENVIRONMEN

PEL #

9508061

INV #

26261

Chain of Custody

1764 Houret Ct. Milpitas, CA. 95035 Tel: 408-946-9636 Fax: 40

PAGE: ___ OF ___

PROJECT MGR.: <u>Mike Killoran</u> COMPANY: <u>AK Environmental, Inc</u> ADDRESS: _____ PHONE: <u>510-820-3224</u> FAX: _____ SIGNATURE: <u>[Signature]</u>				ANALYSIS REPORT														NUMBER OF CONTAINERS					
SAMPLE ID	DATE	TIME	MATRIX	TPH - Gasoline (EPA 5030.8015)	TPH - Gasoline (5030.8015) w/ BTEX (EPA 602.8020)	TPH - Diesel (EPA 3510/3550.8015)	PURGEABLE AROMATICS BTEX (EPA 602.8020)	TOTAL OIL & GREASE (EPA 5520 C.D&F)	PESTICIDES/PCB (EPA 608.8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	CHLORINATED HYDROCARBONS (EPA 601.8010)												
MW-1	8/18/95		water		X	X		X															
MW-2	↓		↓		+	+		+															
MW-3	↓		↓		+	+		+															
PROJECT INFORMATION				SAMPLE RECEIPT				RELINQUISHED BY: 1				RECEIVED BY: 1				RELINQUISHED BY: 2				RECEIVED BY: 2			
PROJECT NAME: <u>Williamson</u>				TOTAL # OF CONTAINERS: <u>18</u>				SIGNATURE: <u>[Signature]</u>				SIGNATURE: <u>[Signature]</u>				SIGNATURE: _____							
PROJECT NUMBER: <u>1031</u>				RECD. GOOD COND./COLD				Date: <u>8/18/95</u> Time: <u>3:45</u>				Date: <u>08/18/95</u> Time: <u>3:45 PM</u>				Date: _____ Time: _____							
INSTRUCTIONS & COMMENTS: _____				COMPANY: _____				COMPANY: _____				COMPANY: _____				COMPANY: _____							

PEL



PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

May 26, 1995

PEL # 9505077

ALL ENVIRONMENTAL, INC.

Attn: Mike Killoren

Re: Three water samples for Gasoline/BTEX, Diesel, and Oil & Grease analyses.

Project name: Williamson

Project number: 1031

Date sampled: May 23-24, 1995


Date submitted: May 24, 1995

Date extracted: May 24-25, 1995

Date analyzed: May 24-25, 1995

RESULTS:

SAMPLE I.D.	Gasoline (ug/L)	Diesel (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylene (ug/L)	Oil & Grease (mg/L)
MW-1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
MW-2	8600	N.D.	95	37	37	70	N.D.
MW-3	710	N.D.	2.5	3.2	3.1	16	N.D.
Blank	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Spiked Recovery	83.7%	94.0%	86.4%	94.2%	88.4%	102.9%	---
Detection limit	50	50	0.5	0.5	0.5	0.5	0.5
Method of Analysis	5030 / 8015	3510 / 8015	602	602	602	602	5520 C & F


David Duong
Laboratory Director

ALL ENVIRONMENTAL, INC.
 2641 Crow Canyon Road, Ste. 5
 San Ramon, CA 94583
 (510) 820-3224 FAX: (510) 838-2687

PEL # 9505077

INV # 25982

Chain of Custody

DATE: 5/24/95 PAGE: 1 OF: 1

AEI PROJECT MANAGER: Mike Killoran
 PROJECT NAME: Williamson
 PROJECT NUMBER: 1031
 SIGNATURE: [Signature]
 TOTAL # OF CONTAINERS: 12
 RECD. GOOD COND./COLD: yes

				ANALYSIS REQUEST											NUMBER OF CONTAINERS	
SAMPLE I.D.	DATE	TIME	MATRIX	TPH-Gasoline (EPA 500.8015)	TPH-Gasoline (EPA 500.8015) w/ BTX (EPA 602.8020)	TPH-Diesel (EPA 5510/5550.8015)	PURGEABLE AROMATICS BTX (EPA 602.8020)	TOTAL OIL & GREASE (EPA 5520 E&G)	TOTAL LEAD (AA) (EPA 7450)	VOLATILE ORGANIC COMPOUNDS (EPA 8240)	LUFT Metals (EPA 7150/7160/7400/7450/7460)	STLC CAM 17 (EPA 1510/8010)	RCR REACTIVITY CORROSIIVITY (USE 2, CCR 6991Z1-9)			
MW-1	5/23/95		W		X	X		X								
MW-2	5/24/95		W		X	X		X								
MW-3	5/24/95		W		X	X		X								

ANALYTICAL LAB: Priority Labs
 ADDRESS: _____
 PHONE: () _____ FAX: () _____
 INSTRUCTIONS/COMMENTS:

RELINQUISHED BY: 1
[Signature]
 Signature
Michael S. Killoran
 Printed Name
 AEI
 Company
 Time 2:22 Date 5/24/95

RECEIVED BY: 1
[Signature]
 Signature
JHONN LAM
 Printed Name
 PEL
 Company
 Time 2:20 PM Date 5/24/95

RELINQUISHED BY: 2
 Signature
 Printed Name
 Company
 Time _____ Date _____

RECEIVED BY: 2
 Signature
 Printed Name
 Company
 Time _____ Date _____



PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

February 27, 1995

PEL # 9502084

ALL ENVIRONMENTAL, INC.

Attn: Charles Kissick

Re: Three water samples for Gasoline/BTEX, Diesel, and Oil & Grease analyses.

Project name: Williamson

Project number: 1031

Date sampled: Feb 22-23, 1995

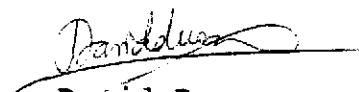
Date submitted: Feb 24, 1995

Date extracted: Feb 24-25, 1995

Date analyzed: Feb 24-25, 1995

RESULTS:

SAMPLE I.D.	Gasoline (ug/L)	Diesel (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylene (ug/L)	Oil & Grease (mg/L)
MW-1	140	N.D.	N.D.	N.D.	0.6	1.5	1.2
MW-2	4400	N.D.	N.D.	N.D.	2.5	5.7	1.6
MW-3	1500	N.D.	6.6	6.4	4.2	13	0.9
Blank	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Spiked Recovery	106.2%	91.7%	82.0%	103.2%	92.3%	103.1%	---
Detection limit	50	50	0.5	0.5	0.5	0.5	0.5
Method of Analysis	5030 / 8015	3510 / 8015	602	602	602	602	5520 C & F


David Duong
Laboratory Director

ALL ENVIRONMENTAL, INC.
 2641 Crow Canyon Road, Ste. 5
 San Ramon, CA 94583
 (510) 820-3224 FAX: (510) 838-2687

PEL # 9502084

Chain of Custody

INV # 25711

DATE: 2/23/95 PAGE: 1 OF 1

AEI PROJECT MANAGER: Charles Kussick
 PROJECT NAME: Williamson
 PROJECT NUMBER: 1031
 SIGNATURE: [Signature]
 TOTAL # OF CONTAINERS: 12
 RECD. GOOD COND./COLD: YES

ANALYSIS REQUEST

SAMPLE I.D.	DATE	TIME	MATRIX	TPH-Casoline (EPA 500.8015)	TPH-Casoline (EPA 500.8015) w/ BTX (EPA 802.8020)	TPH-Diesel (EPA 510.1550.8015)	PURGEABLE AROMATICS BTX (EPA 802.8020)	TOTAL OIL & GREASE (EPA 550.240)	TOTAL LEAD (AA) (EPA 720)	VOLATILE ORGANIC COMPOUNDS (EPA 8240)	LOVT Metals (EPA 716.7160.700.700.700)	STLC CAM 17 (EPA 1510.9010)	REL. ACTIVITY CORRECTED ION/ANIONITY (EPA 821.15)	NUMBER OF CONTAINERS
MW-1	2/22/95		Water		X	X		X						1
MW-2	2/23/95		↓		X	X		X						1
MW-3	↓		↓		X	X		X						1

ANALYTICAL LAB: PEL
 ADDRESS: _____
 PHONE: (415) 446-7636 FAX: 446-9663
 INSTRUCTIONS/COMMENTS: _____

RELINQUISHED BY: 1
[Signature]
 Signature
Williamson Anderson
 Printed Name
AEI
 Company
 Time 11:30 Date 2/24/95

RECEIVED BY: 1
[Signature]
 Signature
THOMAS LAY
 Printed Name
PEL
 Company
 Time 11:35 Date 2/24/95

RELINQUISHED BY: 2
 Signature
 Printed Name
 Company
 Time _____ Date _____

RECEIVED BY: 2
 Signature
 Printed Name
 Company
 Time _____ Date _____



PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

November 26, 1994

PEL # 9411068

ALL ENVIRONMENTAL, INC.

Attn: Charles Kissick
Re: Three water samples for Gasoline/BTEX, Diesel, and Oil & Grease analyses.

Project name: Williamson
Project number: 1031

Date sampled: Nov 22, 1994
Date extracted: Nov 22-25, 1994

Date submitted: Nov 22, 1994
Date analyzed: Nov 22-25, 1994

RESULTS:

SAMPLE I.D.	Gasoline (ug/L)	Diesel (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)	Oil & Grease (mg/L)
MW-1	210	N.D.	N.D.	N.D.	N.D.	2.3	N.D.
MW-2	11000	N.D.	35	21	7.2	50	N.D.
MW-3	200	N.D.	N.D.	N.D.	N.D.	2.0	3.0
Blank	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Spiked Recovery	88.5%	101.2%	88.3%	90.2%	91.0%	100.5%	---
Detection limit	50	50	0.5	0.5	0.5	0.5	0.5
Method of Analysis	5030 / 8015	3510 / 8015	602	602	602	602	5520 C & F

David Duong
Laboratory Director

ALL ENVIRONMENTAL, INC.
 2641 Crow Canyon Road, Ste. 5
 San Ramon, CA 94583
 (510) 820-3224 FAX: (510) 838-2687

PEL # 9411068

INV # 25460

Chain of Custody

DATE: 11/22/94 PAGE: 1 OF 1

AEI PROJECT MANAGER: Charles Kissick
 PROJECT NAME: Williamson
 PROJECT NUMBER: 1031
 SIGNATURE: [Signature]
 TOTAL # OF CONTAINERS: 12
 RECD. GOOD COND./COLD: yes

ANALYSIS REQUEST

SAMPLE I.D.	DATE	TIME	MATRIX	TPH-Gasoline (EPA 5080.8015)	TPH-Gasoline (EPA 5080.8015) w/ BTX (EPA 602.8020)	TPH-Diesel (EPA 3510/3550.8015)	PURGEABLE AROMATICS BTX (EPA 602.8020)	TOTAL OIL & GREASE (EPA 5520 R&F)	TOTAL LEAD (AA) (EPA 7490)	VOLATILE ORGANIC COMPOUNDS (EPA 8240)	LUFT Metals (EPA 7150, 7190, 7487, 807, 990)	STLC CAM 17 (EPA 1510/6010)	RCL REACTIVITY CORROSIONITY, IGNITABILITY (Title 22, CCR 60881.21.9)	NUMBER OF CONTAINERS
				MW-1	11/22/94		Water	X	X		X			
MW-2	↓		↓	X	X		X							5
MW-3	↓		↓	X	X		X							5

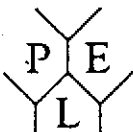
ANALYTICAL LAB: Priority Env. Labs
 ADDRESS: 1764 Harriet Ct.
Milpitas CA 95035
 PHONE: (408) 946-9636 FAX: 1 946-9663
 INSTRUCTIONS/COMMENTS:

RELINQUISHED BY: 1
[Signature]
 Signature
Charles Kissick
 Printed Name
All Env. Inc.
 Company
 Time 3:10 Date 11/22/94

RECEIVED BY: 1
[Signature]
 Signature
DAVID DUNN
 Printed Name
PEL
 Company
 Time 3:10 PM Date 11/22/94

RELINQUISHED BY: 2
 Signature
 Printed Name
 Company
 Time _____ Date _____

RECEIVED BY: 2
 Signature
 Printed Name
 Company
 Time _____ Date _____



PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

March 30, 1994

PEL # 9403095

ALL ENVIRONMENTAL, INC.

Attn: Guy Roy

Re: Sic soil samples for Gasoline/BTEX, Hydraulic Fluid, and Oil & Grease analyses.

Project name: Williamson

Project number: 1031

Date sampled: Mar 24, 1994

Date submitted: Mar 28, 1994

Date extracted: Mar 28-30, 1994

Date analyzed: Mar 28-30, 1994

RESULTS:

SAMPLE I.D.	Gasoline (mg/Kg)	Hydraulic Fluid (mg/Kg)	Benzene (ug/Kg)	Toluene (ug/Kg)	Ethyl Benzene (ug/Kg)	Total Xylenes (ug/Kg)	Oil & Grease (mg/Kg)
MW-1 S-2	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
MW-1 S-3	15	N.D.	40	28	26	67	N.D.
MW-2 S-2	5.9	N.D.	140	84	52	160	N.D.
MW-2 S-3	7.7	N.D.	36	58	11	240	N.D.
MW-3 S-2	N.D.	N.D.	N.D.	N.D.	N.D.	9.4	N.D.
MW-3 S-6	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	91.5%	---	90.6%	74.8%	---	107.2%	---
Duplicate Spiked Recovery	98.7%	---	79.9%	88.4%	91.7%	84.5%	---
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

PROJECT MGR: <u>Guy Roy</u>				ANALYSIS REPORT													NUMBER OF CONTAINERS								
COMPANY: <u>ALL ENVIRONMENTAL INC</u>				TPH-Gasoline (EPA 50.30.8015)	TPH-Gasoline (50.30.8015) w/BTEX (EPA 602.8020)	TPH-Diesel-HYDRAULIC FLUID (EPA 3510/3550.8015)	PURGEABLE AROMATICS BTEX (EPA 602.8020)	TOTAL OIL & GREASE (EPA 5520.808F)	PESTICIDES/PCB (EPA 608.808D)	TOTAL RECOVERABLE HYDROCARBONS EPA 418.1															
ADDRESS: <u>2641 Cross Canyon Rd Suite 5</u> <u>Sun Ramon 94583</u>																									
PHONE: <u>510-820-3224</u> FAX: _____																									
SIGNATURE: <u>Jeffery Wiegand</u>																									
SAMPLE ID	DATE	TIME	MATRIX	LAB ID																					
13TH AVE MW-1 S-2	3.24.94	1145	SOIL TUBE		X	X		X																	
13TH AVE MW-1 S-3	3.24.94	1155	"		X	X		X																	
13TH AVE MW-2 S-2	3.24.94	1320	"		X	X		X																	
13TH AVE MW-2 S-3	3.24.94	1355	"		X	X		X																	
13TH AVE MW-3 S-2	3.24.94	1525	"		X	X		X																	
13TH AVE MW-3 S-8	3.24.94	1540	"		X	X		X																	

PROJECT INFORMATION		SAMPLE RECEIPT		RELINQUISHED BY: 1		RECEIVED BY: 1		RELINQUISHED BY: 2		RECEIVED BY: 2	
PROJECT NAME: <u>WILLIAMSON</u>	TOTAL # OF CONTAINERS <u>6</u>	RECD. GOOD COND./COLD		SIGNATURE: <u>Jeffery WIEGAND</u>		SIGNATURE: <u>[Signature]</u>		SIGNATURE:		SIGNATURE:	
PROJECT NUMBER: <u>1031</u>				Date: <u>10.28.94</u>		Date: <u>3/28/94</u>		Date:		Date:	
INSTRUCTIONS & COMMENTS:				NAME:		NAME:		NAME:		NAME:	
				Time:		Time:		Time:		Time:	
				COMPANY:		COMPANY: <u>PFL</u>		COMPANY:		COMPANY:	