

3R - 27

REPORTS

DATE:

1/26/2000

BLAGG ENGINEERING, INC.

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

January 26, 2000

Mr. Bill Olson
State of New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

**RE: JAQUEZ GC C #1/E #1 - SOIL AND GROUNDWATER REMEDIATION REPORT
UNIT F, SEC. 6, T29N, R9W, SAN JUAN CO., N.M.**

Dear Mr. Olson:

Blagg Engineering, Inc., on behalf of BP Amoco, respectfully submits the attached soil and groundwater report for the Jaquez GC C #1/E #1 well site which was required by the New Mexico Oil Conservation Division (NMOCD) with letter dated December 21, 1999 (attached at the end of the report).

Closure activities that have transpired at the site include the following:

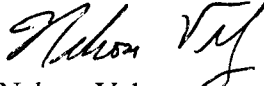
<u>Site Assessment Dates:</u>	March, 1993
<u>Pit closure Date:</u>	December 8, 1993
<u>Monitor Well Installation Dates:</u>	March 1 & 2, 1994
<u>Monitor Well Sampling Dates:</u>	March '94 - June '95

All soil descriptions can be found within the Site Assessment Data section of this report. Groundwater samples were collected from site monitor wells following USEPA: SW-846 protocol. The samples were collected using new disposable bailers and placed in new laboratory supplied 40 ml glass vials with teflon septa caps. Samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) per USEPA Method 8020. The samples were preserved cool and with mercuric chloride preservative, then hand delivered to a qualified laboratory for testing. Waste generated during monitor well sampling and development was disposed of utilizing the separator tank pit located on the well site.

Based on the enclosed documentation, the groundwater at the monitor well vicinities appears to meet all criteria for permanent closure. Therefore, BP Amoco is requesting permanent closure status for all the remediated pits presented within this report.

If you have questions, please contact either myself or Jeffrey C. Blagg. Thank you for your cooperation and assistance.

Sincerely,
BLAGG ENGINEERING, INC.


Nelson Velez
Staff Geologist

cc: Denny Foust, Environmental Geologist, New Mexico Oil Conservation Division, Aztec, NM
Buddy Shaw, Environmental Coordinator, BP Amoco, Farmington, NM (without attachment)

NV/nv

JAQ-C1.CVL

BP AMOCO

SOIL & GROUNDWATER REMEDIATION REPORT

1993-1995

**JAQUEZ GC C #1/E #1
(F) SECTION 6, T29N, R9W, NMPM
SAN JUAN COUNTY, NEW MEXICO**

***PREPARED FOR:
MR. WILLIAM C. OLSON
NEW MEXICO OIL CONSERVATION DIVISION***

JANUARY 2000

***PREPARED BY:
BLAGG ENGINEERING, INC.***

***Consulting Petroleum / Reclamation Services
P.O. Box 87
Bloomfield, New Mexico 87413***

BP AMOCO

SOIL & GROUNDWATER REMEDIATION REPORT

1993-1995

**JAQUEZ GC C #1/E #1
(F) SECTION 6, T29N, R9W, NMPM
SAN JUAN COUNTY, NEW MEXICO**

***PREPARED FOR:
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JANUARY 2000

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Consulting Petroleum / Reclamation Services
P.O. Box 87
Bloomfield, New Mexico 87413***

AMOCO GROUNDWATER MONITOR WELL LABORATORY RESULTS

SUBMITTED BY BLAGG ENGINEERING, INC.

JAQUEZ GC C #1/E #1
UNIT O, SEC. 6, T29N, R9W

REVISED DATE: JANUARY 24, 2000

FILENAME: (C1-4Q-95.WK4) NJV

SAMPLE DATE	MONITOR WELL No:	D.T.W. (ft)	T.D. (ft)	TDS (ft)	COND. (umhos/cm)	pH	PRODUCT (ft)	BTEX EPA METHOD 8020 (PPB)			
								Benzene	Toluene	Ethyl Benzene	Total Xylene
04-Mar-94	WP-1	5.67	7.75		900	7.6		ND	0.8	ND	1.3
15-Jun-94		4.07			700	6.9		0.8	ND	ND	ND
22-Sep-94		3.58			700	7.1		ND	0.5	ND	3.5
19-Dec-94		4.11			600	6.8		ND	ND	ND	ND
16-Mar-95		4.75			400	7.0		0.3	ND	ND	1.5
20-Jun-95		4.04			1,300	6.6		ND	ND	ND	ND
04-Mar-94	WP-2	3.28	6.48		300	7.1		ND	0.7	ND	0.6
15-Jun-94		3.00			500	7.2		ND	ND	ND	ND
22-Sep-94		2.55			600	7.2		ND	0.2	ND	2.9
19-Dec-94		3.47			WELL DAMAGED - UNABLE TO SAMPLE						
04-Mar-94	WP-3	4.20	7.42		300	7.5		ND	0.5	ND	0.6
15-Jun-94		2.77			500	7.0		ND	ND	ND	ND
22-Sep-94		2.68			500	7.1		ND	0.3	ND	2.4
19-Dec-94		3.70			700	6.8		ND	ND	ND	ND
16-Mar-95		4.66			500	6.7		ND	ND	ND	0.9
20-Jun-95		2.92			700	6.9		ND	ND	ND	ND
04-Mar-94	WP-4	5.26	8.11		400	7.2		ND	1.4	ND	2.0
15-Jun-94		3.98			500	7.0		ND	ND	ND	ND
22-Sep-94		3.80			500	7.1		ND	0.2	ND	2.2
19-Dec-94		4.82			600	6.9		ND	ND	ND	ND
16-Mar-95		5.70			500	6.9		ND	ND	ND	0.6
20-Jun-95		3.79			700	6.9		ND	ND	ND	2.2
04-Mar-94	WP-5	4.05	6.50		400	7.5		ND	ND	ND	ND
15-Jun-94		2.74			600	7.0		ND	ND	ND	ND
22-Sep-94		2.70			700	7.1		ND	0.2	ND	1.9
19-Dec-94		3.70			800	6.9		ND	ND	ND	ND
16-Mar-95		4.58			1,100	6.6		ND	0.2	ND	0.5
20-Jun-95		2.38			500	6.8		ND	ND	ND	ND
04-Mar-94	WP-6	3.58	6.65		400	7.3		ND	0.7	ND	ND
15-Jun-94		2.29			500	7.1		ND	1.1	ND	1.4
22-Sep-94		2.51			700	7.1		ND	ND	ND	2.2
19-Dec-94		3.25			1,000	6.9		ND	0.5	1.0	3.5
16-Mar-95		3.96			1,100	6.7		0.3	0.4	1.7	6.1
20-Jun-95		1.62			700	6.9		ND	ND	ND	ND
04-Mar-94	WP-7	3.25	6.86		500	7.5		2.6	0.8	0.9	700
15-Jun-94					WELL DESTROYED DURING ADDITIONAL EXCAVATION						
04-Mar-94	WP-8	5.12	8.20		400	7.3		ND	ND	ND	0.8
15-Jun-94		4.02			500	7.0		ND	ND	ND	ND
22-Sep-94		3.82			700	7.1		ND	0.2	ND	1.1
19-Dec-94		4.71			800	7.0		ND	ND	ND	ND
16-Mar-95		5.53			600	6.9		ND	ND	ND	0.3
20-Jun-95		3.70			800	6.9		ND	ND	ND	ND

AMOCO GROUNDWATER MONITOR WELL LABORATORY RESULTS

SUBMITTED BY BLAGG ENGINEERING, INC.

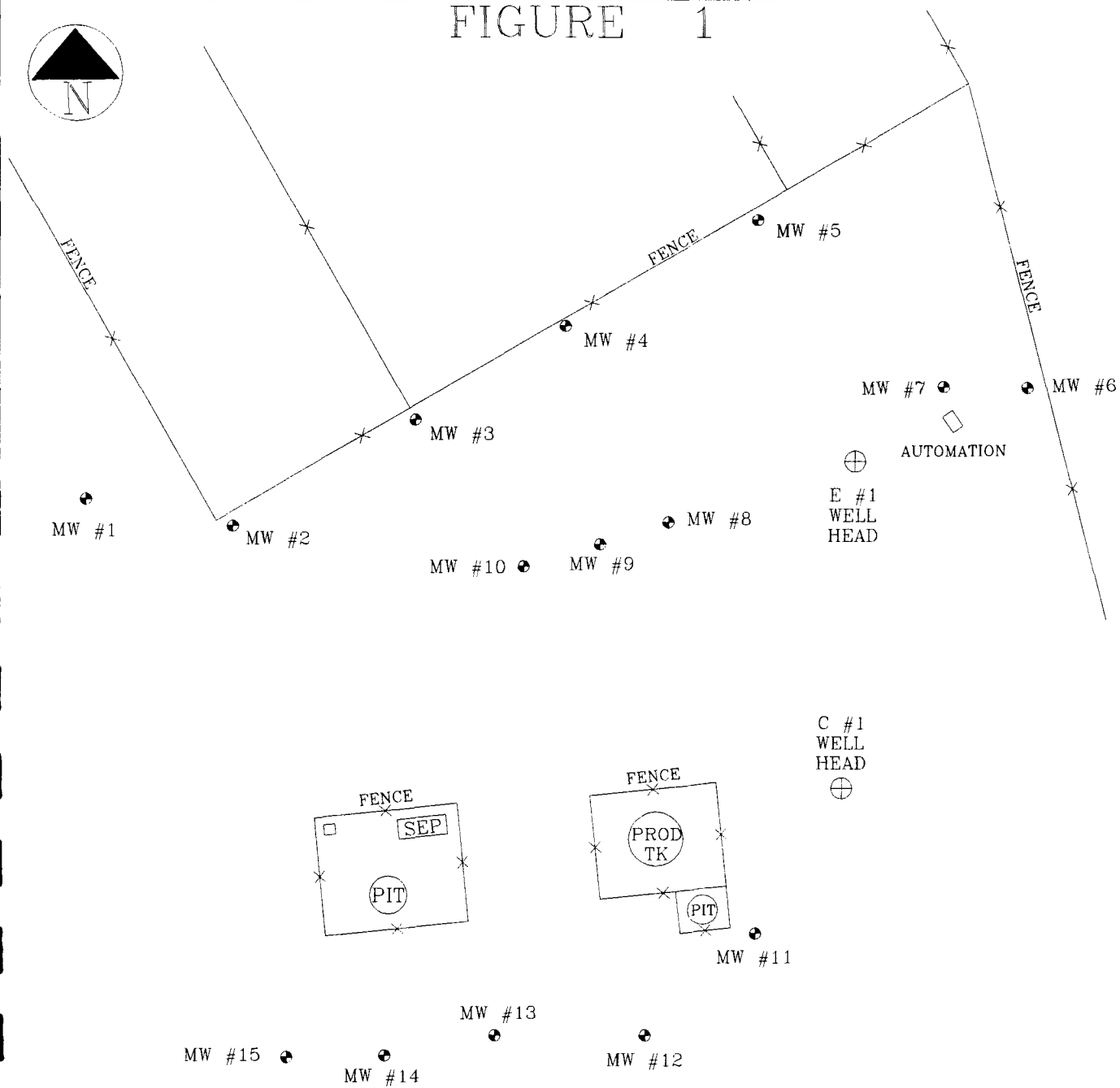
JAQUEZ GC C #1/E #1
UNIT O, SEC. 6, T29N, R9W

REVISED DATE: JANUARY 24, 2000

FILENAME: (C1-4Q-95.WK4) NJV

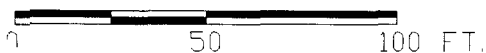
SAMPLE DATE	MONITOR WELL No:	D.T.W. (ft)	T.D. (ft)	TDS (ft)	COND. (umhos/cm)	pH	PRODUCT (ft)	BTEX EPA METHOD 8020 (PPB)			
								Benzene	Toluene	Ethyl Benzene	Total Xylene
04-Mar-94	WP-9	4.25	7.24		2,100	7.4		1.2	0.7	0.4	20.0
15-Jun-94		3.23			800	7.0		8.4	1.8	2.7	46.2
22-Sep-94		2.92			700	7.1		0.9	ND	0.5	10.2
19-Dec-94		3.82			1,000	7.1		ND	0.3	ND	ND
16-Mar-95		4.64			1,500	7.0		ND	0.2	ND	0.4
20-Jun-95		2.95			1,300	6.9		ND	ND	ND	ND
04-Mar-94	WP-10	3.26	6.99		500	7.2		0.7	ND	ND	151.0
15-Jun-94		2.21			400	7.1		ND	ND	ND	16.0
22-Sep-94		1.87			600	6.7		ND	0.3	ND	2.3
19-Dec-94		2.75			900	6.6		ND	ND	ND	ND
16-Mar-95		3.65			800	6.8		ND	ND	ND	0.7
20-Jun-95		2.00			700	6.6		ND	ND	ND	ND
04-Mar-94	WP-11	1.93	4.00		600	7.4		ND	ND	ND	0.7
15-Jun-94		2.08	6.50		400	7.2		ND	ND	ND	ND
22-Sep-94		1.37			600	7.3		ND	0.2	ND	0.4
19-Dec-94		1.46			600	7.2		ND	ND	ND	ND
16-Mar-95		2.33			500	7.2		ND	ND	ND	0.2
20-Jun-95		1.53			500	7.1		ND	ND	ND	ND
04-Mar-94	WP-12	1.96	5.65		300	7.4		ND	ND	ND	ND
15-Jun-94		2.26			400	7.3		0.8	0.6	ND	ND
22-Sep-94		1.40			500	7.3		ND	ND	ND	0.3
19-Dec-94		1.64			600	7.6		ND	ND	ND	ND
16-Mar-95		2.15			400	7.7		ND	ND	ND	ND
20-Jun-95		1.70			500	7.4		ND	ND	ND	ND
04-Mar-94	WP-13	1.82	5.90		500	7.4		ND	ND	ND	1.1
15-Jun-94		2.07			600	7.3		1.0	1.0	0.4	ND
22-Sep-94		1.50			700	7.1		ND	0.2	ND	0.2
19-Dec-94		1.46			700	7.4		ND	ND	ND	ND
16-Mar-95		1.74			400	7.3		ND	ND	ND	0.2
20-Jun-95		1.65			500	7.1		ND	ND	ND	ND
04-Mar-94	WP-14	1.99	5.77		400	7.4		ND	0.9	1.6	19.7
15-Jun-94		2.22			400	7.8		ND	ND	ND	ND
22-Sep-94		1.82			400	7.1		ND	ND	ND	0.2
19-Dec-94		1.62			400	7.6		ND	ND	ND	ND
16-Mar-95		2.09			300	7.3		ND	ND	ND	ND
20-Jun-95		2.16			400	7.1		ND	ND	ND	ND
04-Mar-94	WP-15	1.77	5.67		400	7.5		ND	ND	0.3	0.4
15-Jun-94		2.33			400	7.6		ND	ND	ND	ND
22-Sep-94		1.86			400	7.1		ND	0.2	ND	ND
19-Dec-94		1.58			400	7.6		ND	ND	ND	ND
16-Mar-95		2.01			300	7.3		ND	ND	ND	ND
20-Jun-95		2.18			400	6.9		ND	ND	ND	ND

FIGURE 1



MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE AND BEARING FROM THE WELL HEAD (TOTAL STATION). ALL OTHER STRUCTURES DISPLAYED ON THE SITE MAP ARE SOLELY FOR REFERENCE AND ARE NOT TO SCALE.

1 INCH = 50 FT.



AMOCO PRODUCTION COMPANY

JAQUEZ GC C #1/E #1

SW/4 SE/4 SEC. 6, T29N, R9W

SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.

CONSULTING PETROLEUM / RECLAMATION SERVICES

P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

PROJECT: MW SAMP.

DRAWN BY: NJV

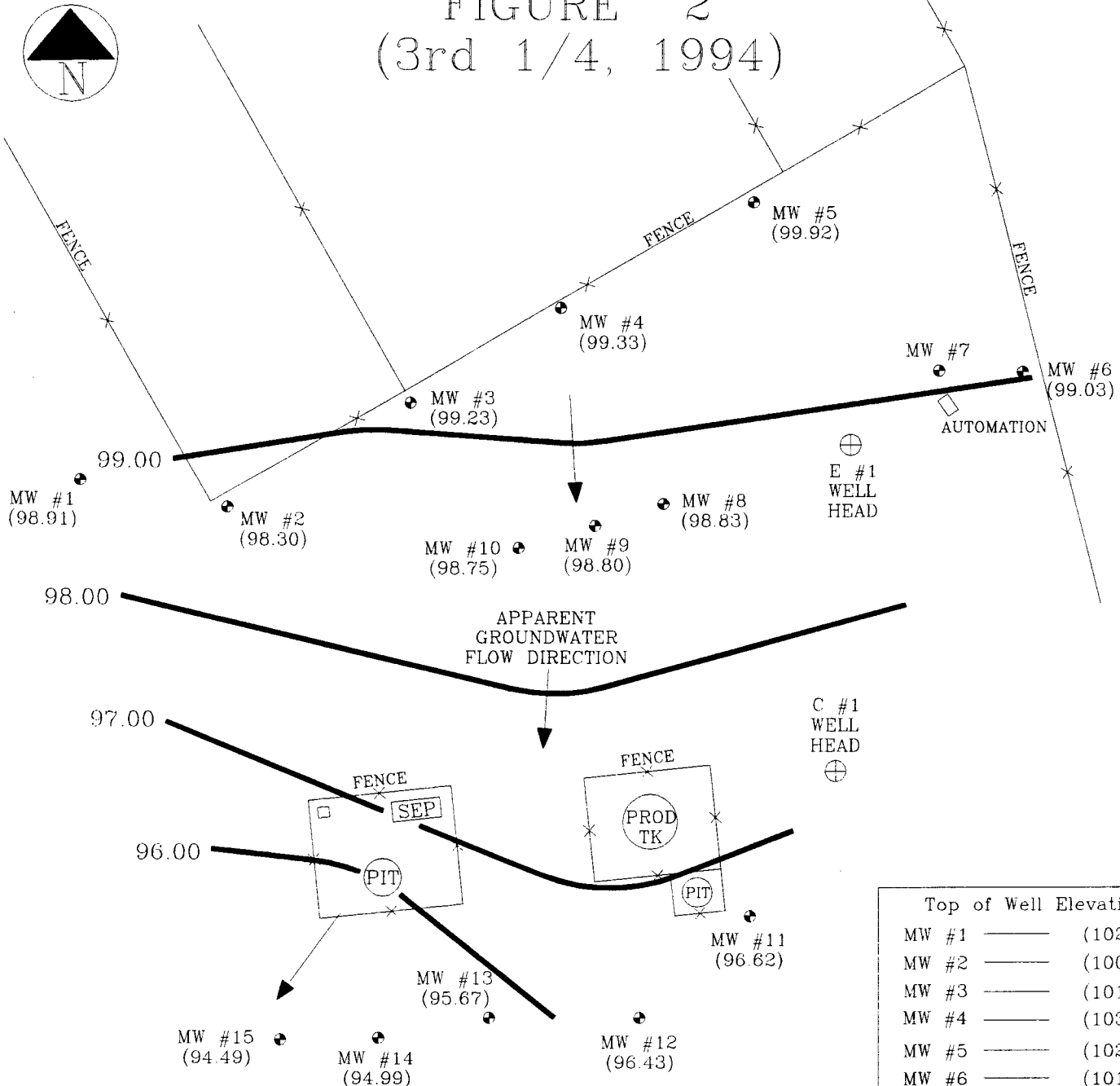
FILENAME: J-C1-SM

DRAFTED: 1/25/00 NJV

SITE
MAP

09/94

FIGURE 2
(3rd 1/4, 1994)



Top of Well Elevation		
MW #1	—	(102.49)
MW #2	—	(100.85)
MW #3	—	(101.91)
MW #4	—	(103.13)
MW #5	—	(102.62)
MW #6	—	(101.54)
MW #8	—	(102.65)
MW #9	—	(101.72)
MW #10	—	(100.62)
MW #11	—	(97.99)
MW #12	—	(97.83)
MW #13	—	(97.17)
MW #14	—	(96.81)
MW #15	—	(96.35)

● MW #1 (98.91)	Groundwater Elevation as of 09/22/94.
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MW #7 DESTROYED DURING
ADDITIONAL EXCAVATION
BETWEEN MAR. & JUN. '94

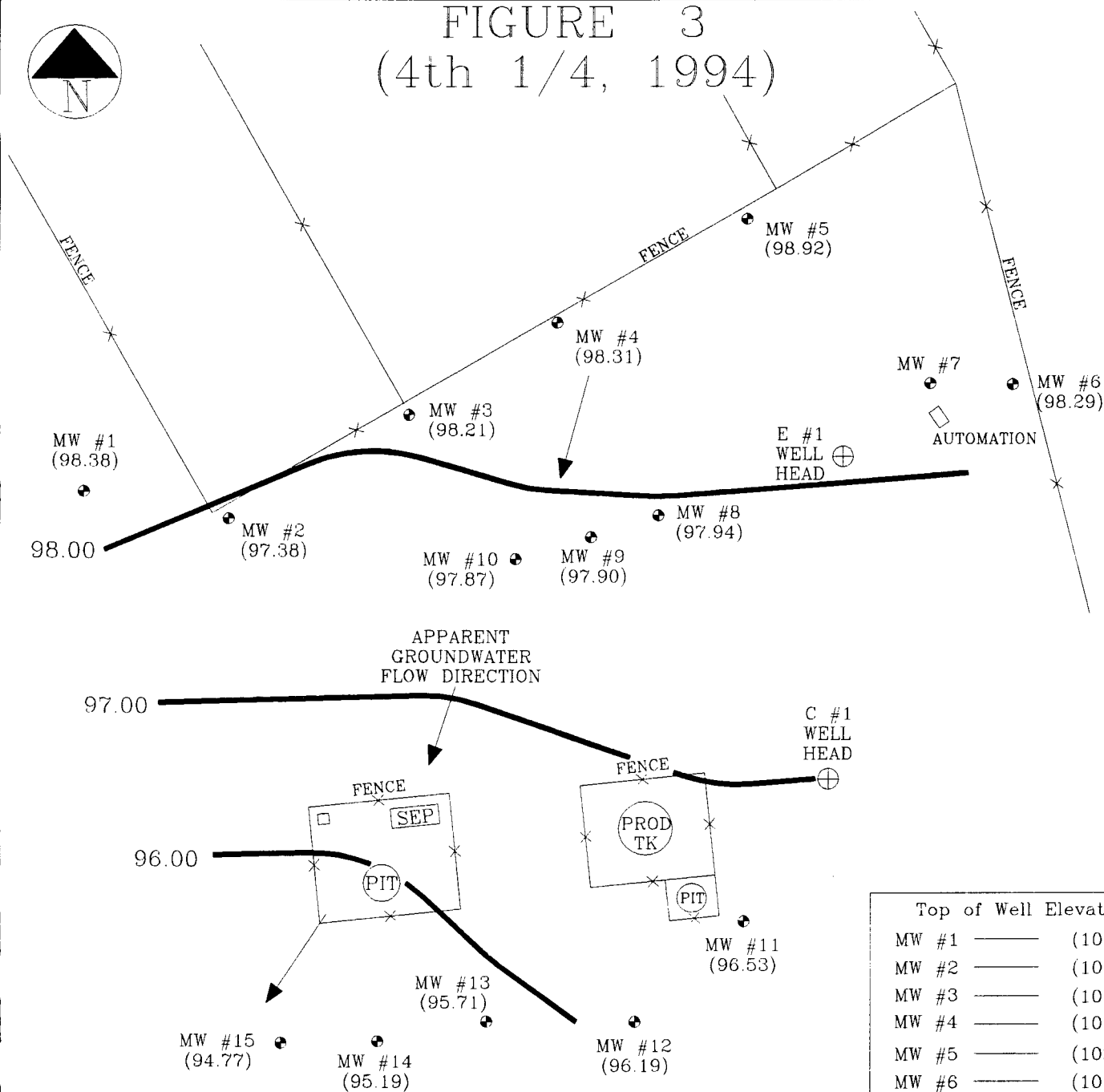
AMOCO PRODUCTION COMPANY
JAQUEZ GC C #1/E #1
SW/4 SE/4 SEC. 6, T29N, R9W
SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.
CONSULTING PETROLEUM / RECLAMATION SERVICES
P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413
PHONE: (505) 632-1199

PROJECT: 1/4ly SAMP.
DRAWN BY: NJV
FILENAME: 09-22-GW
DRAFTED: 1/25/00 NJV

GROUNDWATER
GRADIENT
MAP
09/94

FIGURE 3
(4th 1/4, 1994)



Top of Well Elevation		
MW #1	—	(102.49)
MW #2	—	(100.85)
MW #3	—	(101.91)
MW #4	—	(103.13)
MW #5	—	(102.62)
MW #6	—	(101.54)
MW #8	—	(102.65)
MW #9	—	(101.72)
MW #10	—	(100.62)
MW #11	—	(97.99)
MW #12	—	(97.83)
MW #13	—	(97.17)
MW #14	—	(96.81)
MW #15	—	(96.35)

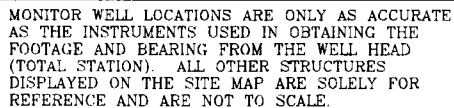
● MW #1 (98.38) Groundwater Elevation as of 12/19/94.

MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE AND BEARING FROM THE WELL HEAD (TOTAL STATION). ALL OTHER STRUCTURES DISPLAYED ON THE SITE MAP ARE SOLELY FOR REFERENCE AND ARE NOT TO SCALE.

1 INCH = 50 FT.

0 50 100 FT.

MW #7 DESTROYED DURING ADDITIONAL EXCAVATION BETWEEN MAR. & JUN. '94



0 50 100 FT.

MW #7 DESTROYED DURING
ADDITIONAL EXCAVATION
BETWEEN MAR. & JUN. '94

• MW #1 Groundwater
 (97.74) Elevation
 as of 03/16/95.

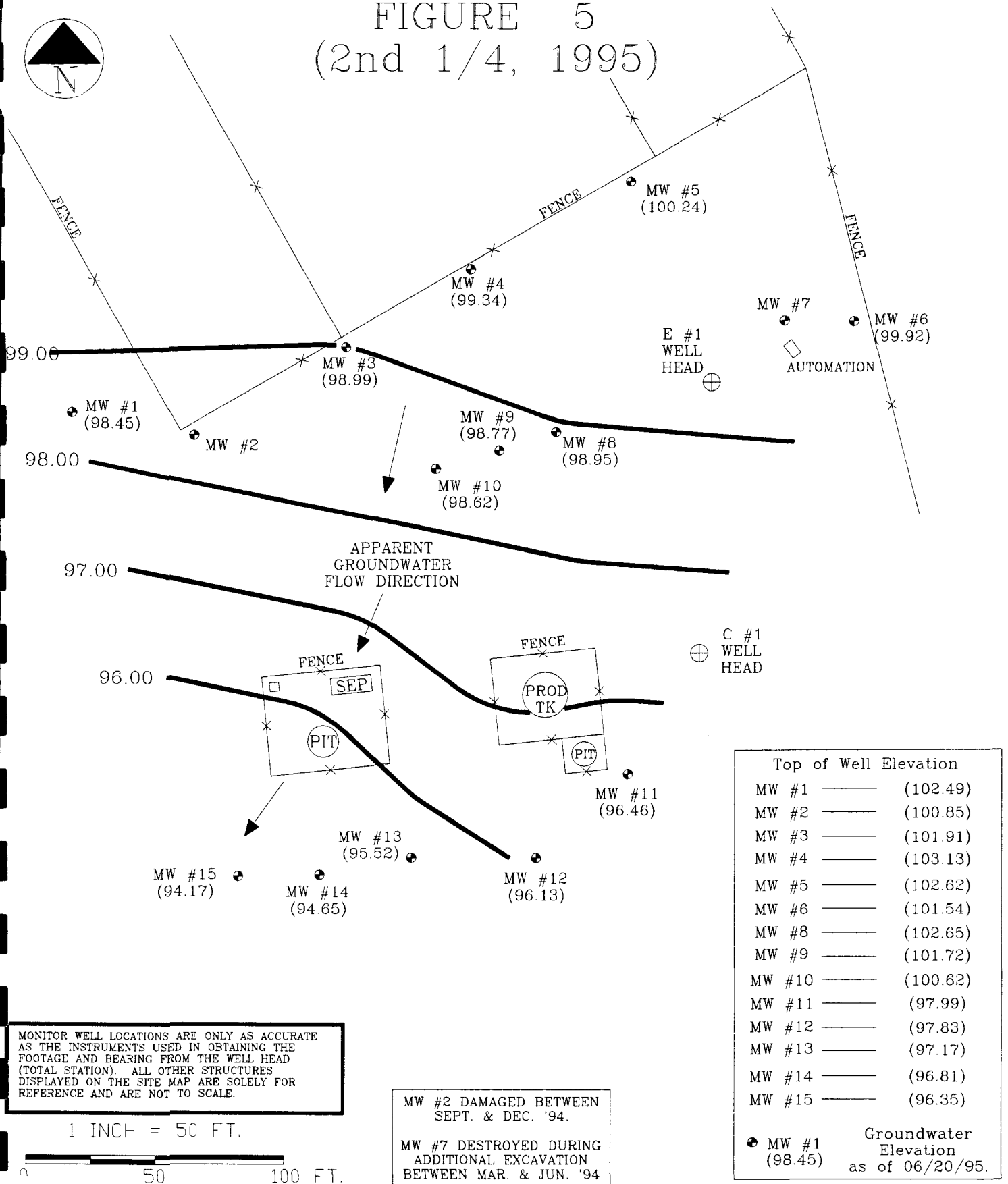
SAN JUAN COUNTY, NEW MEXICO

PHONE: (505) 632-1199

DRAFTED: 1/25/00 NJV

GROUNDWATER
GRADIENT
MAP
03/95

FIGURE 5
(2nd 1/4, 1995)



AMOCO PRODUCTION COMPANY
JAQUEZ GC C #1/E #1
SW/4 SE/4 SEC. 6, T29N, R9W
SAN JUAN COUNTY, NEW MEXICO

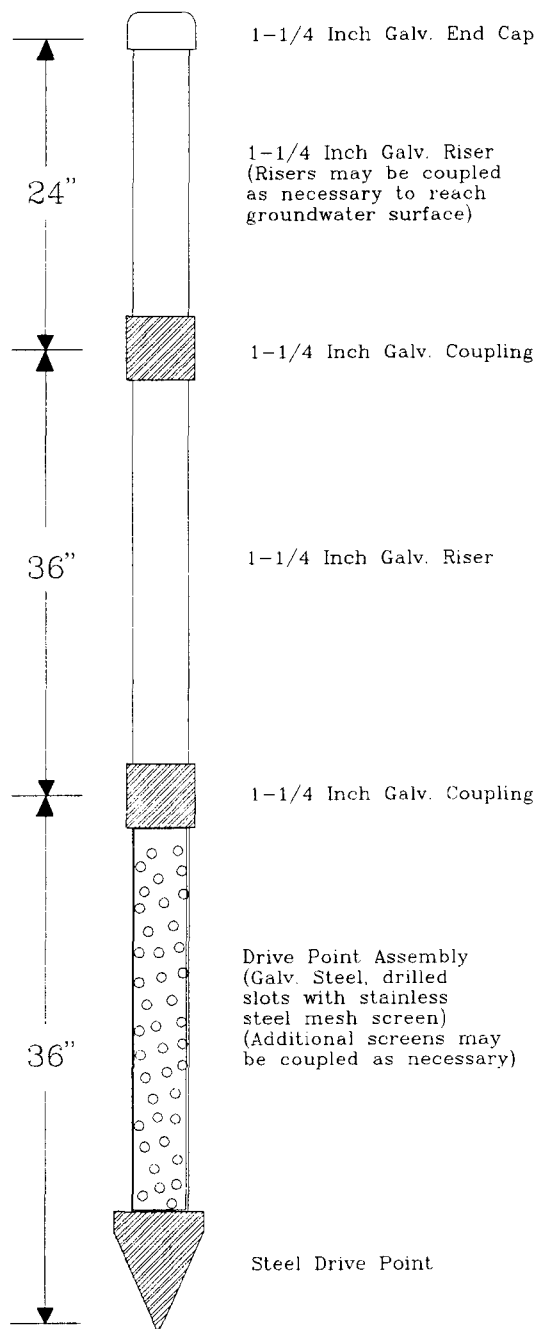
BLAGG ENGINEERING, INC.
CONSULTING PETROLEUM / RECLAMATION SERVICES
P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413
PHONE. (505) 632-1199

PROJECT: 1/4ly SAMP.
DRAWN BY: NJV
FILENAME: 06-20-GW
DRAFTED: 1/25/00 NJV

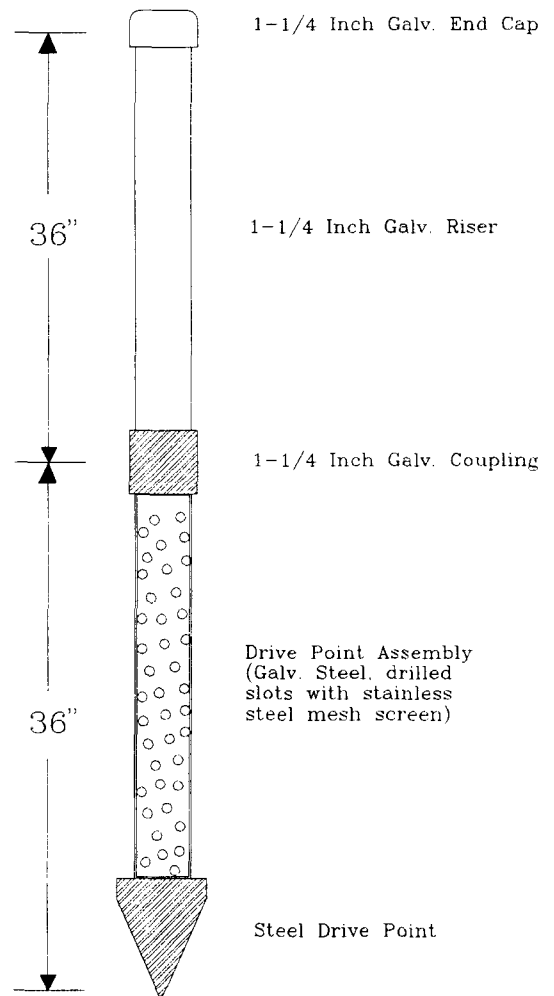
GROUNDWATER
GRADIENT
MAP
06/95

FIGURE 6

Monitor Well #s 1-10



Monitor Well #s 11-15



AMOCO PRODUCTION COMPANY

JAEQUEZ GC C #1 / E #1

SIMPLISTIC DRIVE POINT

CONSTRUCTION & COMPLETION

BLAGG ENGINEERING, INC.

CONSULTING PETROLEUM / RECLAMATION SERVICES

P.O. BOX 87

BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

PROJECT: GW REMED. PLAN

REVISED BY: NJV

DATE: DEC. '95

FILENAME: J-C1-DTL.SKD

BLAGG ENGINEERING, INC.**MONITOR WELL SAMPLING DATA**CLIENT : **AMOCO PRODUCTION CO.**

CHAIN-OF-CUSTODY # : 2126

2127

JAQUEZ GC C #1/E #1

LABORATORY (S) USED : ON - SITE TECH.

UNIT O, SEC. 6, T29N, R9W

Date : September 22, 1994

SAMPLER : R E O

Filename : 09-22-94.WK4

PROJECT MANAGER : R E O

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	VOLUME PURGED (bails)	FREE PRODUCT (ft)
1	102.49	98.91	3.58	7.75	0850	7.1	700	4.00	-
2	100.85	98.30	2.55	6.48	0910	7.1	600	1.00	-
3	101.91	99.23	2.68	7.42	0920	7.1	500	8.00	-
4	103.13	99.33	3.80	8.11	0940	7.1	500	8.00	-
5	102.62	99.92	2.70	6.50	0955	7.1	700	8.00	-
6	101.54	99.03	2.51	6.65	1010	7.1	700	8.00	-
8	102.65	98.83	3.82	8.20	1025	7.1	700	8.00	-
9	101.72	98.80	2.92	7.24	1030	7.1	700	8.00	-
10	100.62	98.75	1.87	6.99	1100	6.7	600	7.00	-
11	97.99	96.62	1.37	6.50	1120	7.3	600	6.00	-
12	97.83	96.43	1.40	5.65	1130	7.3	500	8.00	-
13	97.17	95.67	1.50	5.90	1145	7.1	700	8.00	-
14	96.81	94.99	1.82	5.77	1200	7.1	400	4.00	-
15	96.35	94.49	1.86	5.67	1210	7.1	400	4.00	-

NOTES : Volume of water purged from well prior to sampling: $V = \pi \times r^2 \times h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$.(i.e. 2" MW $r = (1/12) \text{ ft.}$ $h = 1 \text{ ft.}$) (i.e. 4" MW $r = (2/12) \text{ ft.}$ $h = 1 \text{ ft.}$)

Ideally a minimum of three (3) wellbore volumes:

1.25 " well diameter = 0.19 gallons per foot of water (or 24 oz.).

2 bails per foot - small teflon bailer.

3 bails per foot - 3 / 4 " teflon bailer.

2.00 " well diameter = 0.49 gallons per foot of water.

4.00 " well diameter = 1.95 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

All Wells = 1.25" well point . Collected BTEX samples for all MW 's listed above .

**ON SITE
TECHNOLOGIES, LTD.**

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *9/23/94*
Lab ID: *2126*
Sample ID: *3183*
Job No. *2-1000*

Project Name: *Jaquez C1 / E1*
Project Location: *WP - 1*
Sampled by: *REO* Date: *9/22/94*
Analyzed by: *DLA* Date: *9/23/94*
Sample Matrix: *Liquid*

Time: *8:50*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	0.5	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	2.9	0.2
<i>o-Xylene</i>	0.6	0.2
	TOTAL 4.1 ug/L	

ND - Not Detectable

Method - *SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

Approved by: *Jan 64*

Date: *9/20/94*

**ON SITE
TECHNOLOGIES, LTD.**

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *9/23/94*
Lab ID: *2126*
Sample ID: *3184*
Job No. *2-1000*

Project Name: *Jaquez C1 / E1*
Project Location: *WP - 2*
Sampled by: *REO*
Analyzed by: *DLA*
Sample Matrix: *Liquid*

Date: *9/22/94*
Date: *9/23/94*

Time: *9:10*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	<i>ND</i>	<i>0.2</i>
<i>Toluene</i>	<i>0.2</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>ND</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>2.3</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>0.6</i>	<i>0.2</i>
	TOTAL	
	<i>3.1 ug/L</i>	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by:

Date:

Jan H
9/26/94

**ON SITE
TECHNOLOGIES, LTD.**

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *9/23/94*
Lab ID: *2126*
Sample ID: *3185*
Job No. *2-1000*

Project Name: *Jaquez C1 / E1*
Project Location: *WP - 3*
Sampled by: *REO* Date: *9/22/94*
Analyzed by: *DLA* Date: *9/23/94*
Sample Matrix: *Liquid*

Time: *9:20*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	<i>ND</i>	<i>0.2</i>
<i>Toluene</i>	<i>0.3</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>ND</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>2.1</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>0.3</i>	<i>0.2</i>
	<i>TOTAL 2.6 ug/L</i>	

ND - Not Detectable

Method - *SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

Approved by: *DLA*
Date: *9/26/94*

**ON SITE
TECHNOLOGIES, LTD.**

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *9/23/94*
Lab ID: *2126*
Sample ID: *3186*
Job No. *2-1000*

Project Name: *Jaquez C1 / E1*
Project Location: *WP - 4*
Sampled by: *REO* Date: *9/22/94*
Analyzed by: *DLA* Date: *9/23/94*
Sample Matrix: *Liquid*

Time: *9:40*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	0.2	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	1.9	0.2
<i>o-Xylene</i>	0.3	0.2
TOTAL 2.4 ug/L		

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *DLA*

Date: *9/26/94*

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AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *9/23/94*
Lab ID: *2126*
Sample ID: *3187*
Job No. *2-1000*

Project Name: *Jaquez C1 / E1*
Project Location: *WP - 5*
Sampled by: *REO* Date: *9/22/94*
Analyzed by: *DLA* Date: *9/23/94*
Sample Matrix: *Liquid*

Time: *9:55*

Aromatic Volatile Organics

<i>Component</i>	<i>Measured Concentration ug/L</i>	<i>Detection Limit Concentration ug/L</i>
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	0.2	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	1.4	0.2
<i>o-Xylene</i>	0.5	0.2
<i>TOTAL</i>		<i>2.1 ug/L</i>

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *DLA*

Date: *9/26/94*

**ON SITE
TECHNOLOGIES, LTD.**

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *9/23/94*
Lab ID: *2126*
Sample ID: *3188*
Job No. *2-1000*

Project Name: *Jaquez C1 / E1*
Project Location: *WP - 6*
Sampled by: *REO* Date: *9/22/94*
Analyzed by: *DLA* Date: *9/23/94*
Sample Matrix: *Liquid*

Time: *10:10*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	ND	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	2.0	0.2
<i>o-Xylene</i>	0.2	0.2
	TOTAL 2.2 ug/L	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *Da 64*
Date: *9/26/94*

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TECHNOLOGIES, LTD.**
AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *9/23/94*
Lab ID: *2126*
Sample ID: *3189*
Job No. *2-1000*

Project Name: *Jaquez C1 / E1*
Project Location: *WP - 8*
Sampled by: *REO* Date: *9/22/94*
Analyzed by: *DLA* Date: *9/23/94*
Sample Matrix: *Liquid*

Time: *10:25*

Aromatic Volatile Organics

<i>Component</i>	<i>Measured Concentration ug/L</i>	<i>Detection Limit Concentration ug/L</i>
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	0.2	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	0.9	0.2
<i>o-Xylene</i>	0.2	0.2
	<i>TOTAL 1.3 ug/L</i>	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by:
Date:

Ja H
9/26/94

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TECHNOLOGIES, LTD.**

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *9/23/94*
Lab ID: *2126*
Sample ID: *3190*
Job No. *2-1000*

Project Name: *Jaquez C1 / E1*
Project Location: *WP - 9*
Sampled by: *REO* Date: *9/22/94*
Analyzed by: *DLA* Date: *9/23/94*
Sample Matrix: *Liquid*

Time: *10:30*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	<i>0.9</i>	<i>0.2</i>
<i>Toluene</i>	<i>ND</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>0.5</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>9.7</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>0.5</i>	<i>0.2</i>
	TOTAL <i>11.7 ug/L</i>	

ND - Not Detectable

Method - *SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

Approved by: *[Signature]*

Date: *9/26/94*

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AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *9/23/94*
Lab ID: *2126*
Sample ID: *3191*
Job No. *2-1000*

Project Name: *Jaquez C1 / E1*
Project Location: *WP - 10*
Sampled by: *REO* Date: *9/22/94* Time: *11:00*
Analyzed by: *DLA* Date: *9/23/94*
Sample Matrix: *Liquid*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	0.3	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	2.3	0.2
<i>o-Xylene</i>	ND	0.2
	TOTAL 2.6 ug/L	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *Ja G*
Date: *9/26/94*

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TECHNOLOGIES, LTD.**

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *9/23/94*
Lab ID: *2126*
Sample ID: *3192*
Job No. *2-1000*

Project Name: *Jaquez C1 / E1*
Project Location: *WP - 11*
Sampled by: *REO* Date: *9/22/94*
Analyzed by: *DLA* Date: *9/23/94*
Sample Matrix: *Liquid*

Time: *11:20*

Aromatic Volatile Organics

<i>Component</i>	<i>Measured Concentration ug/L</i>	<i>Detection Limit Concentration ug/L</i>
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	0.2	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	0.4	0.2
<i>o-Xylene</i>	ND	0.2
<i>TOTAL</i>		<i>0.7 ug/L</i>

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *[Signature]*

Date: *9/26/94*

**ON SITE
TECHNOLOGIES, LTD.**

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *9/23/94*
Lab ID: *2126*
Sample ID: *3193*
Job No. *2-1000*

Project Name: *Jaquez C1 / E1*
Project Location: *WP - 12*
Sampled by: *REO*
Analyzed by: *DLA*
Sample Matrix: *Liquid*

Date: *9/22/94*
Date: *9/23/94*

Time: *11:30*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	ND	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	0.3	0.2
<i>o-Xylene</i>	ND	0.2
	TOTAL 0.3 ug/L	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *[Signature]*
Date: *9/26/94*

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AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *9/23/94*
Lab ID: *2126*
Sample ID: *3194*
Job No. *2-1000*

Project Name: *Jaquez C1 / E1*
Project Location: *WP - 13*
Sampled by: *REO* Date: *9/22/94*
Analyzed by: *DLA* Date: *9/23/94*
Sample Matrix: *Liquid*

Time: *11:45*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	0.2	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	0.2	0.2
<i>o-Xylene</i>	ND	0.2
	TOTAL 0.4 ug/L	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *[Signature]*
Date: *9/26/94*

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AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *9/24/94*
Lab ID: *2127*
Sample ID: *3195*
Job No. *2-1000*

Project Name: *Jaquez C1 / E1*
Project Location: *WP - 14*
Sampled by: *REO* Date: *9/22/94* Time: *12:00*
Analyzed by: *DLA* Date: *9/23/94*
Sample Matrix: *Liquid*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	ND	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	0.2	0.2
<i>o-Xylene</i>	ND	0.2
TOTAL 0.2 ug/L		

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *[Signature]*

Date: *9/26/94*

**ON SITE
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AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *9/24/94*
Lab ID: *2127*
Sample ID: *3196*
Job No. *2-1000*

Project Name: *Jaquez C1 / E1*
Project Location: *WP - 15*
Sampled by: *REO* Date: *9/22/94*
Analyzed by: *DLA* Date: *9/23/94*
Sample Matrix: *Liquid*

Time: *12:10*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	0.2	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	ND	0.2
<i>o-Xylene</i>	ND	0.2
TOTAL 0.2 ug/L		

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *[Signature]*

Date: *9/26/94*

ON SITE

TECHNOLOGIES, LTD.

657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

CHAIN OF CUSTODY RECORD

2126

9-22-94

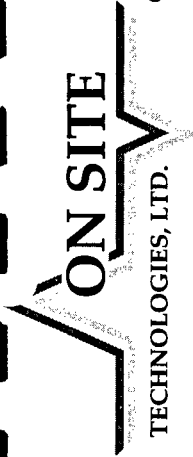
Date:

Page

1 of 2

Purchase Order No.:		Reference No.:		Name		Title	
SEND INVOICE TO		Company		Company		Title	
Address		Address		Mailing Address		Mailing Address	
City, State, Zip		City, State, Zip		City, State, Zip		City, State, Zip	
Telephone No.		Telephone No.		Telephone No.		Telephone No.	
Telex No.		Telex No.		Telex No.		Telex No.	
Special Instructions:		ANALYSIS REQUESTED					
Sample: R E O'MILL		ANALYSIS REQUESTED					
Number of Containers		ANALYSIS REQUESTED					
REPORT RESULTS TO		ANALYSIS REQUESTED					
DATE/TIME SAMPLED		COMPOSITE/ GRAB		PRESERVATIVES		Remarks (matrix)	
WP-1		9-22		0850		3183-2126	
WP-2		"		0910		3184	
WP-3		"		0920		3185	
WP-4		"		0940		3186	
WP-5		"		0955		3187	
WP-6		"		1010		3188	
WP-8		"		1025		3189	
WP-9		"		1030		3190	
WP-10		"		1100		3191	
WP-11		"		1120		3192	
WP-12		"		1130		3193	
WP-13		"		1145		3194	
Relinquished by:		R. E. O'MILL		Date/Time 9/22 1321		Date/Time 9/22/94 1321	
Relinquished by:				Date/Time		Date/Time	
Relinquished by:				Date/Time		Date/Time	
Method of Shipment:				5 Working Days		10 Working Days	
Authorized by:		R E O'MILL		Date 9-22-94		Sampling Location:	
		(Client Signature Must Accompany Request)					

Distribution: White - On Site Yellow - LAB Pink - Sampler Goldenrod - Client



657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

[illegible]

Distribution:		White – On Site	Yellow – LAB	Pink – Sampler	Goldenrod – Client

BLAGG ENGINEERING, INC.**MONITOR WELL SAMPLING DATA**CLIENT : **AMOCO PRODUCTION CO.**

CHAIN-OF-CUSTODY # : 2511

2512

JAEQUEZ GC C #1/E #1LABORATORY (S) USED : **ON - SITE TECH.****UNIT O, SEC. 6, T29N, R9W**

Date : December 19, 1994

SAMPLER : **R E O**

Filename : 12-19-94.WK4

PROJECT MANAGER : **R E O**

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	VOLUME PURGED (bails)	FREE PRODUCT (ft)
1	102.49	98.38	4.11	7.75	0850	6.8	600	3.00	-
2	100.85	97.38	3.47	6.48	-	-	-	-	-
3	101.91	98.21	3.70	7.42	0915	6.8	700	4.00	-
4	103.13	98.31	4.82	8.11	0930	6.9	600	6.00	-
5	102.62	98.92	3.70	6.50	0945	6.9	800	4.00	-
6	101.54	98.29	3.25	6.65	1000	6.9	1,000	6.00	-
8	102.65	97.94	4.71	8.20	1020	7.0	800	6.00	-
9	101.72	97.90	3.82	7.24	1025	7.1	1,000	4.00	-
10	100.62	97.87	2.75	6.99	1045	6.6	900	5.00	-
11	97.99	96.53	1.46	6.50	1100	7.2	600	5.00	-
12	97.83	96.19	1.64	5.65	1120	7.6	600	6.00	-
13	97.17	95.71	1.46	5.90	1130	7.4	700	6.00	-
14	96.81	95.19	1.62	5.77	1145	7.6	400	4.00	-
15	96.35	94.77	1.58	5.67	1200	7.6	400	4.00	-

NOTES : Volume of water purged from well prior to sampling: $V = \pi \times r^2 \times h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$.(i.e. 2" MW $r = (1/12) \text{ ft.}$ $h = 1 \text{ ft.}$) (i.e. 4" MW $r = (2/12) \text{ ft.}$ $h = 1 \text{ ft.}$)

Ideally a minimum of three (3) wellbore volumes:

1.25 " well diameter = 0.19 gallons per foot of water (or 24 oz.).

2 bails per foot - small teflon bailer.

3 bails per foot - 3 / 4 " teflon bailer.

2.00 " well diameter = 0.49 gallons per foot of water.

4.00 " well diameter = 1.95 gallons per foot of water.

Comments or note well diameter if not standard 2".All Wells = 1.25" well point. Collected BTEX samples for all MW's listed above except MW #2 -
damaged ; no sample obtainable .

OFF: (505) 325-8786



LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *12/21/94*
Lab ID: *2511*
Sample ID: *4451*
Job No. *2-1000*

Project Name: *Jaquez GC C1 / E1*
Project Location: *WP - 1*
Sampled by: *REO* Date: *12/19/94*
Analyzed by: *DLA* Date: *12/20/94*
Sample Matrix: *Water*

Time: *8:50*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	ND	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	ND	0.2
<i>o-Xylene</i>	ND	0.2
TOTAL <i>0.0 ug/L</i>		

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *Jaquez*
Date: *12/21/94*

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OFF: (505) 325-8786



LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *12/21/94*
Lab ID: *2511*
Sample ID: *4452*
Job No. *2-1000*

Project Name: *Jaquez GC C1 / E1*
Project Location: *WP - 3*
Sampled by: *REO* Date: *12/19/94*
Analyzed by: *DLA* Date: *12/20/94*
Sample Matrix: *Water*

Time: *9:15*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	<i>0.2</i>
<i>Toluene</i>	ND	<i>0.2</i>
<i>Ethylbenzene</i>	ND	<i>0.2</i>
<i>m,p-Xylene</i>	ND	<i>0.2</i>
<i>o-Xylene</i>	ND	<i>0.2</i>
<i>TOTAL 0.0 ug/L</i>		

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *[Signature]*
Date: *12/21/94*

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OFF: (505) 325-8786

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: 12/21/94
Lab ID: 2511
Sample ID: 4453
Job No. 2-1000

Project Name: *Jaquez GC C1 / E1*
Project Location: *WP - 4*
Sampled by: REO
Analyzed by: DLA
Sample Matrix: *Water*

Date: 12/19/94
Date: 12/20/94
Time: 9:30

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	ND	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	ND	0.2
<i>o-Xylene</i>	ND	0.2
	TOTAL 0.0 ug/L	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *Da 6x*
Date: 12/21/94

OFF: (505) 325-8786



LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *12/21/94*
Lab ID: *2511*
Sample ID: *4454*
Job No. *2-1000*

Project Name: *Jaquez GC C1 / E1*
Project Location: *WP - 5*
Sampled by: *REO* Date: *12/19/94*
Analyzed by: *DLA* Date: *12/20/94*
Sample Matrix: *Water*

Time: *9:45*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	<i>0.2</i>
<i>Toluene</i>	ND	<i>0.2</i>
<i>Ethylbenzene</i>	ND	<i>0.2</i>
<i>m,p-Xylene</i>	ND	<i>0.2</i>
<i>o-Xylene</i>	ND	<i>0.2</i>
<i>TOTAL 0.0 ug/L</i>		

ND - Not Detectable

Method - *SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

Approved by: *Ja*

Date: *12/21/94*

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OFF: (505) 325-8786



LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *12/21/94*
Lab ID: *2511*
Sample ID: *4455*
Job No. *2-1000*

Project Name: *Jaquez GC C1 / E1*
Project Location: *WP - 6*
Sampled by: *REO* Date: *12/19/94*
Analyzed by: *DLA* Date: *12/20/94*
Sample Matrix: *Water*

Time: *10:00*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	<i>ND</i>	<i>0.2</i>
<i>Toluene</i>	<i>0.5</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>1.0</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>3.5</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>ND</i>	<i>0.2</i>
	<i>TOTAL 5.0 ug/L</i>	

ND - Not Detectable

Method - *SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

Approved by:

Date:

Ja H
12/21/94

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LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *12/21/94*
Lab ID: *2511*
Sample ID: *4456*
Job No. *2-1000*

Project Name: *Jaquez GC C1 / E1*
Project Location: *WP - 8*
Sampled by: *REO* Date: *12/19/94*
Analyzed by: *DLA* Date: *12/20/94*
Sample Matrix: *Water*

Time: *10:20*

Aromatic Volatile Organics

<i>Component</i>	<i>Measured Concentration ug/L</i>	<i>Detection Limit Concentration ug/L</i>
<i>Benzene</i>	<i>ND</i>	<i>0.2</i>
<i>Toluene</i>	<i>ND</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>ND</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>ND</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>ND</i>	<i>0.2</i>
<i>TOTAL 0.0 ug/L</i>		

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *[Signature]*

Date: *12/21/94*

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LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *12/21/94*
Lab ID: *2511*
Sample ID: *4457*
Job No. *2-1000*

Project Name: *Jaquez GC C1 / E1*
Project Location: *WP - 9*
Sampled by: *REO* Date: *12/19/94*
Analyzed by: *DLA* Date: *12/20/94*
Sample Matrix: *Water*

Time: *10:25*

Aromatic Volatile Organics

<i>Component</i>	<i>Measured Concentration ug/L</i>	<i>Detection Limit Concentration ug/L</i>
<i>Benzene</i>	<i>ND</i>	<i>0.2</i>
<i>Toluene</i>	<i>0.3</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>ND</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>ND</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>ND</i>	<i>0.2</i>
	<i>TOTAL 0.3 ug/L</i>	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

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Date: *12/21/94*

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AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *12/21/94*
Lab ID: *2511*
Sample ID: *4458*
Job No. *2-1000*

Project Name: *Jaquez GC C1 / E1*
Project Location: *WP - 10*
Sampled by: *REO* Date: *12/19/94*
Analyzed by: *DLA* Date: *12/20/94*
Sample Matrix: *Water*

Time: *10:45*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	ND	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	ND	0.2
<i>o-Xylene</i>	ND	0.2
TOTAL		0.0 ug/L

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *DLA*
Date: *12/21/94*

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AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: 12/21/94
Lab ID: 2511
Sample ID: 4459
Job No. 2-1000

Project Name: *Jaquez GC C1 / E1*
Project Location: *WP - 11*
Sampled by: REO Date: 12/19/94
Analyzed by: DLA Date: 12/20/94
Sample Matrix: *Water*

Time: 11:00

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	ND	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	ND	0.2
<i>o-Xylene</i>	ND	0.2
TOTAL 0.0 ug/L		

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *Ja L*

Date: 12/21/94

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AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *12/21/94*
Lab ID: *2511*
Sample ID: *4460*
Job No. *2-1000*

Project Name: *Jaquez GC C1 / E1*
Project Location: *WP - 12*
Sampled by: *REO* Date: *12/19/94*
Analyzed by: *DLA* Date: *12/20/94*
Sample Matrix: *Water*

Time: *11:20*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	ND	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	ND	0.2
<i>o-Xylene</i>	ND	0.2
<i>TOTAL 0.0 ug/L</i>		

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *J-4*
Date: *12/21/94*

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Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *12/21/94*
Lab ID: *2511*
Sample ID: *4461*
Job No. *2-1000*

Project Name: *Jaquez GC C1 / E1*
Project Location: *WP - 13*
Sampled by: *REO* Date: *12/19/94*
Analyzed by: *DLA* Date: *12/20/94*
Sample Matrix: *Water*

Time: *11:30*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	ND	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	ND	0.2
<i>o-Xylene</i>	ND	0.2
TOTAL <i>0.0 ug/L</i>		

ND - Not Detectable

Method - *SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

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Date: *12/21/94*

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AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *12/21/94*
Lab ID: *2511*
Sample ID: *4462*
Job No. *2-1000*

Project Name: *Jaquez GC C1 / E1*
Project Location: *WP - 14*
Sampled by: *REO* Date: *12/19/94*
Analyzed by: *DLA* Date: *12/20/94*
Sample Matrix: *Water*

Time: *11:45*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	ND	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	ND	0.2
<i>o-Xylene</i>	ND	0.2
	TOTAL 0.0 ug/L	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *[Signature]*
Date: *12/21/94*

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Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *12/21/94*
Lab ID: *2512*
Sample ID: *4463*
Job No. *2-1000*

Project Name: *Jaquez GC C1 / E1*
Project Location: *WP - 15*
Sampled by: *REO* Date: *12/19/94*
Analyzed by: *DLA* Date: *12/20/94*
Sample Matrix: *Water*

Time: *12:00*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	<i>0.2</i>
<i>Toluene</i>	ND	<i>0.2</i>
<i>Ethylbenzene</i>	ND	<i>0.2</i>
<i>m,p-Xylene</i>	ND	<i>0.2</i>
<i>o-Xylene</i>	ND	<i>0.2</i>
<i>TOTAL 0.0 ug/L</i>		

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by:

Date:

[Signature]
12/21/94

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TECHNOLOGIES, LTD.
657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

Purchase Order No.: _____ Job No. _____					
Name _____					
Company _____	Dept. _____				
Address _____					
City, State, Zip _____					
Telephone No. _____		Telex No. _____			
RESULTS TO REPORT					
Number of Containers					
LAB ID					
ANALYSIS REQUESTED					
Sampling Location: _____					
Sampler: _____					
SAMPLE IDENTIFICATION		SAMPLE DATE	MATRIX	PRES.	
WP-1		12/19	0850	WATER	11/12
WP-3		"	0915	"	"
WP-4		"	0930	"	"
WP-5		"	0945	"	"
WP-6		"	1000	"	"
WP-8		"	1020	"	"
WP-9		"	1025	"	"
WP-10		"	1045	"	"
WP-11		"	1100	"	"
WP-12		"	1120	"	"
WP-13		"	1130	"	"
WP-14		"	1145	"	"
Relinquished by: R E O'NEILL		Date/Time	12/19	1302	Received by: _____ Date/Time 12/19/94
Relinquished by: _____		Date/Time	12/19/94	1557	Received by: _____ Date/Time 12/19/94 1557
Relinquished by: _____		Date/Time	Received by: _____ Date/Time _____		
Method of Shipment: _____		Rush	24-48 Hours	10 Working Days	Special Instructions:
Authorized by: _____		Date	12-19-94		
(Client Signature Must Accompany Request)					

Distribution:	White – On Site	Yellow – LAB	Pink – Sampler	Goldenrod – Client
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BLAGG ENGINEERING, INC.**MONITOR WELL SAMPLING DATA**CLIENT : **AMOCO PRODUCTION CO.**

CHAIN-OF-CUSTODY # : 2649

JAEQUEZ GC C # 1 / E # 1
UNIT O, SEC. 6, T29N, R9W

LABORATORY (S) USED : ON - SITE TECH.

Date : March 16, 1995

SAMPLER : R E O

Filename : 03-16-95.WK4

PROJECT MANAGER : R E O

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	VOLUME PURGED (bails)	FREE PRODUCT (ft)
1	102.49	97.74	4.75	7.75	0915	7.0	400	3.00	-
3	101.91	97.25	4.66	7.42	0930	6.7	500	3.00	-
4	103.13	97.43	5.70	8.11	0940	6.9	500	3.00	-
5	102.62	98.04	4.58	6.50	0955	6.6	1,100	2.00	-
6	101.54	97.58	3.96	6.65	1010	6.7	1,100	3.00	-
8	102.65	97.12	5.53	8.20	1020	6.9	600	3.00	-
9	101.72	97.08	4.64	7.24	1030	7.0	1,500	2.00	-
10	100.62	96.97	3.65	6.99	1040	6.8	800	3.00	-
11	97.99	95.66	2.33	6.50	1050	7.2	500	5.00	-
12	97.83	95.68	2.15	5.65	1110	7.7	400	6.00	-
13	97.17	95.43	1.74	5.90	1120	7.3	400	6.00	-
14	96.81	94.72	2.09	5.77	1130	7.3	300	3.00	-
15	96.35	94.34	2.01	5.67	1140	7.3	300	3.00	-

NOTES : Volume of water purged from well prior to sampling: $V = \pi \times r^2 \times h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$.(i.e. 2" MW $r = (1/12) \text{ ft.}$ $h = 1 \text{ ft.}$) (i.e. 4" MW $r = (2/12) \text{ ft.}$ $h = 1 \text{ ft.}$)

Ideally a minimum of three (3) wellbore volumes:

1.25 " well diameter = 0.19 gallons per foot of water (or 24 oz.).

2 bails per foot - small teflon bailer.

3 bails per foot - 3 / 4 " teflon bailer.

2.00 " well diameter = 0.49 gallons per foot of water.

4.00 " well diameter = 1.95 gallons per foot of water.

Comments or note well diameter if not standard 2 ".All Wells = 1.25" well point . Collected BTEX samples for all MW 's listed above .

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AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *3/18/95*
Lab ID: *2649*
Sample ID: *5567*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP - 1*
Sampled by: *REO* Date: *3/16/95*
Analyzed by: *DLA* Date: *3/17/95*
Sample Matrix: *Water*

Time: *9:15*

Aromatic Volatile Organics

<i>Component</i>	<i>Measured Concentration ug/L</i>	<i>Detection Limit Concentration ug/L</i>
<i>Benzene</i>	<i>0.3</i>	<i>0.2</i>
<i>Toluene</i>	<i>ND</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>ND</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>1.5</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>ND</i>	<i>0.2</i>
	<i>TOTAL 1.8 ug/L</i>	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *Da G*
Date: *3/20/95*

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Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *3/18/95*
Lab ID: *2649*
Sample ID: *5568*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP - 3*
Sampled by: *REO* Date: *3/16/95*
Analyzed by: *DLA* Date: *3/17/95*
Sample Matrix: *Water*

Time: *9:30*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	ND	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	0.9	0.2
<i>o-Xylene</i>	ND	0.2
TOTAL 0.9 ug/L		

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *Jaq*
Date: *3/20/95*

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Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *3/18/95*
Lab ID: *2649*
Sample ID: *5569*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP - 4*
Sampled by: *REO* Date: *3/16/95*
Analyzed by: *DLA* Date: *3/17/95*
Sample Matrix: *Water*

Time: *9:40*

Aromatic Volatile Organics

<i>Component</i>	<i>Measured Concentration ug/L</i>	<i>Detection Limit Concentration ug/L</i>
<i>Benzene</i>	<i>ND</i>	<i>0.2</i>
<i>Toluene</i>	<i>ND</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>ND</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>0.6</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>ND</i>	<i>0.2</i>
<i>TOTAL 0.6 ug/L</i>		

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *DLA*
Date: *3/20/95*

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AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *3/18/95*
Lab ID: *2649*
Sample ID: *5570*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP - 5*
Sampled by: *REO* Date: *3/16/95*
Analyzed by: *DLA* Date: *3/17/95*
Sample Matrix: *Water*

Time: *9:55*

Aromatic Volatile Organics

<i>Component</i>	<i>Measured Concentration ug/L</i>	<i>Detection Limit Concentration ug/L</i>
<i>Benzene</i>	<i>ND</i>	<i>0.2</i>
<i>Toluene</i>	<i>0.2</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>ND</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>0.5</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>ND</i>	<i>0.2</i>
<i>TOTAL 0.7 ug/L</i>		

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *Ja4*
Date: *3/20/95*

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AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *3/18/95*
Lab ID: *2649*
Sample ID: *5571*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP - 6*
Sampled by: *REO* Date: *3/16/95*
Analyzed by: *DLA* Date: *3/17/95*
Sample Matrix: *Water*

Time: *10:10*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	<i>0.3</i>	<i>0.2</i>
<i>Toluene</i>	<i>0.4</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>1.7</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>6.1</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>ND</i>	<i>0.2</i>
	<i>TOTAL 8.5 ug/L</i>	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *De 4*
Date: *3/20/95*

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Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *3/18/95*
Lab ID: *2649*
Sample ID: *5572*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP - 8*
Sampled by: *REO* Date: *3/16/95*
Analyzed by: *DLA* Date: *3/17/95*
Sample Matrix: *Water*

Time: *10:20*

Aromatic Volatile Organics

<i>Component</i>	<i>Measured Concentration ug/L</i>	<i>Detection Limit Concentration ug/L</i>
<i>Benzene</i>	<i>ND</i>	<i>0.2</i>
<i>Toluene</i>	<i>ND</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>ND</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>0.3</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>ND</i>	<i>0.2</i>
	<i>TOTAL 0.3 ug/L</i>	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *[Signature]*
Date: *3/20/95*

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-8786



LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *3/18/95*
Lab ID: *2649*
Sample ID: *5573*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP - 9*
Sampled by: *REO* Date: *3/16/95*
Analyzed by: *DLA* Date: *3/17/95*
Sample Matrix: *Water*

Time: *10:30*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	0.2	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	0.4	0.2
<i>o-Xylene</i>	ND	0.2
TOTAL 0.6 ug/L		

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *Ja4*
Date: *3/20/95*

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LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *3/18/95*
Lab ID: *2649*
Sample ID: *5574*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP - 10*
Sampled by: *REO* Date: *3/16/95*
Analyzed by: *DLA* Date: *3/17/95*
Sample Matrix: *Water*

Time: *10:40*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	<i>0.2</i>
<i>Toluene</i>	ND	<i>0.2</i>
<i>Ethylbenzene</i>	ND	<i>0.2</i>
<i>m,p-Xylene</i>	<i>0.7</i>	<i>0.2</i>
<i>o-Xylene</i>	ND	<i>0.2</i>
	<i>TOTAL 0.7 ug/L</i>	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *DLA*

Date: *3/20/95*

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AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *3/18/95*
Lab ID: *2649*
Sample ID: *5575*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP - 11*
Sampled by: *REO* Date: *3/16/95*
Analyzed by: *DLA* Date: *3/17/95*
Sample Matrix: *Water*

Time: *10:50*

Aromatic Volatile Organics

<i>Component</i>	<i>Measured Concentration ug/L</i>	<i>Detection Limit Concentration ug/L</i>
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	ND	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	0.2	0.2
<i>o-Xylene</i>	ND	0.2
<i>TOTAL 0.2 ug/L</i>		

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *Day*
Date: *3/20/95*

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LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *3/18/95*
Lab ID: *2649*
Sample ID: *5576*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP - 12*
Sampled by: *REO* Date: *3/16/95*
Analyzed by: *DLA* Date: *3/17/95*
Sample Matrix: *Water*

Time: *11:10*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	ND	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	ND	0.2
<i>o-Xylene</i>	ND	0.2
	TOTAL 0.0 ug/L	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *DLA*
Date: *3/20/95*

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Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *3/18/95*
Lab ID: *2649*
Sample ID: *5577*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP - 13*
Sampled by: *REO* Date: *3/16/95*
Analyzed by: *DLA* Date: *3/17/95*
Sample Matrix: *Water*

Time: *11:20*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	ND	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	0.2	0.2
<i>o-Xylene</i>	ND	0.2
TOTAL 0.2 ug/L		

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *Ja4*

Date: *3/20/95*

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Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *3/18/95*
Lab ID: *2649*
Sample ID: *5578*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP - 14*
Sampled by: *REO* Date: *3/16/95*
Analyzed by: *DLA* Date: *3/17/95*
Sample Matrix: *Water*

Time: *11:30*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	ND	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	ND	0.2
<i>o-Xylene</i>	ND	0.2
TOTAL		0.0 ug/L

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *Ja G*
Date: *3/20/95*

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LAB: (505) 325-5667

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Attn: *R. E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *3/18/95*
Lab ID: *2649*
Sample ID: *5579*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP - 15*
Sampled by: *REO* Date: *3/16/95*
Analyzed by: *DLA* Date: *3/17/95*
Sample Matrix: *Water*

Time: *11:40*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	<i>0.2</i>
<i>Toluene</i>	ND	<i>0.2</i>
<i>Ethylbenzene</i>	ND	<i>0.2</i>
<i>m,p-Xylene</i>	ND	<i>0.2</i>
<i>o-Xylene</i>	ND	<i>0.2</i>
	TOTAL <i>0.0 ug/L</i>	

ND - Not Detectable

Method - *SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

Approved by: *DLA*
Date: *3/20/95*

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657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

Date: 3-16-95

Purchase Order No.:		Job No.		Name		Title	
SEND INVOICE TO		Company		Company		Company	
Address		Dept.		Mailing Address		Mailing Address	
City, State, Zip		City, State, Zip		City, State, Zip		City, State, Zip	
Telephone No.		Telephone No.		Telephone No.		Telephone No.	
Telefax No.		Telefax No.		Telefax No.		Telefax No.	
Sampling Location:				ANALYSIS REQUESTED			
Maple 2 CC 21/61				STX			
Sampler: R & Cilled				LAB ID			
RESULTS TO		Number of Containers		Date/Time		Date/Time	
REPORT		PRES.		Date/Time		Date/Time	
DATE		TIME		Date/Time		Date/Time	
3-16		0915		3-16		1400	
4		0930		3-16		1400	
5		0940		3-16		1400	
6		0955		3-16		1400	
7		1010		3-16		1400	
8		1020		3-16		1400	
9		1030		3-16		1400	
10		1040		3-16		1400	
11		1050		3-16		1400	
12		1110		3-16		1400	
13		1120		3-16		1400	
14		1130		3-16		1400	
Relinquished by:		Date/Time		Received by:		Date/Time	
R. E. Cilled		3-16 1400		R. E. Cilled		3-16 1400	
Relinquished by:		Date/Time		Received by:		Date/Time	
R. E. Cilled		3-16 1400		R. E. Cilled		3-16 1400	
Method of Shipment:		Rush		10 Working Days		Special Instructions:	
Authorized by:		Date		24-48 Hours		Special Instructions:	
R. E. Cilled		3-16-95		Goldenrod - Client		Special Instructions:	

Distribution: White - On Site Yellow - LAB Pink - Sampler Goldenrod - Client

BLAGG ENGINEERING, INC.
MONITOR WELL SAMPLING DATA

CLIENT : AMOCO PRODUCTION CO.

CHAIN-OF-CUSTODY # : 2950

2951

Jaquez GC C #1 / E #1
UNIT O, SEC. 6, T29N, R9W

LABORATORY (S) USED : ON - SITE TECH.

Date : June 20, 1995

SAMPLER : REO

Filename : 06-20-95.WK4

PROJECT MANAGER : REO

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	VOLUME PURGED (bails)	FREE PRODUCT (ft)
1	102.49	98.45	4.04	7.75	0845	6.6	1,300	4.00	-
3	101.91	98.99	2.92	7.42	0852	6.9	700	7.00	-
4	103.13	99.34	3.79	8.11	0904	6.9	700	8.00	-
5	102.62	100.24	2.38	6.50	0914	6.8	500	8.00	-
6	101.54	99.92	1.62	6.65	0923	6.9	700	10.00	-
8	102.65	98.95	3.70	8.20	0935	6.9	800	8.00	-
9	101.72	98.77	2.95	7.24	0944	6.9	1,300	7.00	-
10	100.62	98.62	2.00	6.99	0953	6.6	700	6.00	-
11	97.99	96.46	1.53	6.50	1004	7.1	500	5.00	-
12	97.83	96.13	1.70	5.65	1015	7.4	500	8.00	-
13	97.17	95.52	1.65	5.90	1024	7.1	500	6.00	-
14	96.81	94.65	2.16	5.77	1032	7.1	400	3.00	-
15	96.35	94.17	2.18	5.67	1042	6.9	400	3.00	-

NOTES : Volume of water purged from well prior to sampling: $V = \pi \times r^2 \times h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$

(i.e. 2" MW $r = (1/12) \text{ ft.}$ $h = 1 \text{ ft.}$) (i.e. 4" MW $r = (2/12) \text{ ft.}$ $h = 1 \text{ ft.}$)

Ideally a minimum of three (3) wellbore volumes:

1.25 " well diameter = 0.19 gallons per foot of water (or 24 oz.).

2 bails per foot - small teflon bailer.

3 bails per foot - 3 / 4 " teflon bailer.

2.00 " well diameter = 0.49 gallons per foot of water.

4.00 " well diameter = 1.95 gallons per foot of water.

Comments or note well diameter if not standard 2".

All Wells = 1.25" well point. Collected BTEX samples for all MW's listed above.

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LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *R.E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/21/95*
COC No.: *2950*
Sample No. *6908*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP-1*
Sampled by: *REO*
Analyzed by: *DC*
Type of Sample: *Water*

Date: *6/20/95* Time: *8:45*
Date: *6/20/95*

Aromatic Volatile Organics

<i>Component</i>	<i>Measured Concentration ug/L</i>	<i>Detection Limit Concentration ug/L</i>
<i>Benzene</i>	ND	<i>0.2</i>
<i>Toluene</i>	ND	<i>0.2</i>
<i>Ethylbenzene</i>	ND	<i>0.2</i>
<i>m,p-Xylene</i>	ND	<i>0.2</i>
<i>o-Xylene</i>	ND	<i>0.2</i>
	<i>TOTAL 0.0 ug/L</i>	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by:
Date:

Ja Lx
6/21/95

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AROMATIC VOLATILE ORGANICS

Attn: *R.E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/21/95*
COC No.: *2950*
Sample No. *6909*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP-3*
Sampled by: *REO*
Analyzed by: *DC*
Type of Sample: *Water*

Date: *6/20/95* Time: *8:52*
Date: *6/20/95*

Aromatic Volatile Organics

<i>Component</i>	<i>Measured Concentration ug/L</i>	<i>Detection Limit Concentration ug/L</i>
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	ND	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	ND	0.2
<i>o-Xylene</i>	ND	0.2
	<i>TOTAL 0.0 ug/L</i>	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *Jahy*
Date: *6/21/95*

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AROMATIC VOLATILE ORGANICS

Attn: *R.E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/21/95*
COC No.: *2950*
Sample No. *6910*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP-4*
Sampled by: *REO*
Analyzed by: *DC*
Type of Sample: *Water*

Date: *6/20/95* Time: *9:04*
Date: *6/20/95*

Aromatic Volatile Organics

<i>Component</i>	<i>Measured Concentration ug/L</i>	<i>Detection Limit Concentration ug/L</i>
<i>Benzene</i>	<i>ND</i>	<i>0.2</i>
<i>Toluene</i>	<i>ND</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>ND</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>2.2</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>ND</i>	<i>0.2</i>
	<i>TOTAL 2.2 ug/L</i>	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *[Signature]*
Date: *6/21/95*

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AROMATIC VOLATILE ORGANICS

Attn: *R.E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/21/95*
COC No.: *2950*
Sample No. *6911*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP-5*
Sampled by: *REO*
Analyzed by: *DC*
Type of Sample: *Water*

Date: *6/20/95* Time: *9:14*
Date: *6/20/95*

Aromatic Volatile Organics

<i>Component</i>	<i>Measured Concentration ug/L</i>	<i>Detection Limit Concentration ug/L</i>
<i>Benzene</i>	ND	<i>0.2</i>
<i>Toluene</i>	ND	<i>0.2</i>
<i>Ethylbenzene</i>	ND	<i>0.2</i>
<i>m,p-Xylene</i>	ND	<i>0.2</i>
<i>o-Xylene</i>	ND	<i>0.2</i>
	<i>TOTAL 0.0 ug/L</i>	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *Ja4*
Date: *6/21/95*

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AROMATIC VOLATILE ORGANICS

Attn: *R.E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/21/95*
COC No.: *2950*
Sample No. *6912*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP-6*
Sampled by: *REO*
Analyzed by: *DC*
Type of Sample: *Water*

Date: *6/20/95* Time: *9:23*
Date: *6/20/95*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	<i>0.2</i>
<i>Toluene</i>	ND	<i>0.2</i>
<i>Ethylbenzene</i>	ND	<i>0.2</i>
<i>m,p-Xylene</i>	ND	<i>0.2</i>
<i>o-Xylene</i>	ND	<i>0.2</i>
TOTAL		0.0 ug/L

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *JaG*
Date: *6/21/95*

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AROMATIC VOLATILE ORGANICS

Attn: *R.E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/21/95*
COC No.: *2950*
Sample No. *6913*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP-8*
Sampled by: *REO*
Analyzed by: *DC*
Type of Sample: *Water*

Date: *6/20/95* Time: *9:35*
Date: *6/20/95*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	<i>0.2</i>
<i>Toluene</i>	ND	<i>0.2</i>
<i>Ethylbenzene</i>	ND	<i>0.2</i>
<i>m,p-Xylene</i>	ND	<i>0.2</i>
<i>o-Xylene</i>	ND	<i>0.2</i>
	<i>TOTAL 0.0 ug/L</i>	

ND - Not Detectable

Method - *SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

Approved by: *Ja H*
Date: *6/21/95*

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Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/21/95*
COC No.: *2950*
Sample No. *6914*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP-9*
Sampled by: *REO*
Analyzed by: *DC*
Type of Sample: *Water*

Date: *6/20/95* Time: *9:44*
Date: *6/20/95*

Aromatic Volatile Organics

<i>Component</i>	<i>Measured Concentration ug/L</i>	<i>Detection Limit Concentration ug/L</i>
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	ND	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	ND	0.2
<i>o-Xylene</i>	ND	0.2
	<i>TOTAL 0.0 ug/L</i>	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *Ja*
Date: *6/21/95*

P. O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-8786

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *R.E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/21/95*
COC No.: *2950*
Sample No. *6915*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP-10*
Sampled by: *REO*
Analyzed by: *DC*
Type of Sample: *Water*

Date: *6/20/95* Time: *9:53*
Date: *6/20/95*

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
<i>Benzene</i>	ND	<i>0.2</i>
<i>Toluene</i>	ND	<i>0.2</i>
<i>Ethylbenzene</i>	ND	<i>0.2</i>
<i>m,p-Xylene</i>	ND	<i>0.2</i>
<i>o-Xylene</i>	ND	<i>0.2</i>
	<i>TOTAL 0.0 ug/L</i>	

ND - Not Detectable

Method - *SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

Approved by: *Jaquez*

Date: *6/21/95*

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OFF: (505) 325-8786



LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *R.E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/21/95*
COC No.: *2950*
Sample No. *6916*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP-11*
Sampled by: *REO*
Analyzed by: *DC*
Type of Sample: *Water*

Date: *6/20/95* Time: *10:04*
Date: *6/20/95*

Aromatic Volatile Organics

<i>Component</i>	<i>Measured Concentration ug/L</i>	<i>Detection Limit Concentration ug/L</i>
<i>Benzene</i>	ND	<i>0.2</i>
<i>Toluene</i>	ND	<i>0.2</i>
<i>Ethylbenzene</i>	ND	<i>0.2</i>
<i>m,p-Xylene</i>	ND	<i>0.2</i>
<i>o-Xylene</i>	ND	<i>0.2</i>
	<i>TOTAL 0.0 ug/L</i>	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *Ja4*
Date: *6/21/95*

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OFF: (505) 325-8786

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TECHNOLOGIES, LTD.

LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *R.E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/21/95*
COC No.: *2950*
Sample No. *6917*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP-12*
Sampled by: *REO*
Analyzed by: *DC*
Type of Sample: *Water*

Date: *6/20/95* Time: *10:15*
Date: *6/20/95*

Aromatic Volatile Organics

<i>Component</i>	<i>Measured Concentration ug/L</i>	<i>Detection Limit Concentration ug/L</i>
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	ND	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	ND	0.2
<i>o-Xylene</i>	ND	0.2
<i>TOTAL</i> 0.0 ug/L		

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *[Signature]*
Date: *6/21/95*

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OFF: (505) 325-8786



LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *R.E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/21/95*
COC No.: *2950*
Sample No. *6918*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP-13*
Sampled by: *REO*
Analyzed by: *DC*
Type of Sample: *Water*

Date: *6/20/95* Time: *10:24*
Date: *6/20/95*

Aromatic Volatile Organics

<i>Component</i>	<i>Measured Concentration ug/L</i>	<i>Detection Limit Concentration ug/L</i>
<i>Benzene</i>	<i>ND</i>	<i>0.2</i>
<i>Toluene</i>	<i>ND</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>ND</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>ND</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>ND</i>	<i>0.2</i>
<i>TOTAL</i>		<i>0.0 ug/L</i>

ND - Not Detectable

Method - *SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

Approved by: *Ja4*
Date: *6/21/95*

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OFF: (505) 325-8786



LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *R.E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/21/95*
COC No.: *2951*
Sample No. *6919*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP-14*
Sampled by: *REO*
Analyzed by: *DC*
Type of Sample: *Water*

Date: *6/20/95* Time: *10:32*
Date: *6/20/95*

Aromatic Volatile Organics

<i>Component</i>	<i>Measured Concentration ug/L</i>	<i>Detection Limit Concentration ug/L</i>
<i>Benzene</i>	ND	0.2
<i>Toluene</i>	ND	0.2
<i>Ethylbenzene</i>	ND	0.2
<i>m,p-Xylene</i>	ND	0.2
<i>o-Xylene</i>	ND	0.2
TOTAL		0.0 ug/L

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *JKH*
Date: *6/21/95*

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OFF: (505) 325-8786



LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *R.E. O'Neill*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/21/95*
COC No.: *2951*
Sample No. *6920*
Job No. *2-1000*

Project Name: *Jaquez GC C1/E1*
Project Location: *WP-15*
Sampled by: *REO*
Analyzed by: *DC*
Type of Sample: *Water*

Date: *6/20/95* Time: *10:42*
Date: *6/20/95*

Aromatic Volatile Organics

<i>Component</i>	<i>Measured Concentration ug/L</i>	<i>Detection Limit Concentration ug/L</i>
<i>Benzene</i>	ND	<i>0.2</i>
<i>Toluene</i>	ND	<i>0.2</i>
<i>Ethylbenzene</i>	ND	<i>0.2</i>
<i>m,p-Xylene</i>	ND	<i>0.2</i>
<i>o-Xylene</i>	ND	<i>0.2</i>
	<i>TOTAL 0.0 ug/L</i>	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *Ja6x*
Date: *6/21/95*

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

ON SITE

TECHNOLOGIES, LTD.

657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

CHAIN OF CUSTODY RECORD

2950

Date: 6-20-95

Page 1 of 2

Purchase Order No.:		Job No. A14060		Name R. E. O'NEILL		Title	
SEND INVOICE TO		Company BUNGO ENGINEERING		Company SAME			
Address		City, State, Zip		Mailing Address			
City, State, Zip		City, State, Zip		Telephone No.		Telefax No. 7751	
Sampling Location: STATION 2 CC C1/E1				ANALYSIS REQUESTED			
Sampler: R. E. O'NEILL							
SAMPLE IDENTIFICATION		SAMPLE DATE		MATRIX		PRES.	
WP-1		6-20		0845		WATER	
WP-3		"		0852		"	
WP-4		"		0904		"	
WP-5		"		0914		"	
WP-6		"		0923		"	
WP-8		"		0935		"	
WP-9		"		0944		"	
WP-10		"		0953		"	
WP-11		"		1004		"	
WP-12		"		1005		"	
WP-13		"		1024		"	
Relinquished by: R. E. O'NEILL		Date/Time 6-20 1222		Received by: [Signature]		Date/Time 6-20 1:20	
Relinquished by:		Date/Time		Received by:		Date/Time	
Relinquished by:		Date/Time		Received by:		Date/Time	
Method of Shipment:		Rush		24-48 Hours		10 Working Days	
Authorized by: R. E. O'NEILL		Date 6-20-95		Special Instructions:			
(Client Signature Must Accompany Request)							

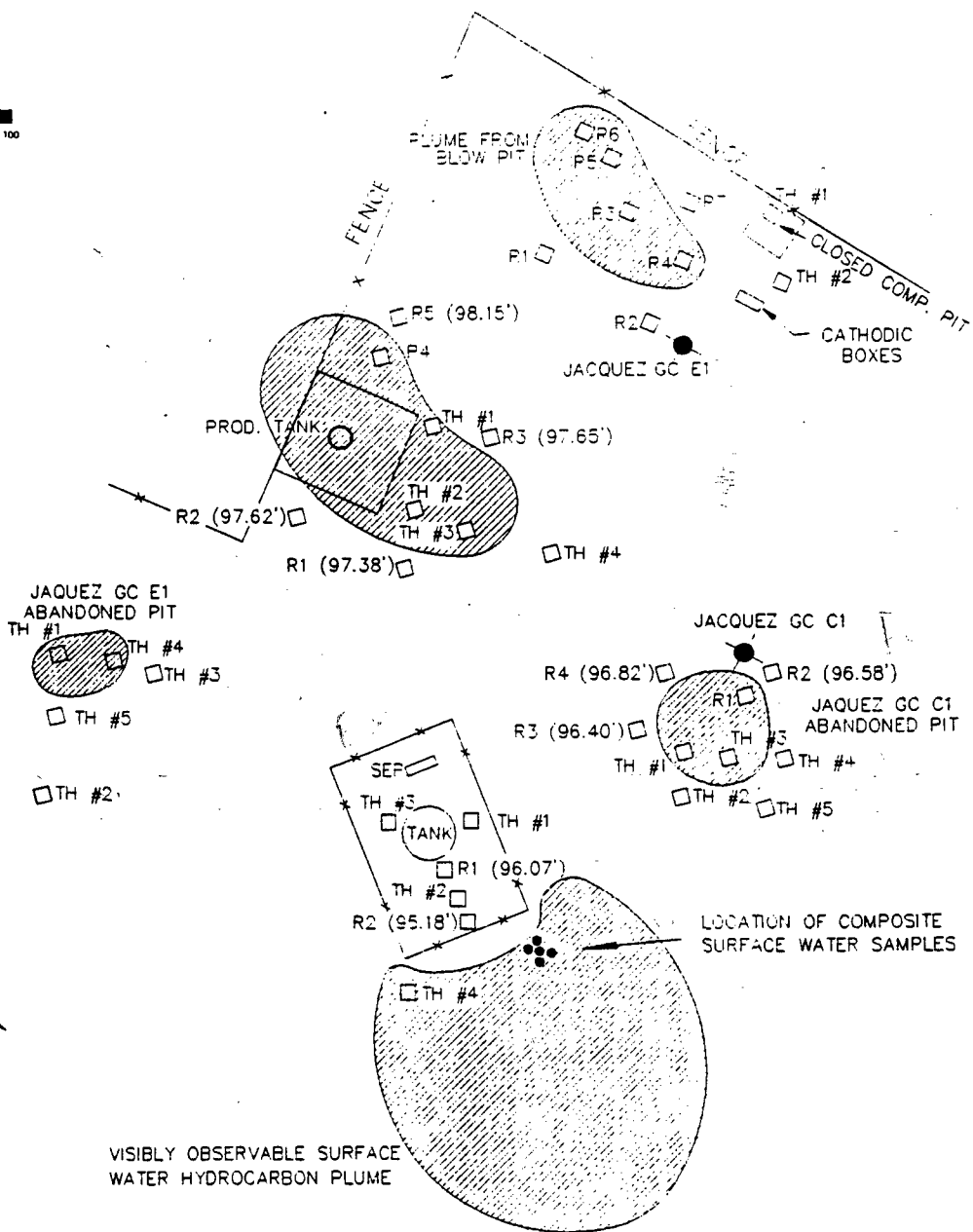
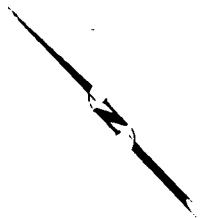
Distribution: White - On Site Yellow - LAB Pink - Sampler Goldenrod - Client

TECHNOLOGIES, LTD.

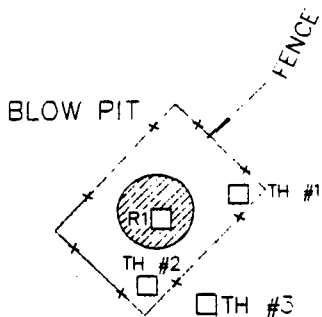
657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

[illegible]

Distribution:	White – On Site	Yellow – LAB	Pink – Sampler	Goldenrod – Client
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DIRECTION OF GROUNDWATER
FLOW ON 9/30/93



LEGEND

- TH #2 -- PREVIOUS TEST HOLE
- R2 -- TEST HOLE AND GROUNDWATER ELEVATION ON 9-30-93
- R2 -- TEST HOLE, NOT SURVEYED
- WELL HEAD
- SUSPECTED LATERAL EXTENT OF CONTAMINATION

SITE DIAGRAM
AMOCO PRODUCTION CO
JACQUEZ C1/E1 LOCATION
(O) 06-T29N-R09W

PROJECT NO. 92140

ENVIROTECH INC.

ENVIRONMENTAL SCIENTISTS & ENGINEERS
5796 U.S. HIGHWAY 64-3014
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615

REV BY: RMY
REV DATE: 10/93
SURVEYED: 9/30/93
DATE DRAWN: 5-26-93
PROJECT MGR: RMY

SHEET # 1

ENVIROTECH Inc.

5796 US HWY. 64, FARMINGTON, NM 87401
(505) 832-0815

94805

FIELD REPORT: SITE ASSESSMENT

JOB No: 92140
PAGE No: 1 of 2

PROJECT: PIT ASSESSMENTS & CLOSURE
CLIENT: AMOCO PRODUCTION COMPANY
CONTRACTOR: ENVIROTECH INC.
EQUIPMENT USED: EXTENSION HOSE # 538

DATE STARTED: 3/16/93
DATE FINISHED: 3/17/93
ENVIRO. SPCLT.: NV
OPERATOR: RW
ASSISTANT: JC

LOCATION: LSE: JACQUEZ WELL: GC E1 GD: (0) SW 1/4 SE 1/4
SEC: 6 TWP: 29N RNG: 9W PM: NM CNTY: SAG TWPST: NM PIT: ABANDONED

LAND USE: RANGE RESIDENTIAL

SURFACE CONDITIONS: CLEARED OUT NO VEGETATION LEACHED (WHITE)

FIELD NOTES & REMARKS: SOIL CONSISTS OF BLACK MOIST SAND @ T1 FROM 1' TO APPROX. 4 1/2' INTERVAL. STRONG PETROLEUM ODOR. DUE TO TEST HOLE BEING DRUG TOO DEEP INITIALLY, GRUING IN OCCURRED. UNABLE TO COLLECT GROUNDWATER SAMPLE @ T1. PLUME AREA APPEARS TO BE ISOLATED TO THE ORIGINAL PIT LOCATION. APPROXIMATE VOLUME OF CONTAMINATION EQUALS 25' X 30' X 4' (111 CUBIC YARDS).
HAZ-1 = 0.00 PPM HAZ-2 = 0.6 PPM
SEE SITE DIAGRAM FOR PIT LOCATION APPROXIMATED FROM THE JACQUEZ HOUSE.

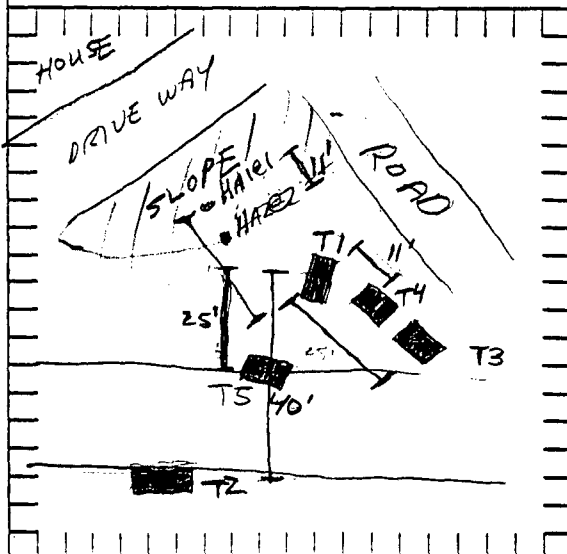
SAMPLE INVENTORY:

SMPL ID:	SMPL TYPE:	LABORATORY ANALYSIS:
T1@1.5'	SOIL	RTX/TPH
T1@2.5'	WATER	CHLOROFORM
T2@3'	SOIL	TPH
T2@4.5'	WATER	TPH
T2@6.5'	WATER	RTX
T3@3'	SOIL	TPH/RTX
T3@4.5'	WATER	TPH
T3@6.5'	WATER	RTX

SCALE



FEET
SITE DIAGRAM



TEST HOLE LOGS:

TH#:	SOIL TYPE:	SMPL OVM/TYPE:	TH#:	SOIL TYPE:	SMPL OVM/TYPE:	TH#:	SOIL TYPE:	SMPL OVM/TYPE:	TH#:	SOIL TYPE:	SMPL OVM/TYPE:
1	SP	666	2	SP	0.6	3	SP	0.9	4	SP	20.6
2	SP	666	3	SP	0.6	4	SP	0.9	5	SP	20.6
3	SP	666	4	SP	0.6	5	SP	0.9	6	SP	20.6
4	SP	666	5	SP	0.6	6	SP	0.9	7	SP	20.6
5	SP	666	6	SP	0.6	7	SP	0.9	8	SP	20.6
6	SP	666	8	SP	0.6	9	SP	0.9	9	SP	20.6
7	SP	666	9	SP	0.6						
8	SP	666									
9	SP	666									

SOIL TYPE: C - Clay, M - Sil, S - Sand, G - Gravel, Plasticity L - None, H - Plastic, Gradings P - Poor, V - Very

5796 US HWY. 64, FARMINGTON, NM 87401
(505) 632-0815

FIELD REPORT: SITE ASSESSMENT

JOB No: 92140
PAGE No: 2 of 2

PROJECT: DIT ASSESSMENTS & CLOSURE
CLIENT: AMOCO PRODUCTION COMPANY
CONTRACTOR: ENVIROTECH, INC.
EQUIPMENT USED: _____

DATE STARTED: 3/16/93
DATE FINISHED: 3/17/93
ENVIRO. SPCLT: NV
OPERATOR: BW
ASSISTANT: TC

LOCATION: LSE: JARUEZ WELL: GC E1 QD: _____
SEC: TWP: _____ RNG: _____ PM: _____ CNTY: _____ ST: _____ PIT: ABANDONED

LAND USE:
SURFACE CONDITIONS:

FIELD NOTES & REMARKS:

CONT'D

SAMPLE INVENTORY:

[illegible]

SCALE

0

FEET

SITE DIAGRAM

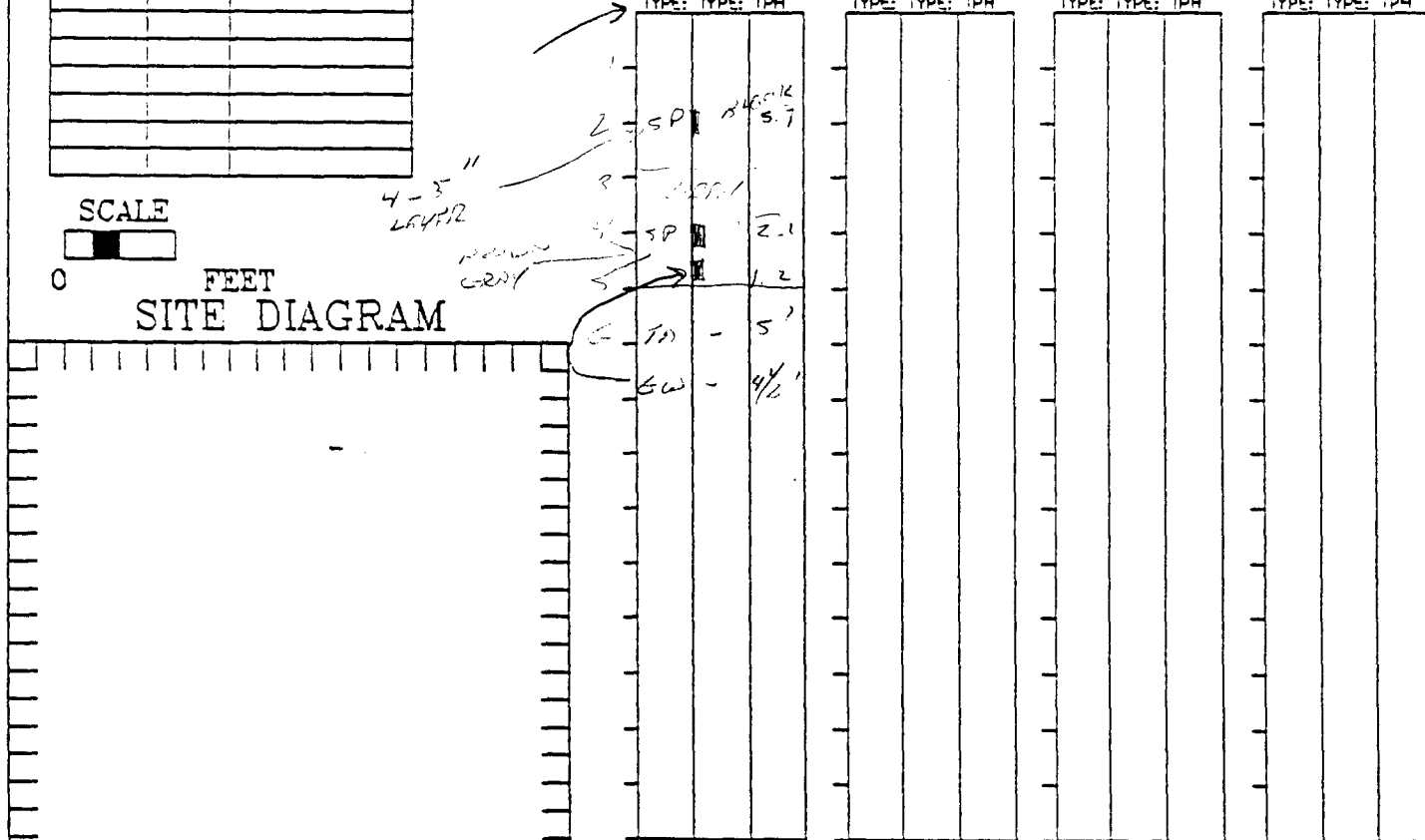
TEST HOLE LOGS:

TH#: 5
SOIL TYPE: SMPL TYPE:

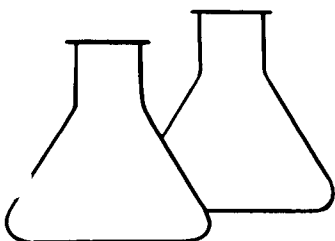
TH#: _____
SOIL SMPL OVM
TYPE: TYPE: TPH

TH#: _____
SOIL SMPL OVM
TYPE: TYPE: TPH

TH#: _____
SOIL: SMP1 OVM
TYPE: TYPE: TP4



SOIL TYPE: C - Clay, M - Silt, S - Sand, G - Gravel Plant life: L - None, H - Plants Graveling: P - Peats, W - Wood



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	T1 @ 1.5'	Date Sampled:	03-16-93
Laboratory Number:	4759	Date Received:	03-16-93
Sample Matrix:	Soil	Date Analyzed:	03-16-93
Preservative:	Cool	Date Reported:	03-16-93
Condition:	Cool & Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
-----	-----	-----
Total Petroleum Hydrocarbons	26,200	250

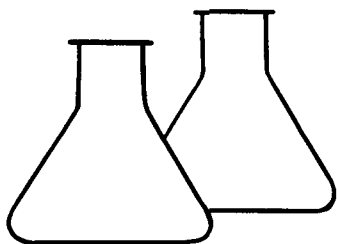
Method: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC El Abandoned Pit
94805

Heidi Feltman
Analyst

Mari D. Young
Review



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	T1 @ 1.5'	Date Reported:	03-16-93
Laboratory Number:	4759	Date Sampled:	03-16-93
Sample Matrix:	Soil	Date Received:	03-16-93
Preservative:	Cool	Date Extracted:	03-16-93
Condition:	Cool & Intact	Date Analyzed:	03-16-93
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	3,720	167
Toluene	33,600	250
Ethylbenzene	12,300	167
p,m-Xylene	105,200	250
o-Xylene	10,800	167

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	109 %

Method: Method 5030, Purge-and-Trap, Test Methods for
Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

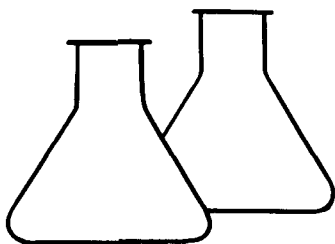
Method 8020, Aromatic Volatile Organics, Test Methods
for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC E1, Abandoned Pit, 94805.

A. Chaharlang
Analyst

Marion D. Young
Review



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	T2 @ 3'	Date Reported:	03-17-93
Laboratory Number:	4760	Date Sampled:	03-16-93
Sample Matrix:	Soil	Date Received:	03-16-93
Preservative:	Cool	Date Extracted:	03-17-93
Condition:	Cool & Intact	Date Analyzed:	03-17-93
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	24.9	20.0
Toluene	55	26.7
Ethylbenzene	17.3	13.3
p,m-Xylene	69	20.0
o-Xylene	22.8	13.3

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Bromofluorobenzene	98 %

Method: Method 5030, Purge-and-Trap, Test Methods for
Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

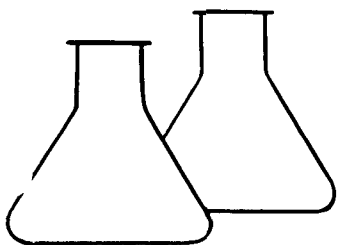
Method 8020, Aromatic Volatile Organics, Test Methods
for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC E1, Abandoned Pit, 94805.

A. Chaharling
Analyst

Mari D. Young
Review



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	T2 @ 3'	Date Sampled:	03-16-93
Laboratory Number:	4760	Date Received:	03-16-93
Sample Matrix:	Soil	Date Analyzed:	03-17-93
Preservative:	Cool	Date Reported:	03-17-93
Condition:	Cool & Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
-----	-----	-----
Total Petroleum Hydrocarbons	ND	10

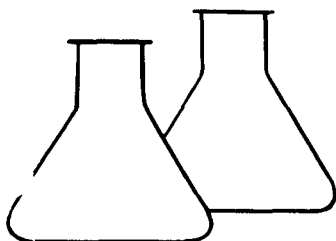
Method: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC El Abandoned Pit
94805

Heidi LeBlond
Analyst

Marin D. Young
Review



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EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	T2 @ GW (4')	Date Sampled:	03-16-93
Laboratory Number:	4762	Date Received:	03-16-93
Sample Matrix:	Water	Date Analyzed:	03-17-93
Preservative:	Cool	Date Reported:	03-17-93
Condition:	Cool	Analysis Needed:	TPH

Parameter -----	Concentration (mg/L) -----	Det. Limit (mg/L) -----
TPH	ND	0.5

Method: Method 418.1, Total Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

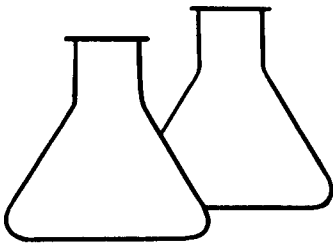
ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC El Abandoned Pit 94805

Sample container was not rinsed during analysis due to the large amount of solids present.

Stela Lelova
Analyst

Margaret Young
Review



ENVIROTECH LABS

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EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	T2 @ GW (4')	Date Reported:	03-17-93
Laboratory Number:	4761	Date Sampled:	03-16-93
Sample Matrix:	Water	Date Received:	03-16-93
Preservative:	HgCl & Cool	Date Analyzed:	03-17-93
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	0.4	0.3
Toluene	1.8	0.4
Ethylbenzene	1.2	0.2
p,m-Xylene	8.0	0.3
o-Xylene	2.5	0.2

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	110 %
	Bromofluorobenzene	101 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

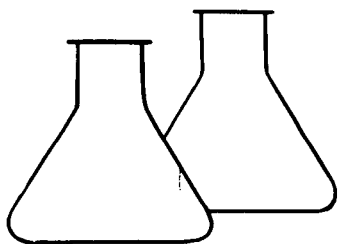
Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC E1, Abandoned Pit, 94805.

Ar Chaharbagy
Analyst

Mari D Young
Review



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EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	T3 @ 3'	Date Sampled:	03-17-93
Laboratory Number:	4779	Date Received:	03-17-93
Sample Matrix:	Soil	Date Analyzed:	03-18-93
Preservative:	Cool	Date Reported:	03-18-93
Condition:	Cool & Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	ND	5.0

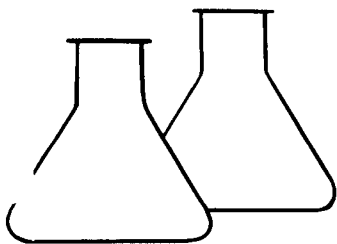
Method: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC El Abandoned Pit
94805

Steve Feltner
Analyst

Maris D. Young
Review



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EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	T3 @ GW (3.5')	Date Sampled:	03-17-93
Laboratory Number:	4781	Date Received:	03-17-93
Sample Matrix:	Water	Date Analyzed:	03-18-93
Preservative:	Cool	Date Reported:	03-18-93
Condition:	Cool & Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/L)	Det. Limit (mg/L)
-----	-----	-----
TPH	ND	0.5

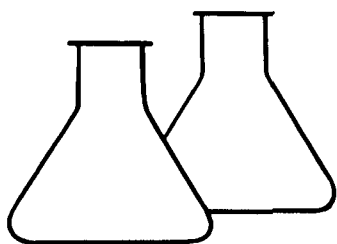
Method: Method 418.1, Total Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC El Abandoned Pit
94805

Stik Feltner
Analyst

Margi D. Young
Review



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PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	T3 @ GW (3.5')	Date Reported:	03-18-93
Laboratory Number:	4780	Date Sampled:	03-17-93
Sample Matrix:	Water	Date Received:	03-17-93
Preservative:	HgCl and Cool	Date Analyzed:	03-17-93
Condition:	Cool and Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	1.8	0.3
Toluene	2.9	0.5
Ethylbenzene	3.3	0.4
p,m-Xylene	1.6	1.0
o-Xylene	2.4	0.5

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	109 %
	Bromofluorobenzene	117 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating
Solid Waste, SW-846, USEPA, Sept. 1986

Method 8020, Aromatic Volatile Organics, Test Methods for
Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC E1, Abandoned, 94805.

A. Chaharlang
Analyst

W. D. Young
Review

CHAIN OF CUSTODY RECORD

[illegible]

ENVIROTECH Inc.

5796 US HWY. 64, FARMINGTON, NM 87401
(505) 832-0815

92806

FIELD REPORT: SITE ASSESSMENT

JOB No: 92140
PAGE No: 1 of 1

PROJECT: PIT ASSESSMENTS & CLOSURE
CLIENT: AMOCO PRODUCTION COMPANY
CONTRACTOR: ENVIROTECH INC.
EQUIPMENT USED: EXTENDA-DOE #538

DATE STARTED: 3/17/93
DATE FINISHED: 3/17/93
ENVIRO. SPCLT: NV
OPERATOR: BW
ASSISTANT: TC

LOCATION: LSE: JAPUEZ WELL: GC C1 GD: SW/4 SE/4 (0)
SEC: 6 TWP: 7N RNG: 9W PM: NM CNTY: SAN JUAN ST: NM PIT: ABANDONED

LAND USE: RANGE AGRICULTURAL
SURFACE CONDITIONS: CLEARED OUT, NO VEGETATION

FIELD NOTES & REMARKS:

FREE PRODUCT IN WATER @ T3. REFER TO TEST HOLE LOGS FOR SOIL PROFILES FOR EACH TEST HOLE ADVANCED. CONTAMINATION OF SOIL APPEARS TO BE CONICAL IN FASHION. CENTER OF PIT PROBABLY LOCATED BETWEEN T1 & T3. APPROXIMATION VOLUME OF SOIL CONTAMINATION EQUALS 100-125 CUBIC YARD.

T1 LOCATED - 30 FT. WEST, 10 FT. SOUTH OF WELL HEAD. RECALIBRATED OVM AFTER T3 @ 2' (122). IN FIELD STATED THAT T3 LOCATION WAS APPROXIMATELY WHERE HE LAST REMEMBERED THE CENTER OF PIT @ 10 FT. N.E.

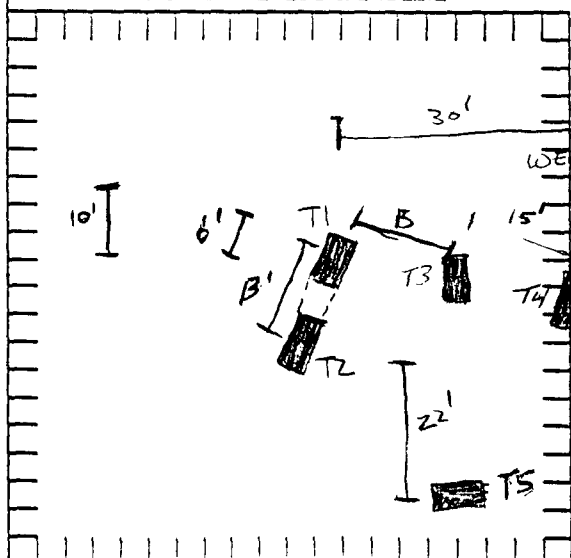
SAMPLE INVENTORY:

SMPL ID	SMPL TYPE	LABORATORY ANALYSIS
T1E2	SOIL	TPH, TPH
T2E1	SOIL	TPH
T3E1	SOIL	TPH
T3E2	SOIL	TPH
T3E3	SOIL	TPH
T3E4	SOIL	TPH
T3E5	SOIL	TPH
T3E6	SOIL	TPH
T3E7	SOIL	TPH
T3E8	SOIL	TPH
T3E9	SOIL	TPH
T3E10	SOIL	TPH
T3E11	SOIL	TPH
T3E12	SOIL	TPH
T3E13	SOIL	TPH
T3E14	SOIL	TPH
T3E15	SOIL	TPH
T3E16	SOIL	TPH
T3E17	SOIL	TPH
T3E18	SOIL	TPH
T3E19	SOIL	TPH
T3E20	SOIL	TPH
T3E21	SOIL	TPH
T3E22	SOIL	TPH
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T3E92	SOIL	TPH
T3E93	SOIL	TPH
T3E94	SOIL	TPH
T3E95	SOIL	TPH
T3E96	SOIL	TPH
T3E97	SOIL	TPH
T3E98	SOIL	TPH
T3E99	SOIL	TPH
T3E100	SOIL	TPH

SCALE



FEET
SITE DIAGRAM



TEST HOLE LOGS:

TH#	1	2	3	4
SOIL TYPE	SMPL OVM/TYPE	SMPL OVM/TYPE	SMPL OVM/TYPE	SMPL OVM/TYPE
SP	525	7.1	451	723
SP	3.5	1.8	147.3	9.9
SP	136.1		198	
TD	5'	5'	5'	4 1/2'
GW	4'	4'	4'	4'
GROUNDWATER	NO OVM READING IN WATER	NO OVM READING IN WATER	FREE PRODUCT IN UNIT 2 (GREEN COLOR)	BLACK LAYER APPROX. 1-2" THICK

SOIL TYPE: C - Clay, M - Silt, S - Sand, G - Gravel, P - Peat, L - Lignite, H - Humus

5796 US HWY. 64, FARMINGTON, NM 87401
(505) 832-0815

JOB No: 92140
PAGE No: 2 of 2

PROJECT: DIT ASSESSMENTS & CLOSURE
CLIENT: AMOCO PRODUCTION COMPANY
CONTRACTOR: ENVIROTECH, INC.
EQUIPMENT USED:

DATE STARTED: 3/17/93
DATE FINISHED: 3/17/93
ENVIRO. SPCLT: JV
OPERATOR: BW
ASSISTANT: TC

LOCATION:	LSE: JARWZ	WELL: GC	C1	GD:		
SEC:	TWP:	RNG:	PM:	CNTY:	ST:	PIT: ABANDONED

LAND USE:

SURFACE CONDITIONS:

FIELD NOTES & REMARKS:

CONT'D

[illegible]

SCALE

0

FEET

SITE DIAGRAM

TEST HOLE LOGS:

TH#: 5

SOIL TYPE:	SMPL TYPE:	QVM/TPH
------------	------------	---------

TH#:

SOIL TYPE:	SMPL TYPE:	OVN, TPH
------------	------------	----------

TH#:

SCIL	SMPL	OVM,
TYPE:	TYPE:	TPH

TH#:

SOIL	SMP1	OVM
TYPE:	TYPE:	TP4

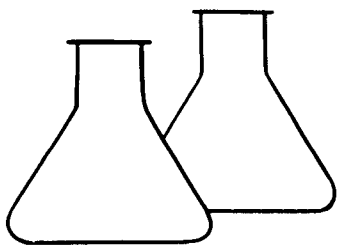
A hand-drawn stratigraphic column with the following layers and annotations:

- Layer 1:** An arrow points to the top of this layer.
- Layer 2:** Labeled "SP" and "8' GW". To the right, "24.2" is written.
- Layer 3:** Labeled "SP". To the right, "2.2" is written. An arrow points to the boundary between layers 3 and 4.
- Layer 4:** Labeled "SP". To the right, "1.2" is written.
- Layer 5:** An arrow points to the boundary between layers 4 and 5.
- Layer 6:** Labeled "MD" and "5'".
- Layer 7:** Labeled "GW" and "4'".

Handwritten notes on the left side of the column:

- "BLACK SAND" (written vertically next to layer 2)
- "APPROX 1" DIAMETER" (written next to layer 3)

SOIL TYPE: C - Clay, M - SIL, S - Sand, G - Gravel Planting: L - Moss, H - Plants Grading: P - Peoria, W - Wet



ENVIROTECH LABS

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PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	T1 @ 2'	Date Sampled:	03-17-93
Laboratory Number:	4782	Date Received:	03-17-93
Sample Matrix:	Soil	Date Analyzed:	03-18-93
Preservative:	Cool	Date Reported:	03-18-93
Condition:	Cool & Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
-----	-----	-----
Total Petroleum Hydrocarbons	18,200	50

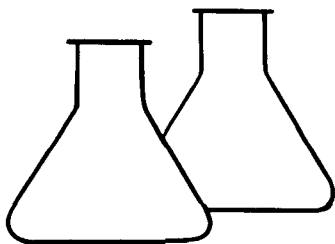
Method: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC Cl Abandoned Pit
94806

John Leltner
Analyst

Marin D. Young
Review



ENVIROTECH LABS

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PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	T1 @ 2'	Date Reported:	03-18-93
Laboratory Number:	4782	Date Sampled:	03-17-93
Sample Matrix:	Soil	Date Received:	03-17-93
Preservative:	Cool	Date Extracted:	03-18-93
Condition:	Cool & Intact	Date Analyzed:	03-18-93
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	4,960	187
Toluene	16,800	373
Ethylbenzene	3,320	373
p,m-Xylene	45,300	840
o-Xylene	17,700	466

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	118 %
	Bromofluorobenzene	122 %

Method: Method 5030, Purge-and-Trap, Test Methods for
Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

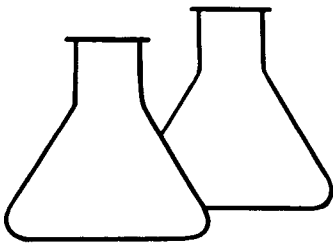
Method 8020, Aromatic Volatile Organics, Test Methods
for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC C1, Abandoned, 94806.

Cee Chaharlay
Analyst

Morris D. Young
Review



ENVIROTECH LABS

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PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	T1 @ GW (4')	Date Reported:	03-18-93
Laboratory Number:	4784	Date Sampled:	03-17-93
Sample Matrix:	Water	Date Received:	03-17-93
Preservative:	HgCl and Cool	Date Analyzed:	03-17-93
Condition:	Cool and Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	2.2	0.3
Toluene	3.3	0.5
Ethylbenzene	2.8	0.4
p,m-Xylene	31.8	1.0
o-Xylene	7.0	0.5

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	105 %
	Bromfluorobenzene	100 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

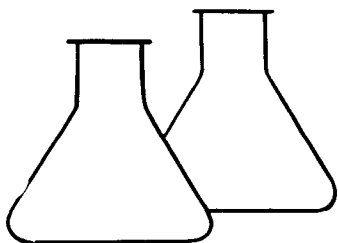
Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC C1, Abandoned, 94806.

A. Chaharlang
Analyst

Marion D. Young
Review



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PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	T1 @ GW (4')	Date Sampled:	03-17-93
Laboratory Number:	4783	Date Received:	03-17-93
Sample Matrix:	Water	Date Analyzed:	03-18-93
Preservative:	Cool	Date Reported:	03-18-93
Condition:	Cool & Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/L)	Det. Limit (mg/L)
TPH	29.7	0.5

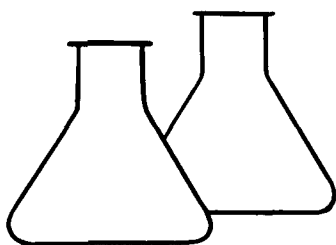
Method: Method 418.1, Total Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC C1 Abandoned Pit
94806

Heik Feltma
Analyst

Mani D. Young
Review



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EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	T3 @ GW (4')	Date Reported:	03-18-93
Laboratory Number:	4785	Date Sampled:	03-17-93
Sample Matrix:	Water	Date Received:	03-17-93
Preservative:	HgCl and Cool	Date Analyzed:	03-18-93
Condition:	Cool and Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	1.1	0.3
Toluene	4.5	0.5
Ethylbenzene	5.1	0.4
p,m-Xylene	17.2	1.0
o-Xylene	2.0	0.5

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	108 %
	Bromofluorobenzene	108 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

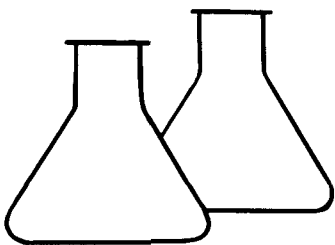
Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC C1, Abandoned, 94806.

A. Chahaling
Analyst

Morris D. Young
Review



ENVIROTECH LABS

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EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	T5 @ 3.5'	Date Reported:	03-18-93
Laboratory Number:	4786	Date Sampled:	03-17-93
Sample Matrix:	Soil	Date Received:	03-17-93
Preservative:	Cool	Date Extracted:	03-18-93
Condition:	Cool & Intact	Date Analyzed:	03-18-93
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	19.6
Toluene	48.0	39.2
Ethylbenzene	51	39.2
p,m-Xylene	132	88
o-Xylene	56	49.0

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	97 %
	Bromofluorobenzene	95 %

Method: Method 5030, Purge-and-Trap, Test Methods for
Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

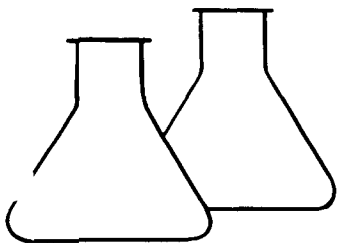
Method 8020, Aromatic Volatile Organics, Test Methods
for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC C1, Abandoned, 94806.

Al Chaharaz
Analyst

Morris D. Young
Review



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PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	T5 @ 3.5'	Date Sampled:	03-17-93
Laboratory Number:	4786	Date Received:	03-17-93
Sample Matrix:	Soil	Date Analyzed:	03-18-93
Preservative:	Cool	Date Reported:	03-18-93
Condition:	Cool & Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
-----	-----	-----
Total Petroleum Hydrocarbons	7.7	5.0

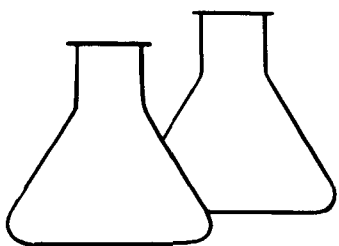
Method: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC Cl Abandoned Pit
94806

Heila Peltuna
Analyst

Marvin D. Young
Review



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	T5 @ GW (4')	Date Sampled:	03-17-93
Laboratory Number:	4787	Date Received:	03-17-93
Sample Matrix:	Water	Date Analyzed:	03-18-93
Preservative:	Cool	Date Reported:	03-18-93
Condition:	Cool & Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/L)	Det. Limit (mg/L)
TPH	1.3	0.5

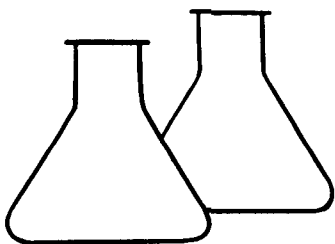
Method: Method 418.1, Total Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC C1 Abandoned Pit
94806

Sheila Feltman
Analyst

Moni D. Young
Review



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	T5 @ GW (4')	Date Reported:	03-18-93
Laboratory Number:	4788	Date Sampled:	03-17-93
Sample Matrix:	Water	Date Received:	03-17-93
Preservative:	HgCl and Cool	Date Analyzed:	03-18-93
Condition:	Cool and Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	ND	0.3
Toluene	ND	0.5
Ethylbenzene	0.5	0.4
p,m-Xylene	1.7	1.0
o-Xylene	0.5	0.5

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	93 %
	Bromofluorobenzene	98 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating
Solid Waste, SW-846, USEPA, Sept. 1986

Method 8020, Aromatic Volatile Organics, Test Methods for
Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC C1, Abandoned, 94806.

Al Chaharby
Analyst

Marin D. Young
Review

ENVIROTECH Inc.

COC 3068

5796 US HWY. 84, FARMINGTON, NM 87401
(505) 832-0815

94506

FIELD REPORT: SITE ASSESSMENT

JOB No: 92140
PAGE No: 1 of 1

PROJECT: DIT ASSESSMENTS & CLOSURE
CLIENT: AMCCO PRODUCTION COMPANY
CONTRACTOR: ENVIROTECH INC.
EQUIPMENT USED: HAND AUGER

DATE STARTED: 9/30/93
DATE FINISHED: 9/30/93
ENVIRO. SPCLT: RMY
OPERATOR: PV
ASSISTANT: PV

LOCATION: LSE: JAQUEZ GC WELL: C1 CD: SW/4 SE/4 (0)
SEC: 06 TWP: 29N RNG: 09W PM: NMPM CNTY: SJ ST: NM PIT: ABANDONED

LAND USE: RANGE- PRIVATE LEASE

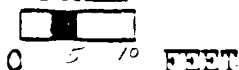
SURFACE CONDITIONS: MINOR GRASSES.

FIELD NOTES & REMARKS: PREVIOUS ASSESSMENT ON 3/17/93 (TEST PILE HOLE ON SITE DEMONSTRATED WITH A "T" DESIGNATION)
CONTAMINATION PLUME APPEARS TO BE BOUNDED ON 6 SIDES BY
TEST HOLES T2, T5, T4, R2, R4, R3.

SAMPLE INVENTORY:

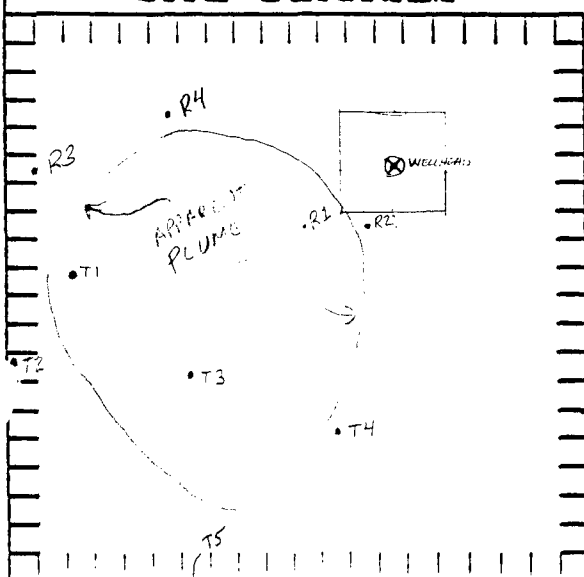
SAMPL ID:	SAMPL TYPE:	LABORATORY ANALYSIS:
R203'	SOIL	H10.1
R205'	WATER	BTEX
R305'	SOIL	H10.1
R307'	WATER	BTEX
R403'	SOIL	H10.1
R405'	WATER	BTEX

SCALE



SURFACE FLOW
FWD SOSP
GULF WATER TAIL

SITE DIAGRAM



TEST HOLE LOGS:

TH#	SOIL TYPE	SAMPL TYPE	QVM/TPH	TH#	SOIL TYPE	SAMPL TYPE	QVM/TPH	TH#	SOIL TYPE	SAMPL TYPE	QVM/TPH	TH#	SOIL TYPE	SAMPL TYPE	QVM/TPH
R1	SP-PAC Yellowish Brown, MOIST, LOOSE, NO HC DOOR	SOIL	92.8	R2	SP-PAC Yellowish Brown, MOIST, LOOSE, NO HC DOOR	SOIL	10.7	R3	S.A. R20.5'			R4	S.A. R20.5'		
1	TD 12"			1	S.A. R20.5'			1	S.A. R20.5'			1	OVN SOIL	S.3	
2	TD 12"			2	S.A. R20.5'			2	S.A. R20.5'			2	S.A. R20.5'		
3	TD 12"			3	MILD HC DOOR SAT'D SOILS			3	NO HC DOOR SAT'D SOILS			3	NO HC DOOR SAT'D SOILS		
4	TD 12"			4	OVN SOIL 10.7			4	OVN SOIL 0.9			4	OVN SOIL 0.9		
					GROUNDFWATER				GROUNDFWATER				GROUNDFWATER		
					NO HC DOOR NO V.52 BLK				S.A. R20.5'				S.A. R20.5'		
					TD 03'				TD 03'				TD 03'		
					60' 03'				60' 03'				60' 03'		

SOIL TYPE: C - Clay, M - Sil, S - Sand, C - Gravel, F - Fines, L - Lign, H - Hard, P - Plastic, G - Gravel, P - Plastic, V - V.52

94807

JOB No: 92140
PAGE No: 1 of 1

DATE STARTED: 3/17/93
DATE FINISHED: 3/17/93
ENVIRO. SPCLT: NV
OPERATOR: BW
ASSISTANT: TC

LAND USE: RAILROAD / AGRICULTURAL
SURFACE CONDITIONS: CLEARED ONT PIT WAS CLOSED w/out ASSESSMENT OR VERIFICATION

PIT DOES NOT APPEAR TO BE CONTAMINATED. GREEN-GRAY SAND/CLAY @ T1 MAY HAVE RESULTED FROM A TUBE OF GREASE BURIED DURING CLOSING OR DRILLING OF WELL. RECOMMEND CLOSING AS IS.

[illegible]

PIT LOCATION: 30 FT. NORTH, 45 FT. EAST OF WELL HEAD.

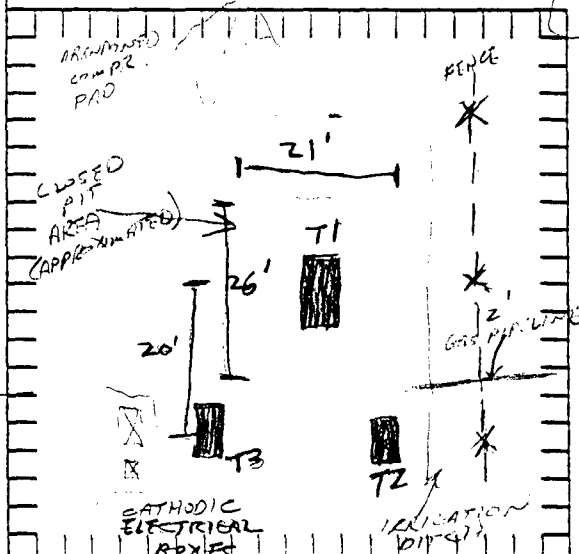
DRINKER $\leftarrow$ MOD POSSIBLE $\sim$ THE DRINKER

<u>TH#:</u>			<u>TH#:</u>			<u>TH#:</u>			<u>TH#:</u>		
<u>SOIL TYPE:</u>	<u>SAMPL TYPE:</u>	<u>OVM / TPH</u>	<u>SOIL TYPE:</u>	<u>SAMPL TYPE:</u>	<u>OVM / TPH</u>	<u>SOIL TYPE:</u>	<u>SAMPL TYPE:</u>	<u>OVM / TPH</u>	<u>SOIL TYPE:</u>	<u>SAMPL TYPE:</u>	<u>OVM / TPH</u>
BROWN SP	BLACK MOIST	7.0	SP	PURE CLAYE		BROWN	SG BLACK	9.9			
GREAT PREC MUD			RQ	MUD		-					
SL -		118.1	RQ SLURRY		0.0	DYES MUD					
→		5.4	SP →		3.2	→		9.3			
TG -		5'	(X) -		3'6"	TG -		'			
GW -		4'	NW -		3'	GU -		'			

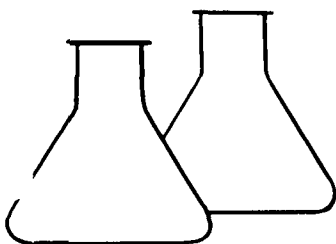
SOIL TYPE: C - Clay, M - SIL, S - Sand, G - Gravel PESTICIDE: I - Insect, H - Fungus CRACKING: P - Above, V - Under

[illegible]

FEET IN
SITE DIAGRAM



(DEY)



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	T1 @ 1.5'	Date Sampled:	03-17-93
Laboratory Number:	4789	Date Received:	03-17-93
Sample Matrix:	Soil	Date Analyzed:	03-18-93
Preservative:	Cool	Date Reported:	03-18-93
Condition:	Cool & Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
-----	-----	-----
Total Petroleum Hydrocarbons	42.5	5.0

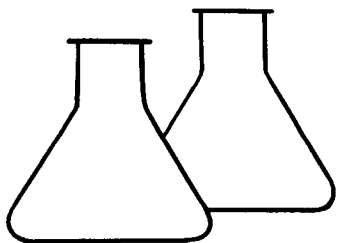
Method: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC El Compr. Abandoned Pit
94807

Steve Feltman
Analyst

Ernie D. Young
Review



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	T1 @ 1.5'	Date Reported:	03-18-93
Laboratory Number:	4789	Date Sampled:	03-17-93
Sample Matrix:	Soil	Date Received:	03-17-93
Preservative:	Cool	Date Extracted:	03-18-93
Condition:	Cool & Intact	Date Analyzed:	03-18-93
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	20.1
Toluene	54	40.2
Ethylbenzene	ND	40.2
p,m-Xylene	172	90
o-Xylene	ND	50.2

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	103 %
	Bromofluorobenzene	85 %

Method: Method 5030, Purge-and-Trap, Test Methods for
Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

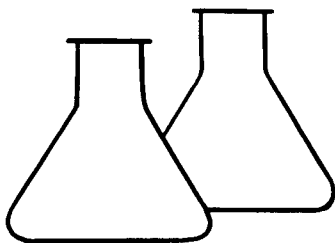
Method 8020, Aromatic Volatile Organics, Test Methods
for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC E1, Compressor Abandoned, 94807.

Ar Chaharlang
Analyst

M. D. Young
Review



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	T1 @ GW (4')	Date Reported:	03-18-93
Laboratory Number:	4791	Date Sampled:	03-17-93
Sample Matrix:	Water	Date Received:	03-17-93
Preservative:	HgCl and Cool	Date Analyzed:	03-18-93
Condition:	Cool and Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	3.3	0.2
Toluene	3.7	0.4
Ethylbenzene	ND	0.4
p,m-Xylene	8.3	0.9
o-Xylene	1.6	0.5

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	76 %
	Bromofluorobenzene	98 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating
Solid Waste, SW-846, USEPA, Sept. 1986

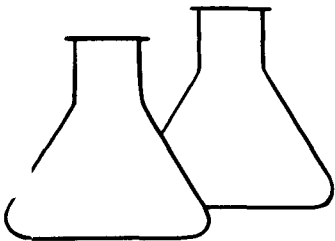
Method 8020, Aromatic Volatile Organics, Test Methods for
Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC E1, Compressor Abandoned, 94807.

Al Chaharlang
Analyst

Maris D. Young
Review



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	T1 @ GW (4')	Date Sampled:	03-17-93
Laboratory Number:	4790	Date Received:	03-17-93
Sample Matrix:	Water	Date Analyzed:	03-18-93
Preservative:	Cool	Date Reported:	03-18-93
Condition:	Cool & Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/L)	Det. Limit (mg/L)
TPH	0.8	0.5

Method: Method 418.1, Total Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC El Compr. Abandoned Pit
94807

Shirley Feltman
Analyst

Mari D Young
Review

94808

JOB No: 92140
PAGE No: 1 of 1

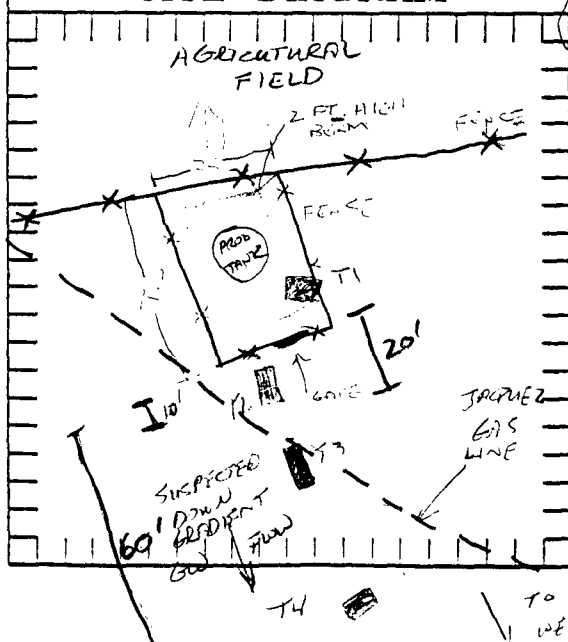
DATE STARTED: 3/18/93
DATE FINISHED: 3/18/93
ENVIRO. SPCLT: NV
OPERATOR: BW
ASSISTANT: KC

SURFACE CONDITIONS: STRAINED TEND IN OVERFLOW DITCH AROUND TRNK

FREE PRODUCT IN GL_2 @ T_1 & T_2

0

FEET
SITE DIAGRAM



TH#:	SOIL TYPE:	SMPL TYPE:	QVM/TPH
1	SP	GRAY	1067
			1320
	TD		5'
	GW		4'

TH#:	SOIL TYPE:	SMPL TYPE:	QVM/TPH
2	SP	GRAY	1065
	TD		4'

TH#:	SOIL TYPE:	SMPL TYPE:	QVM/TPH
3	SP	GRAY	1066
	TD		1'
	GW		NR
TEST HOLE LOCATED IN THE APPROXIMATE OF JOHN JARUE'S GAS LINE OFF W.H.			

TH#:	SOIL TYPE:	SMPL TYPE:	QVM/TPH
4	SP	GRAY	1068
	TD		5'
	GW		4'

SOIL TYPE: G - Clay, M - SIL, S - Sand, C - Gravel FILLING: L - None, H - Plastic Condition: P - Poor, V - Very

94808

JCB No: 92140

PAGE No: 1 of 1

PROJECT: DIT ASSESSMENTS & CLOSURE

CLIENT: AMCCO PRODUCTION COMPANY

CONTRACTOR: ENVIROTECH INC.

EQUIPMENT USED: HAND AUGER

DATE STARTED: 9-30-93

DATE FINISHED: 9-30-92

ENVIRO. SPCLT: RAY

OPERATOR:

ASSISTANT: PV

LOCATION: LSE: Jaquez GC WELL: C1 CD: SW/4 SE/4 (0)

SEC: 06 TWP: 29N RNG: 09W PM: 1141 PM CNTY: SJ ST: NM PIT: PROB

LAND USE: RANGE / PRIVATE USE

SURFACE CONDITIONS: 8"-12" CRACKS, NO SURFACE STRIPPING.

FIELD NOTES & REMARKS: PREVIOUS ASSESSMENT PERFORMED 3/10/93, HOLE DENOTES AS "4"

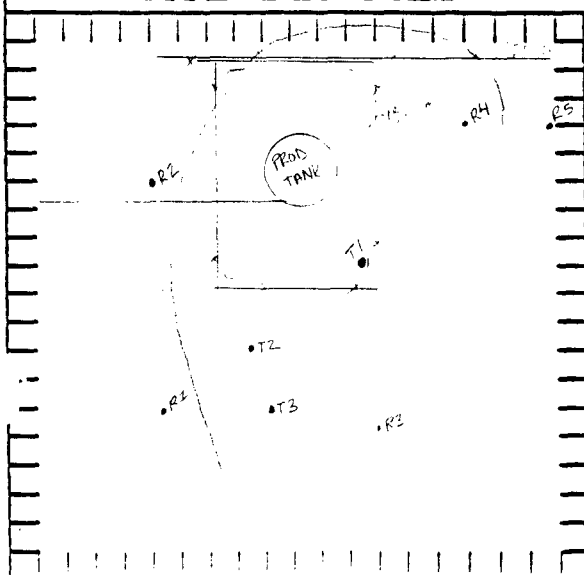
(CONTAMINATION) PLUME APPEARS TO BE BOUNDED ON FOUR SIDES BY R_1, R_2, R_3, R_5 .

[illegible]

SCALE

0 20

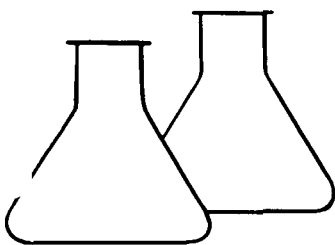
SITE DIAGRAM



TEST HOLE LOGS:

TH#:	R1			TH#:	R2			TH#:	R3			TH#:	R4		
SOIL TYPE:	SMPL TYPE:	QVM/ TBM		SOIL TYPE:	SMPL TYPE:	QVM/ TBM		SOIL TYPE:	SMPL TYPE:	QVM/ TBM		SOIL TYPE:	SMPL TYPE:	QVM/ TBM	
6L	SP - MOD. CLAY BY 3.14 CM DIA. 10-15 S.A. - 0.2 100-100%			6L	S.A. R100			6L	S.A. R100			6L	S.A. R100		
1	QVM SOIL 90.1 S.A. 100-100% 100-100%			1	QVM SOIL 1.2 S.A. 100-100%			1	QVM SOIL 1.0 S.A. R100 100% 100-100%			1	QVM SOIL 626 S.A. R100 100%		
2	QVM SOIL 27.4 R100 100-100% 100-100%			2	QVM SOIL 1.2 S.A. 100-100%			2	QVM SOIL 1.2 S.A. 100-100%			2	QVM SOIL 1.0 S.A. 100-100%		
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SOIL TYPE: C - Clay, M - Sil. S - Sand, G - Gravel FERTILIZER: L - Nitro, N - Phos, P - Potash



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	T1 @ 2'	Date Sampled:	03-18-93
Laboratory Number:	4797	Date Received:	03-18-93
Sample Matrix:	Soil	Date Analyzed:	03-19-93
Preservative:	Cool	Date Reported:	03-19-93
Condition:	Cool & Intact	Analysis Needed:	TPH

Parameter -----	Concentration (mg/kg) -----	Det. Limit (mg/kg) -----
Total Petroleum Hydrocarbons	8,880	25.0

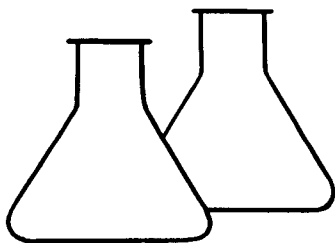
Method: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC Cl Prod. Pit
94808

Steve Lillie
Analyst

Marion Young
Review



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	T1 @ 2'	Date Reported:	03-23-93
Laboratory Number:	4797	Date Sampled:	03-18-93
Sample Matrix:	Soil	Date Received:	03-18-93
Preservative:	Cool	Date Extracted:	03-22-93
Condition:	Cool & Intact	Date Analyzed:	03-23-93
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	1,800	149
Toluene	6,300	198
Ethylbenzene	3,310	149
p,m-Xylene	105,800	397
o-Xylene	10,600	198

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	117 %
	Bromofluorobenzene	102 %

Method: Method 5030, Purge-and-Trap, Test Methods for
Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

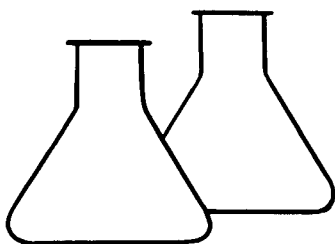
Method 8020, Aromatic Volatile Organics, Test Methods
for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC C1, Production Pit, 94808.

A. Chaharlang
Analyst

Moni D. Young
Review



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	T1 @ GW (4')	Date Reported:	03-19-93
Laboratory Number:	4798	Date Sampled:	03-18-93
Sample Matrix:	Water	Date Received:	03-18-93
Preservative:	HgCl & Cool	Date Analyzed:	03-19-93
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	10.5	0.3
Toluene	36.0	0.3
Ethylbenzene	21.0	0.3
p,m-Xylene	347	0.4
o-Xylene	11.5	0.3

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	108 %
	Bromofluorobenzene	107 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating
Solid Waste, SW-846, USEPA, Sept. 1986

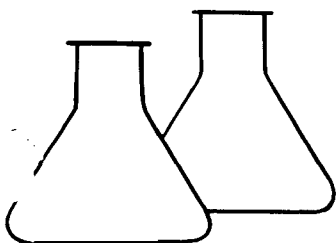
Method 8020, Aromatic Volatile Organics, Test Methods for
Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC C1, Production Pit, 94808.

A. Chahar
Analyst

Maris D. Young
Review



ENVIROTECH LABS

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PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

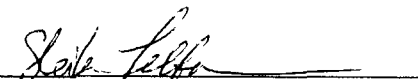
Client:	Amoco	Project #:	92140
Sample ID:	T1 @ GW (4')	Date Sampled:	03-18-93
Laboratory Number:	4799	Date Received:	03-18-93
Sample Matrix:	Water	Date Analyzed:	03-19-93
Preservative:	Cool	Date Reported:	03-19-93
Condition:	Cool & Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/L)	Det. Limit (mg/L)
-----	-----	-----
TPH	247	0.5

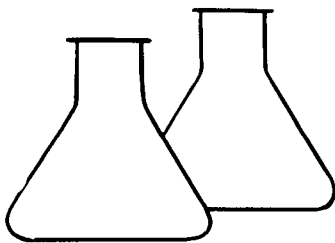
Method: Method 418.1, Total Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC Cl Prod. Pit
94808


Analyst


Review



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

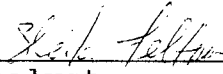
Client:	Amoco	Project #:	92140
Sample ID:	T4 @ 2'	Date Sampled:	03-18-93
Laboratory Number:	4800	Date Received:	03-18-93
Sample Matrix:	Soil	Date Analyzed:	03-19-93
Preservative:	Cool	Date Reported:	03-19-93
Condition:	Cool & Intact	Analysis Needed:	TPH

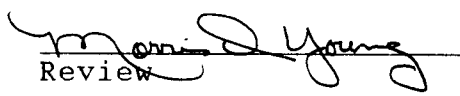
Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
-----	-----	-----
Total Petroleum Hydrocarbons	14.2	5.0

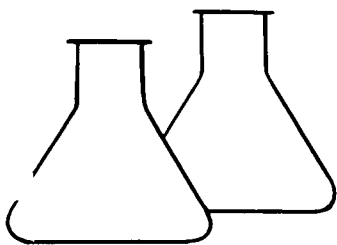
Method: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC Cl Prod. Pit
94808


Analyst


Review



ENVIROTECH LABS

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PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

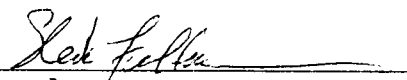
Client:	Amoco	Project #:	92140
Sample ID:	T4 @ GW (4')	Date Sampled:	03-18-93
Laboratory Number:	4802	Date Received:	03-18-93
Sample Matrix:	Water	Date Analyzed:	03-19-93
Preservative:	Cool	Date Reported:	03-19-93
Condition:	Cool & Intact	Analysis Needed:	TPH

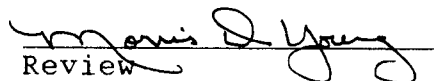
Parameter -----	Concentration (mg/L) -----	Det. Limit (mg/L) -----
TPH	ND	0.5

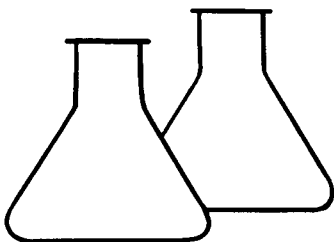
Method: Method 418.1, Total Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC Cl Prod. Pit
94808


Analyst


Review



ENVIROTECH LABS

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PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	T4 @ GW (4')	Date Reported:	03-19-93
Laboratory Number:	4801	Date Sampled:	03-18-93
Sample Matrix:	Water	Date Received:	03-18-93
Preservative:	HgCl & Cool	Date Analyzed:	03-19-93
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	ND	0.3
Toluene	ND	0.3
Ethylbenzene	2.0	0.3
p,m-Xylene	1.7	0.4
o-Xylene	1.1	0.3

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	86 %
	Bromofluorobenzene	100 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating
Solid Waste, SW-846, USEPA, Sept. 1986

Method 8020, Aromatic Volatile Organics, Test Methods for
Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC C1, Production Pit, 94808.

A. Chaharley
Analyst

Marie D. Young
Review

C4806

District I

State of New Mexico

SUBMIT 1 COPY TO

P.O. Box 1980, Hobbs, NM

Energy, Minerals and Natural Resources Department

APPROPRIATE

District II

P.O. Drawer DD, Artesia, NM 88211

DISTRICT OFFICE

AND 1 COPY TO

District III

P.O. Rio Brazos Rd, Aztec, NM 87410

SANTA FE OFFICE

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

PIT REMEDIATION AND CLOSURE REPORTOperator: Amoco Production Company Telephone: (505) - 326-9200Address: 200 Amoco Court, Farmington, New Mexico 87401Facility Or: JARQUEZ GC C # 1
Well NameLocation: Unit or Qtr/Qtr Sec 0 Sec 6 T 29N R 9W County SAN JUANPit Type: Separator Dehydrator Other ABANDONEDLand Type: BLM , State , Fee X, Other Pit Location: Pit dimensions: length 35', width 60', depth 1 1/2'
(attach diagram)Reference: wellhead X, other Footage from reference: 39'Direction from reference: 40 Degrees East North
of
X West South X

Depth To Ground Water:	Less than 50 feet	(20 points)	
(Vertical distance from	50 feet to 99 feet	(10 points)	
contaminants to seasonal	Greater than 100 feet	(0 Points)	<u>20</u>
high water elevation of			
ground water)			

Wellhead Protection Area:	Yes (20 points)	
(Less than 200 feet from a private	No (0 points)	<u>0</u>
domestic water source, or; less than		
1000 feet from all other water sources)		

Distance To Surface Water:	Less than 200 feet	(20 points)	
(Horizontal distance to perennial	200 feet to 1000 feet	(10 points)	
lakes, ponds, rivers, streams, creeks,	Greater than 1000 feet	(0 points)	<u>10</u>
irrigation canals and ditches)			

RANKING SCORE (TOTAL POINTS): 30

Date Remediation Started: _____ Date Completed: 12/9/93

Remediation Method: Excavation ☒ Approx. cubic yards 150
(Check all appropriate sections) Landfarmed _____ Insitu Bioremediation _____
Other STOCKPILED

Remediation Location: Onsite _____ Offsite ☒ NYE GC B #1E
(ie. landfarmed onsite, name and location of offsite facility) (F-7-29-9)

General Description Of Remedial Action: _____
Excavation, GROUNDWATER IMPACTED.

Ground Water Encountered: No _____ Yes ☒ Depth 1.5'

Final Pit: Sample location see Attached Documents

Closure Sampling:
(if multiple samples, attach sample results and diagram of sample locations and depths)

Sample depth 1.5' (GROUNDWATER)
Sample date 12/8/93 Sample time 1320

Sample Results

ppb	TOLUENE	2.0	ppb
Benzene (ppm) <u>0.4</u>	ETHYLBENZENE	ND	"
	TOT. XYLENE	8.3	"

Total BTEX (ppm) NAField headspace (ppm) NATPH NA

Ground Water Sample: Yes ☒ No _____ (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 1/25/00 ⁹¹⁵

SIGNATURE

Buddy D. ShawPRINTED NAME
AND TITLEBuddy D. Shaw
Environmental Coordinator

C 4806

5796 US HWY. 64, FARMINGTON, NM 87401
(505) 632-0615

CO CR 3258

JOB No: 92140
PAGE No: 1 of 1

LOCATION: LEASE: JACQUEZ GC WELL: #1 QD: 50/4 52/4 (0)
SEC: 6 TWP: 29N RNG: 9W BM: NM CNTY: SAN JUAN ST: NM PIT: ABANDONED
CONTRACTOR: P. VELASQUEZ
EQUIPMENT USED: TRACKHOSE

DATE STARTED: 12/8/93
DATE FINISHED: 12/8/93

ENVIRONMENTAL SPECIALIST: *nv*

SOIL REMEDIATION: QUANTITY: 60' X 35' / 1 1/2' 150 c.y.
DISPOSAL FACILITY: UNKNOWN NYE GC B #1E (F-7-29-9)
LAND USE: RANGE
SURFACE CONDITIONS: UNKNOWN (SEE SITE ASSESSMENT)

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 13 YARDS S 40° W FROM WELLHEAD.
DEPTH TO GROUNDWATER: 14.1
NEAREST WATER SOURCE: ~~5300'~~ > 1000' gr 1/25/00
NEAREST SURFACE WATER: < 300'

COLLECTED GW SAMPLE FOR ANAL.
SLIGHT SINK ON GW SURFACE.

FIELD 418.1 CALCULATIONS

FIELD #101 CALCULATIONS						
SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

SCALE

11/11/2016

0

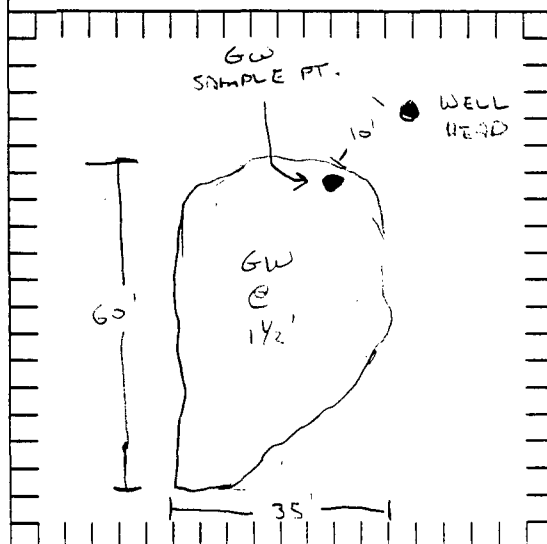
FEET

PIT PERIMETER

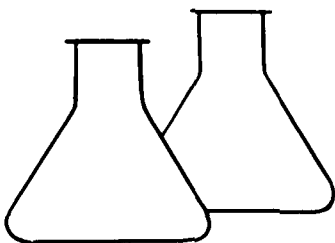
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OVM RESULTS

PIT PROFILE

[illegible]

TRAVEL NOTES: CALLOUT: 12/5/93 ONSITE: 12/5/93



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	Pit Water (1.5')	Date Reported:	12-09-93
Laboratory Number:	6646	Date Sampled:	12-08-93
Sample Matrix:	Water	Date Received:	12-08-93
Preservative:	HgCl and Cool	Date Analyzed:	12-09-93
Condition:	Cool and Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	0.4	0.2
Toluene	2.0	0.6
Ethylbenzene	ND	0.3
p,m-Xylene	6.9	0.4
o-Xylene	1.4	0.3

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	99 %
	Bromofluorobenzene	102 %

Method: Method 5030A, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC C #1 Abandoned Pit C4806

Dennis L. Cisneros
Analyst

Tony Triotano
Review

C4808

District I

P.O. Box 1980, Hobbs, NM

District II

P.O. Drawer DD, Artesia, NM 88211

District III

1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

PIT REMEDIATION AND CLOSURE REPORTOperator: Amoco Production Company Telephone: (505) - 326-9200Address: 200 Amoco Court, Farmington, New Mexico 87401Facility Or: JARQUEZ GC C #1
Well NameLocation: Unit or Qtr/Qtr Sec 0 Sec 6 T29N R 9W county SAN JUANPit Type: Separator Dehydrator Other PRODUCTION TANKLand Type: BLM , State , Fee X, Other Pit Location: Pit dimensions: length 20', width 90', depth 2 1/2'
Attach diagram)Reference: wellhead X, other Footage from reference: 125'Direction from reference: 30 Degrees X East North
of
 West South X

Depth To Ground Water:

(Vertical distance from
contaminants to seasonal
high water elevation of
ground water)

Less than 50 feet (20 points)
50 feet to 99 feet (10 points)
Greater than 100 feet (0 Points) 20

Wellhead Protection Area:

(Less than 200 feet from a private
domestic water source, or; less than
1000 feet from all other water sources)

Yes (20 points)
No (0 points) 0

Distance To Surface Water:

(Horizontal distance to perennial
lakes, ponds, rivers, streams, creeks,
irrigation canals and ditches)

Less than 200 feet (20 points)
200 feet to 1000 feet (10 points)
Greater than 1000 feet (0 points) 10

RANKING SCORE (TOTAL POINTS): 30

Date Remediation Started: _____ Date Completed: 12/14/93Remediation Method: Excavation X Approx. cubic yards 167
(Check all appropriate sections) Landfarmed _____ Insitu Bioremediation _____Other STOCKPILEDRemediation Location: Onsite _____ Offsite X NYE GC 8 # FE
(ie. landfarmed onsite, name and location of offsite facility) (F-7-29-9)

General Description Of Remedial Action: _____

Excavation, GROUNDWATER IMPACT.Ground Water Encountered: No _____ Yes X Depth 2.5'Final Pit: Sample location see Attached DocumentsClosure Sampling:
(if multiple samples, attach sample results and diagram of sample locations and depths) Sample depth 2.5' (GROUNDWATER)Sample date 12/8/93 & 12/13/93 Sample time 1340/1415

Sample Results

	12/8/93	12/13/93
Benzene(ppm)	34.1 ppb	4.5 ppb
Toluene	2.4 "	2.7 "
ETHYLBENZ.	ND "	ND "
TOT. XYLENES	160.2 "	99.7 "
Total BTEX(ppm)	NA	
Field headspace(ppm)	NA	
TPH	NA	

Ground Water Sample: Yes X No _____ (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 1/25/00

SIGNATURE

B. ShawPRINTED NAME
AND TITLEBuddy D. Shaw
Environmental Coordinator

C4808
COCR 3276 12/15/93
COCR 3260

JOB No: 92145
PAGE No: 1 of 1

DATE STARTED: 12/8/93
DATE FINISHED: 12/8/93

ENVIRONMENTAL SPECIALIST: *NV*

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 42 YARDS 530E FROM WELLHEAD.

DEPTH TO GROUNDWATER: 2.5'
NEAREST WATER SOURCE: ~~525'~~ 71000' 910 1/25/00
NEAREST SURFACE WATER: < 300'

COLLECTED GW SAMPLE FOR BTC.

SLIGHT SHEEN ON GW SURFACE 1-2" FROM P.

COLLECTED GW SAMPLE FOR BTEX (12/13/93 1415-TIME SOUTHEAST)

SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

--	--	--

0

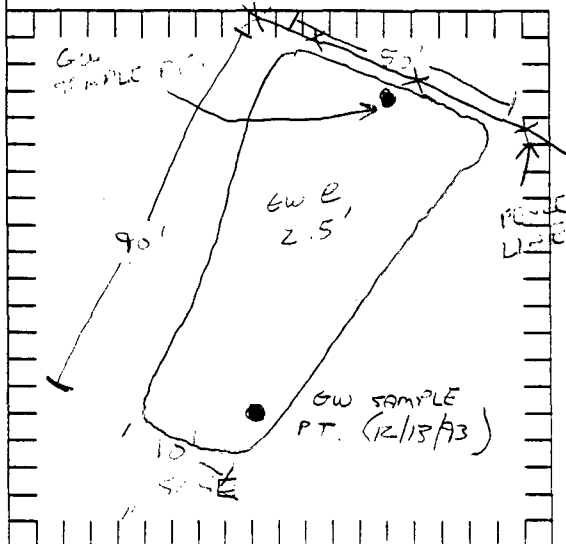
FEET

PIT PERIMETER

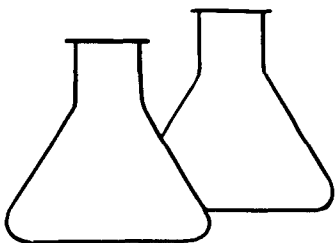
↑ N

OVM RESULTS

PIT PROFILE

[illegible]

TRAVEL NOTES: CALLOUT: 12/8/93 ONSITE: 12/8/93



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	Pit Water (2.5')	Date Reported:	12-09-93
Laboratory Number:	6648	Date Sampled:	12-08-93
Sample Matrix:	Water	Date Received:	12-08-93
Preservative:	HgCl and Cool	Date Analyzed:	12-09-93
Condition:	Cool and Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	34.1	0.2
Toluene	2.4	0.6
Ethylbenzene	ND	0.3
p,m-Xylene	147	0.4
o-Xylene	13.2	0.3

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	100 %
	Bromofluorobenzene	102 %

Method: Method 5030A, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

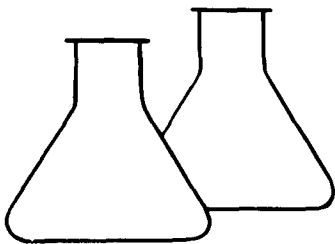
Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC C #1 Production Pit C4808

Devin L. Jensen
Analyst

Tony Tristano
Review



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	Pit Water	Date Reported:	12-14-93
Laboratory Number:	6663	Date Sampled:	12-13-93
Sample Matrix:	Water	Date Received:	12-13-93
Preservative:	HgCl & Cool	Date Analyzed:	12-14-93
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	4.5	0.2
Toluene	2.7	0.5
Ethylbenzene	ND	0.3
p,m-Xylene	96	0.4
o-Xylene	3.7	0.3

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	97 %
	Bromofluorobenzene	97 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC C #1 Production Pit C4808

Devin L. Cisneros
Analyst

Maria D. Young
Review

District I

P.O. Box 1980, Hobbs, NM

District II

P.O. Drawer DD, Artesia, NM 88211

District III

Uru Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

C4344

SUBMIT 1 COPY TO
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DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

PIT REMEDIATION AND CLOSURE REPORT

Operator: Amoco Production Company Telephone: (505) -326-9200

Address: 200 Amoco Court, Farmington, New Mexico 87401

Facility Or: JAQUEZ GC C#1
Well Name

Location: Unit or Qtr/Qtr sec 0 sec 6 T29N R 9W county SAN JUAN

Pit Type: Separator ☒ Dehydrator ☐ Other ☐

Land Type: BLM ☐ State ☐ Fee ☒ Other ☐

Pit Location: Pit dimensions: length 80', width 45', depth 2'
(attach diagram)

Reference: wellhead ☒ other ☐

Footage from reference: 150'

Direction from reference: 80 Degrees East North
of
☒ West South ☒

Depth To Ground Water: Less than 50 feet (20 points)
(Vertical distance from 50 feet to 99 feet (10 points)
contaminants to seasonal Greater than 100 feet (0 Points) 20
high water elevation of
ground water)

Wellhead Protection Area: Yes (20 points)
(Less than 200 feet from a private No (0 points) 0
domestic water source, or; less than
1000 feet from all other water sources)

Distance To Surface Water: Less than 200 feet (20 points)
(Horizontal distance to perennial 200 feet to 1000 feet (10 points)
lakes, ponds, rivers, streams, creeks, Greater than 1000 feet (0 points) 10
irrigation canals and ditches)

RANKING SCORE (TOTAL POINTS): 30

Date Remediation Started: _____ Date Completed: 12/9/93

Remediation Method: Excavation ☒ Approx. cubic yards 267
 (Check all appropriate sections) Landfarmed _____ Insitu Bioremediation _____
 Other STOCKPILED

Remediation Location: Onsite _____ Offsite ☒ NYE GC B#1E
 (ie. landfarmed onsite, name and location of offsite facility) (F-7-29-9)

General Description Of Remedial Action: _____

Excavation. GROUNDWATER IMPACT.

Ground Water Encountered: No _____ Yes ☒ Depth 2'Final Pit: Sample location see Attached Documents

Closure Sampling:
 (if multiple samples, attach sample results and diagram of sample locations and depths)

Sample depth 2' (GROUNDWATER)Sample date 12/8/93 Sample time 1330

Sample Results

Benzene (ppm)	_____	BENZENE	4.0	ppb
Total BTEX (ppm)	<u>NA</u>	TOLUENE	3.2	"
Field headspace (ppm)	<u>NA</u>	ETHYLBENZ.	0.5	"
TPH	<u>NA</u>	TOT. XYLENES	8.5	"

Ground Water Sample: Yes ☒ No _____ (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 1/25/00 90

SIGNATURE

B. ShawPRINTED NAME
AND TITLEBuddy D. Shaw
Environmental Coordinator

C4344

COCR 3259

JOB No: 9240
PAGE No: 1 of 1

DATE STARTED: 12/8/93
DATE FINISHED: 12/8/93

ENVIRONMENTAL SPECIALIST: NV

SOIL REMEDIATION: QUANTITY: 80' x 45' x 2' 267 C.Y.
DISPOSAL FACILITY: ~~UNKNOWN~~ NYE GC B #1E (F-7-29-9)
LAND USE: LARGE
SURFACE CONDITIONS: UNKNOWN (SEE SITE ASSESS. FIELD REPORT)

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 50 YARDS S 80° W FROM WELLHEAD.

DEPTH TO GROUNDWATER: 2.5'
NEAREST WATER SOURCE: < 300'
NEAREST SURFACE WATER: < 300'

COLLECTED GW SAMPLE FOR ITEX
SLIGHT SHEEN ON GW SURFACE

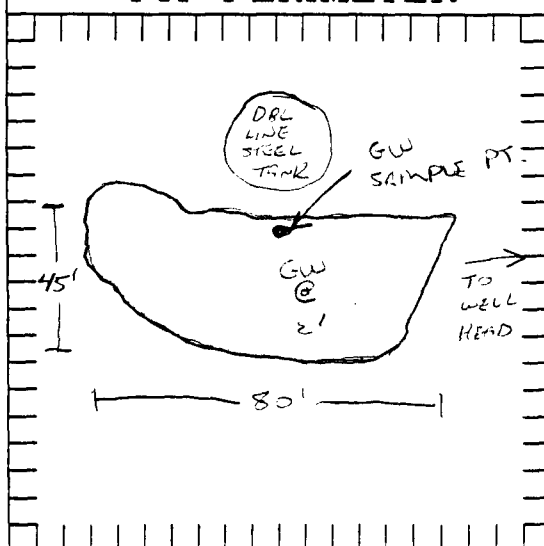
SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

--	--	--

0

FEET

PIT PERIMETER

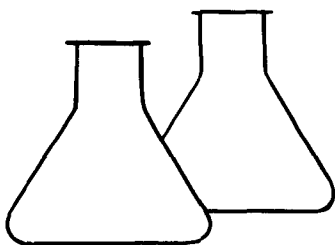


OVM RESULTS

[illegible]

PIT PROFILE

TRAVEL NOTES: CALLOUT: 12/1/73 ONSITE: 12/8/73



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	Pit Water (2')	Date Reported:	12-09-93
Laboratory Number:	6647	Date Sampled:	12-08-93
Sample Matrix:	Water	Date Received:	12-08-93
Preservative:	HgCl and Cool	Date Analyzed:	12-09-93
Condition:	Cool and Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	4.0	0.2
Toluene	3.2	0.6
Ethylbenzene	0.5	0.3
p,m-Xylene	7.0	0.4
o-Xylene	1.5	0.3

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	95 %
	Bromofluorobenzene	102 %

Method: Method 5030A, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Jaquez GC C #1 Separator Pit C4344

Dennis L. Aymer
Analyst

Tony Tristano
Review

BLAGG ENGINEERING, INC.

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505) 632-1199

Fax: (505) 632-3903

June 29, 1994

Mr. William C. Olson
Hydrogeologist
Environmental Bureau
New Mexico Oil Conservation Division
Post Office Box 2088
Santa Fe, New Mexico 87504

RE: Groundwater sampling
Amoco Production Company
Jaquez GC C1/E1 Well Locations
San Juan County, New Mexico
Unit O, Section 06, T29N, R09W

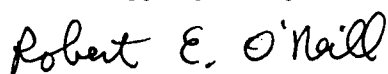
Dear Mr. Olson:

Per the instructions of Mr. Buddy Shaw, Amoco Production Company, the attached report on groundwater monitoring at the above referenced well locations is being submitted for your review. A copy of this report is also being submitted to Mr. Denny Foust at the Aztec OCD office. Please refer to the original report submitted to you with a March 25, 1994 cover letter for additional information.

Table 1 summarizes all sampling results since initial installation of 15 wellpoints in March 1994. The wellpoints were installed after contaminated pits were excavated for site remediation. Additional excavation was done in the area of wellpoint #7 after initial sampling was completed to remove a small area of remaining contamination. Wellpoint #7 was destroyed in the process. The attached site diagram also indicates the most recent groundwater elevations.

If you have any questions or comments concerning this report, please contact Blagg Engineering at 632-1199.

Respectfully submitted,
Blagg Engineering, Inc.



Robert E. O'Neill, M.S.
Civil Engineering, Environmental

Attachments: Table 1 - Sample Results
Site Diagram
Laboratory Reports

xc: Buddy Shaw, Amoco
Denny Foust, NMOCD Aztec Office

REO/reo

JAQ-6-94.RPT

TABLE 1
AMOCO PRODUCTION COMPANY
JAQUEZ GC C1/E1
GROUNDWATER SAMPLING

June 29, 1994

WELL POINT	DATE	pH	COND. umhos/cm	BENZENE ug/L	TOLUENE ug/L	E-BENZENE ug/L	T-XYLENE ug/L
#1	3-4-94	7.6	900	ND	0.8	ND	1.3
	6-15-94	6.9	700	0.8	ND	ND	ND
#2	3-4-94	7.1	300	ND	0.7	ND	0.6
	6-15-94	7.2	500	ND	ND	ND	ND
#3	3-4-94	7.5	300	ND	0.5	ND	0.6
	6-15-94	7.0	500	ND	ND	ND	ND
#4	3-4-94	7.2	400	ND	1.4	ND	2.0
	6-15-94	7.0	500	ND	ND	ND	ND
#5	3-4-94	7.5	400	ND	ND	ND	ND
	6-15-94	7.0	600	ND	ND	ND	ND
#6	3-4-94	7.3	400	ND	0.7	ND	ND
	6-15-94	7.1	500	ND	1.1	ND	1.4
#7	3-4-94	7.5	500	2.6	0.8	0.9	700.0
#8	3-4-94	7.3	400	ND	ND	ND	0.8
	6-15-94	7.0	500	ND	ND	ND	ND
#9	3-4-94	7.4	2100	1.2	0.7	0.4	20.0
	6-15-94	7.0	800	8.4	1.8	2.7	46.2
#10	3-4-94	7.2	500	0.7	ND	ND	151.0
	6-15-94	7.1	400	ND	ND	ND	16.0
#11	3-4-94	7.4	600	ND	ND	ND	0.7
	6-15-94	7.2	400	ND	ND	ND	ND
#12	3-4-94	7.4	300	ND	ND	ND	ND
	6-15-94	7.3	400	0.8	0.6	ND	ND
#13	3-4-94	7.5	500	ND	ND	ND	1.1
	6-15-94	7.3	600	1.0	1.0	0.4	ND
#14	3-4-94	7.4	400	ND	0.9	1.6	19.7
	6-15-94	7.8	400	ND	ND	ND	ND
#15	3-4-94	7.5	400	ND	ND	0.3	0.4
	6-15-94	7.6	400	ND	ND	ND	ND

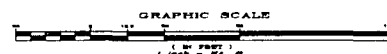
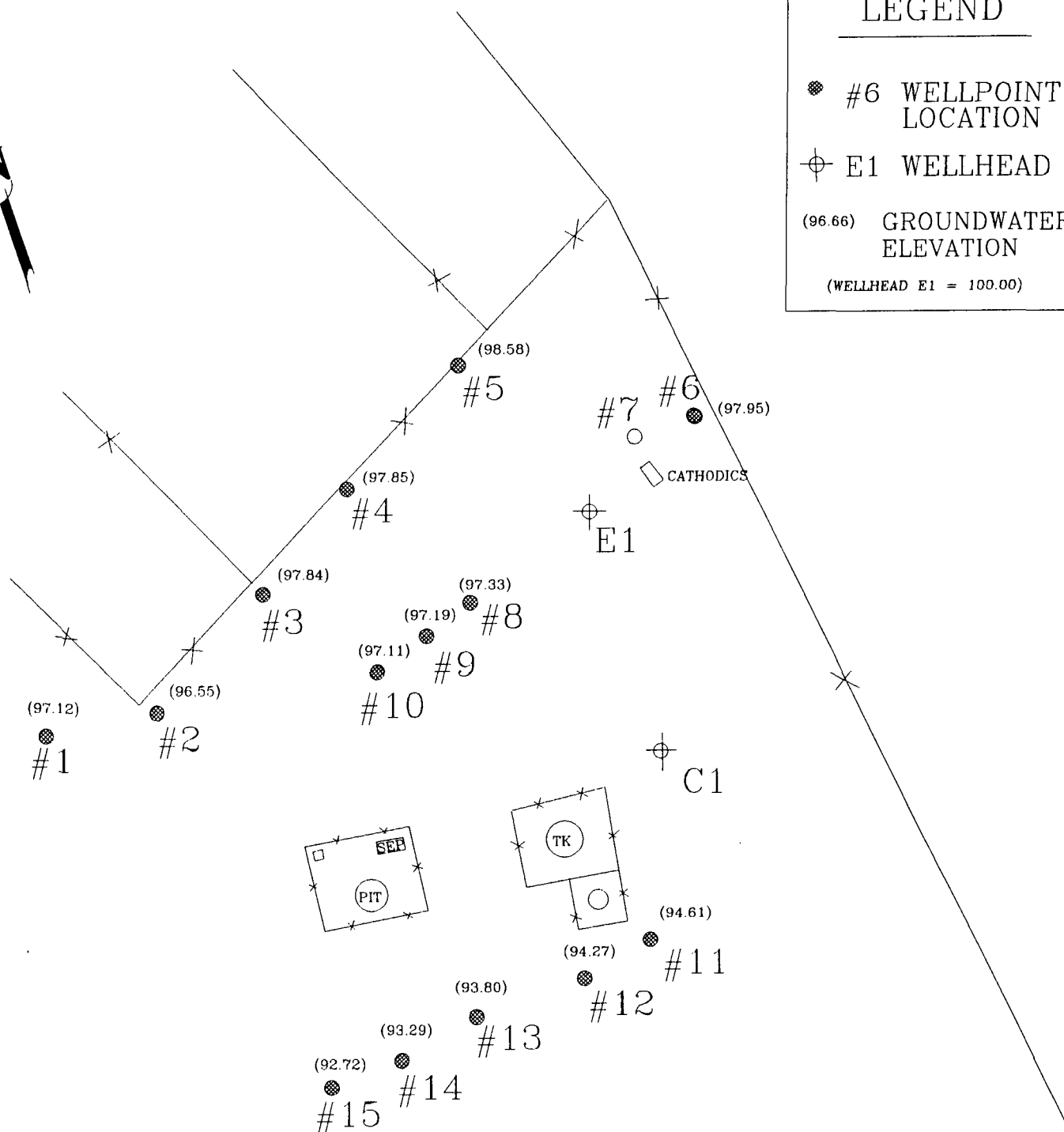
LEGEND

● #6 WELLPOINT LOCATION

⊕ E1 WELLHEAD

(96.66) GROUNDWATER ELEVATION

(WELLHEAD E1 = 100.00)



JAQ-6-94 DWG

AMOCO PRODUCTION
COMPANY
JAQUEZ C1/E1

(O) S06-T29N-R09W

BLAGG ENGINEERING, INC.
P.O. BOX 87
BLOOMFIELD, NM 87413

PHONE: 632-1199 FAX: 632-3903

WELL LOCATIONS
G.W. ELEVATIONS

FIGURE #1 DRWN: 3/94

P.M: REO REV'D 6/94

**ON SITE
TECHNOLOGIES, LTD.**
AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering Inc.*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/16/94*
Lab ID: *1669*
Sample ID: *1572*
Job No. *2-1000*

Project Name: *Jaquez C1/E1*
Project Location: *WP - 1*
Sampled by: *REO* Date: *6/15/94*
Analyzed by: *DLA* Date: *6/16/94*
Sample Matrix: *Liquid*

Time: *8:30*

Aromatic Volatile Organics

<i>Component</i>	<i>**Measured Concentration ug/L</i>
<i>Benzene</i>	<i>0.8</i>
<i>Toluene</i>	<i>ND</i>
<i>Ethylbenzene</i>	<i>ND</i>
<i>m,p-Xylene</i>	<i>ND</i>
<i>o-Xylene</i>	<i>ND</i>
<i>TOTAL</i>	<i>0.8 ug/L</i>

ND - Not Detectable

*** - Method Detection Limit, 2 ug/L*

***Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by
Gas Chromatography***

Approved by: *[Signature]*
Date: *6/16/94*



ON SITE TECHNOLOGIES, LTD.

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering Inc.*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/16/94*
Lab ID: *1670*
Sample ID: *1572*
Job No. *2-1000*

Project Name: *Jaquez C1/E1*
Project Location: *WP - 2*
Sampled by: *REO*
Analyzed by: *DLA*
Sample Matrix: *Liquid*

Date: *6/15/94*
Date: *6/16/94*

Time: *8:50*

Aromatic Volatile Organics

Component	**Measured Concentration ug/L
<i>Benzene</i>	<i>ND</i>
<i>Toluene</i>	<i>ND</i>
<i>Ethylbenzene</i>	<i>ND</i>
<i>m,p-Xylene</i>	<i>ND</i>
<i>o-Xylene</i>	<i>ND</i>
<i>TOTAL</i>	<i>0.0 ug/L</i>

ND - Not Detectable

*** - Method Detection Limit, 2 ug/L*

*Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by
Gas Chromatography*

Approved by: *Jan H*
Date: *6/16/94*

**ON SITE
TECHNOLOGIES, LTD.**
AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering Inc.*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/16/94*
Lab ID: *1671*
Sample ID: *1572*
Job No. *2-1000*

Project Name: *Jaquez C1/E1*
Project Location: *WP - 3*
Sampled by: *REO* Date: *6/15/94*
Analyzed by: *DLA* Date: *6/16/94*
Sample Matrix: *Liquid*

Time: *9:10*

Aromatic Volatile Organics

Component	**Measured Concentration ug/L
<i>Benzene</i>	<i>ND</i>
<i>Toluene</i>	<i>ND</i>
<i>Ethylbenzene</i>	<i>ND</i>
<i>m,p-Xylene</i>	<i>ND</i>
<i>o-Xylene</i>	<i>ND</i>
TOTAL	0.0 ug/L

ND - Not Detectable

*** - Method Detection Limit, 2 ug/L*

**Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by
Gas Chromatography**

Approved by:
Date:

Ja Gx
6/16/94



ON SITE TECHNOLOGIES, LTD.

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering Inc.*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/16/94*
Lab ID: *1672*
Sample ID: *1572*
Job No. *2-1000*

Project Name: *Jaquez C1/E1*
Project Location: *WP - 4*
Sampled by: *REO* Date: *6/15/94*
Analyzed by: *DLA* Date: *6/16/94*
Sample Matrix: *Liquid*

Time: *9:45*

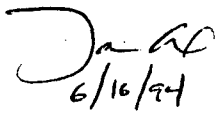
Aromatic Volatile Organics

Component	**Measured Concentration ug/L
<i>Benzene</i>	<i>ND</i>
<i>Toluene</i>	<i>ND</i>
<i>Ethylbenzene</i>	<i>ND</i>
<i>m,p-Xylene</i>	<i>ND</i>
<i>o-Xylene</i>	<i>ND</i>
TOTAL	0.0 ug/L

ND - Not Detectable

*** - Method Detection Limit, 2 ug/L*

**Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by
Gas Chromatography**

Approved by: 

Date: *6/16/94*

**ON SITE
TECHNOLOGIES, LTD.**
AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering Inc.*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/16/94*
Lab ID: *1673*
Sample ID: *1572*
Job No. *2-1000*

Project Name: *Jaquez C1/E1*
Project Location: *WP - 5*
Sampled by: *REO*
Analyzed by: *DLA*
Sample Matrix: *Liquid*

Date: *6/15/94*
Date: *6/16/94*

Time: *10:10*

Aromatic Volatile Organics

<i>Component</i>	<i>**Measured Concentration ug/L</i>
<i>Benzene</i>	<i>ND</i>
<i>Toluene</i>	<i>ND</i>
<i>Ethylbenzene</i>	<i>ND</i>
<i>m,p-Xylene</i>	<i>ND</i>
<i>o-Xylene</i>	<i>ND</i>
<i>TOTAL</i>	<i>0.0 ug/L</i>

ND - Not Detectable

*** - Method Detection Limit, 2 ug/L*

***Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by
Gas Chromatography***

Approved by: *Jan Gx*

Date: *6/16/94*



ON SITE TECHNOLOGIES, LTD.

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering Inc.*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/16/94*
Lab ID: *1674*
Sample ID: *1572*
Job No. *2-1000*

Project Name: *Jaquez C1/E1*
Project Location: *WP - 6*
Sampled by: *REO*
Analyzed by: *DLA*
Sample Matrix: *Liquid*

Date: *6/15/94*
Date: *6/16/94*

Time: *10:30*

Aromatic Volatile Organics

Component	**Measured Concentration ug/L
<i>Benzene</i>	<i>ND</i>
<i>Toluene</i>	<i>1.1</i>
<i>Ethylbenzene</i>	<i>ND</i>
<i>m,p-Xylene</i>	<i>1.4</i>
<i>o-Xylene</i>	<i>ND</i>
<i>TOTAL</i>	<i>2.5 ug/L</i>

ND - Not Detectable

*** - Method Detection Limit, 2 ug/L*

*Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by
Gas Chromatography*

Approved by:
Date:

Ja 6x
6/16/94

**ON SITE
TECHNOLOGIES, LTD.**
AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering Inc.*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/16/94*
Lab ID: *1676*
Sample ID: *1572*
Job No. *2-1000*

Project Name: *Jaquez C1/E1*
Project Location: *WP - 8*
Sampled by: *REO* Date: *6/15/94*
Analyzed by: *DLA* Date: *6/16/94*
Sample Matrix: *Liquid*

Time: *11:00*

Aromatic Volatile Organics

Component	**Measured Concentration ug/L
<i>Benzene</i>	<i>ND</i>
<i>Toluene</i>	<i>ND</i>
<i>Ethylbenzene</i>	<i>ND</i>
<i>m,p-Xylene</i>	<i>ND</i>
<i>o-Xylene</i>	<i>ND</i>
<i>TOTAL</i>	<i>0.0 ug/L</i>

ND - Not Detectable

*** - Method Detection Limit, 2 ug/L*

**Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by
Gas Chromatography**

Approved by: *[Signature]*
Date: *6/16/94*



ON SITE TECHNOLOGIES, LTD.

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering Inc.*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/16/94*
Lab ID: *1677*
Sample ID: *1572*
Job No. *2-1000*

Project Name: *Jaquez C1/E1*
Project Location: *WP - 9*
Sampled by: *REO* Date: *6/15/94*
Analyzed by: *DLA* Date: *6/16/94*
Sample Matrix: *Liquid*

Time: *11:20*

Aromatic Volatile Organics

Component	**Measured Concentration ug/L
<i>Benzene</i>	<i>8.4</i>
<i>Toluene</i>	<i>1.8</i>
<i>Ethylbenzene</i>	<i>2.7</i>
<i>m,p-Xylene</i>	<i>45.2</i>
<i>o-Xylene</i>	<i>1.0</i>
	<i>TOTAL 59 ug/L</i>

ND - Not Detectable

** - Method Detection Limit, 2 ug/L

*Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by
Gas Chromatography*

Approved by: *[Signature]*

Date: *6/16/94*

**ON SITE
TECHNOLOGIES, LTD.**
AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering Inc.*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/16/94*
Lab ID: *1678*
Sample ID: *1572*
Job No. *2-1000*

Project Name: *Jaquez C1/E1*
Project Location: *WP - 10*
Sampled by: *REO* Date: *6/15/94*
Analyzed by: *DLA* Date: *6/16/94*
Sample Matrix: *Liquid*

Time: *11:40*

Aromatic Volatile Organics

Component	**Measured Concentration ug/L
<i>Benzene</i>	<i>ND</i>
<i>Toluene</i>	<i>ND</i>
<i>Ethylbenzene</i>	<i>ND</i>
<i>m,p-Xylene</i>	<i>16.0</i>
<i>o-Xylene</i>	<i>ND</i>
TOTAL	16.0 ug/L

ND - Not Detectable

*** - Method Detection Limit, 2 ug/L*

**Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by
Gas Chromatography**

Approved by: *Ja H*
Date: *6/16/94*

**ON SITE
TECHNOLOGIES, LTD.**
AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering Inc.*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/16/94*
Lab ID: *1679*
Sample ID: *1572*
Job No. *2-1000*

Project Name: *Jaquez C1/E1*
Project Location: *WP - 11*
Sampled by: *REO*
Analyzed by: *DLA*
Sample Matrix: *Liquid*

Date: *6/15/94*
Date: *6/16/94*

Time: *12:15*

Aromatic Volatile Organics

Component	**Measured Concentration ug/L
<i>Benzene</i>	<i>ND</i>
<i>Toluene</i>	<i>ND</i>
<i>Ethylbenzene</i>	<i>ND</i>
<i>m,p-Xylene</i>	<i>ND</i>
<i>o-Xylene</i>	<i>ND</i>
<i>TOTAL</i>	<i>0.0 ug/L</i>

ND - Not Detectable

*** - Method Detection Limit, 2 ug/L*

**Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by
Gas Chromatography**

Approved by:
Date:

Jaquez
6/16/94



ON SITE TECHNOLOGIES, LTD.

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering Inc.*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/17/94*
Lab ID: *1680*
Sample ID: *1572*
Job No. *2-1000*

Project Name: *Jaquez C1/E1*
Project Location: *WP - 12*
Sampled by: *REO*
Analyzed by: *DLA*
Sample Matrix: *Liquid*

Date: *6/15/94*
Date: *6/17/94*

Time: *12:40*

Aromatic Volatile Organics

Component	**Measured Concentration ug/L
<i>Benzene</i>	<i>0.8</i>
<i>Toluene</i>	<i>0.6</i>
<i>Ethylbenzene</i>	<i>ND</i>
<i>m,p-Xylene</i>	<i>ND</i>
<i>o-Xylene</i>	<i>ND</i>
<i>TOTAL</i>	<i>1.4 ug/L</i>

ND - Not Detectable

*** - Method Detection Limit, 2 ug/L*

*Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by
Gas Chromatography*

Approved by:
Date:

Don W.
6/17/94



ON SITE TECHNOLOGIES, LTD.

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering Inc.*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/17/94*
Lab ID: *1681*
Sample ID: *1572*
Job No. *2-1000*

Project Name: *Jaquez C1/E1*
Project Location: *WP - 13*
Sampled by: *REO*
Analyzed by: *DLA*
Sample Matrix: *Liquid*

Date: *6/15/94*
Date: *6/17/94*

Time: *12:50*

Aromatic Volatile Organics

Component	**Measured Concentration ug/L
<i>Benzene</i>	<i>1.0</i>
<i>Toluene</i>	<i>1.0</i>
<i>Ethylbenzene</i>	<i>0.4</i>
<i>m,p-Xylene</i>	<i>ND</i>
<i>o-Xylene</i>	<i>ND</i>
<i>TOTAL</i>	<i>2.4 ug/L</i>

ND - Not Detectable

*** - Method Detection Limit, 2 ug/L*

*Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by
Gas Chromatography*

Approved by: *[Signature]*
Date: *6/17/94*



ON SITE TECHNOLOGIES, LTD.

AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering Inc.*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/17/94*
Lab ID: *1682*
Sample ID: *1573*
Job No. *2-1000*

Project Name: *Jaquez C1/E1*
Project Location: *WP - 14*
Sampled by: *REO* Date: *6/15/94*
Analyzed by: *DLA* Date: *6/17/94*
Sample Matrix: *Liquid*

Time: *13:10*

Aromatic Volatile Organics

Component	**Measured Concentration ug/L
<i>Benzene</i>	<i>ND</i>
<i>Toluene</i>	<i>ND</i>
<i>Ethylbenzene</i>	<i>ND</i>
<i>m,p-Xylene</i>	<i>ND</i>
<i>o-Xylene</i>	<i>ND</i>
<i>TOTAL</i>	<i>0.0 ug/L</i>

ND - Not Detectable

*** - Method Detection Limit, 2 ug/L*

*Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by
Gas Chromatography*

Approved by:

Date:

Ja Gx
6/17/94

**ON SITE
TECHNOLOGIES, LTD.**
AROMATIC VOLATILE ORGANICS

Attn: *R. E. O'Neill*
Company: *Blagg Engineering Inc.*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *6/17/94*
Lab ID: *1683*
Sample ID: *1573*
Job No. *2-1000*

Project Name: *Jaquez C1/E1*
Project Location: *WP - 15*
Sampled by: *REO*
Analyzed by: *DLA*
Sample Matrix: *Liquid*

Date: *6/15/94*
Date: *6/17/94*

Time: *13:30*

Aromatic Volatile Organics

Component	**Measured Concentration ug/L
<i>Benzene</i>	<i>ND</i>
<i>Toluene</i>	<i>ND</i>
<i>Ethylbenzene</i>	<i>ND</i>
<i>m,p-Xylene</i>	<i>ND</i>
<i>o-Xylene</i>	<i>ND</i>
TOTAL	0.0 ug/L

ND - Not Detectable

*** - Method Detection Limit, 2 ug/L*

**Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by
Gas Chromatography**

Approved by:
Date:

Jan 64
6/17/94



ON SITE TECHNOLOGIES, LTD.

QUALITY ASSURANCE REPORT for EPA Method 8020

Date Analyzed: 6/16/94

Internal QC No.: 0222-STD

Surrogate QC No.: 0223-STD

Reference Standard QC No.: 0300-STD

Method Blank

Analytes in Blank	Amount
Average Amount of All Analytes In Blank	<1 ppb

Calibration Check

Calibration Standards	Units of Measure	*True Value	Analyzed Value	% Diff	Limit
Benzene	ppb	20	22	10	15%
Toluene	ppb	20	21	4	15%
Ethylbenzene	ppb	20	20	0	15%
m,p-Xylene	ppb	40	39	2	15%
o-Xylene	ppb	20	20	1	15%

Spike Results

Analyte	1 - Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Benzene	104	105	(39-150)	1	20%
Toluene	104	109	(46-148)	3	20%
Ethylbenzene	104	108	(32-160)	3	20%
m,p-Xylene	101	104	(35-145)	2	20%
o-Xylene	101	105	(35-145)	3	20%

Surrogate Recoveries

Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered	S3 Percent Recovered
Limits	(70-130)		
1669-1572	99		

S1: Fluorobenzene



ON SITE TECHNOLOGIES, LTD.

QUALITY ASSURANCE REPORT for EPA Method 8020

Date Analyzed: 6/17/94

Internal QC No.: 0222-STD
Surrogate QC No.: 0223-STD
Reference Standard QC No.: 0300-STD

Method Blank

Analytes in Blank	Amount
Average Amount of All Analytes In Blank	<1 ppb

Calibration Check

Calibration Standards	Units of Measure	*True Value	Analyzed Value	% Diff	Limit
Benzene	ppb	20	22	9	15%
Toluene	ppb	20	20	2	15%
Ethylbenzene	ppb	20	19	4	15%
m,p-Xylene	ppb	40	38	6	15%
o-Xylene	ppb	20	19	3	15%

Spike Results

Analyte	1- Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Benzene	102	102	(39-150)	0	20%
Toluene	103	100	(46-148)	2	20%
Ethylbenzene	101	99	(32-160)	2	20%
m,p-Xylene	101	99	(35-145)	1	20%
o-Xylene	101	98	(35-145)	2	20%

Surrogate Recoveries

Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered	S3 Percent Recovered
Limits	(70-130)		
1680-1572	99		

S1: Fluorobenzene

ON SITE TECHNOLOGIES LIMITED

CHAIN OF CUSTODY RECORD

657 W. Maple • P. O. Box 2606 • Farmington, NM 87499
LAB: [505] 325-5667 • FAX: [505] 325-6256

Date: 6-15-94

Page 1 of 2

Purchase Order No.:		Reference No.:		Name <u>R. E. O'NEILL</u>		Title	
SEND INVOICE TO		Company <u>BLA66 ENGINEERING INC.</u>		Company <u>SAME</u>			
		Address <u>P.O. BOX 87</u>		Mailing Address			
		City, State, Zip <u>BLOOMFIELD, N.M. 87413</u>		City, State, Zip			
				Telephone No. <u>632-1199</u>		Telefax No. <u>632-3903</u>	
Special Instructions: <u>JACQUEZ CI/EI</u>				ANALYSIS REQUESTED			
Sampler: <u>R. E. O'NEILL</u>							
SAMPLE IDENTIFICATION		DATE/TIME SAMPLED	COMPOSITE/ GRAB	PRESERVATIVES	Number of Containers	Remarks (matrix)	
WP-1		<u>6/15 0830</u>		<u>HgCl2 - ICE</u>	<u>2</u>	<u>WADR</u>	
WP-2		<u>" 0850</u>		<u>"</u>	<u>2</u>	<u>"</u>	
WP-3		<u>" 0910</u>		<u>"</u>	<u>2</u>	<u>"</u>	
WP-4		<u>" 0945</u>		<u>"</u>	<u>2</u>	<u>"</u>	
WP-5		<u>" 1010</u>		<u>"</u>	<u>2</u>	<u>"</u>	
WP-6		<u>" 1030</u>		<u>"</u>	<u>2</u>	<u>"</u>	
WP-8		<u>" 1100</u>		<u>"</u>	<u>2</u>	<u>"</u>	
WP-9		<u>" 1120</u>		<u>"</u>	<u>2</u>	<u>"</u>	
WP-10		<u>" 1140</u>		<u>"</u>	<u>2</u>	<u>"</u>	
WP-11		<u>" 1215</u>		<u>"</u>	<u>2</u>	<u>"</u>	
WP-12		<u>" 1240</u>		<u>"</u>	<u>2</u>	<u>"</u>	
WP-13		<u>" 1250</u>		<u>"</u>	<u>2</u>	<u>"</u>	
Relinquished by: <u>R. E. O'NEILL</u>		Date/Time <u>6/15 1412</u>	Received by: <u>[Signature]</u>		Date/Time <u>6/15/94 1412</u>		
Relinquished by: <u>[Signature]</u>		Date/Time <u>6/15/94 1529</u>	Received by: <u>[Signature]</u>		Date/Time <u>6/15/94 1529</u>		
Relinquished by: <u>[Signature]</u>		Date/Time	Received by:		Date/Time		
Method of Shipment:		Rush		5 Working Days	10 Working Days	Sampling Location:	
Authorized by: _____		(Client Signature <u>Must</u> Accompany Request)		Date _____			

1573

1573

657 W. Maple ■ P. O. Box 2606 ■ Farmington, NM 87499
LAB: (505) 325-5667 ■ FAX: (505) 325-6256

[illegible]



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

December 21, 1999

CERTIFIED MAIL
RETURN RECEIPT NO. Z-274-520-744

Mr. B.D. Shaw
Amoco Production Company
200 Amoco Court
Farmington, New Mexico 87401

**RE: GROUND WATER CONTAMINATION
JAQUEZ COM C#1 AND E#1 WELL SITES**

Dear Mr. Shaw:

The New Mexico Oil Conservation Division (OCD) is currently working with El Paso Field Services (EPFS) to remediate contaminated soil and ground water related to EPFS's former dehydration pits at the Jaquez Com C#1 & E#1 wells sites north of Blanco, New Mexico.

A review of the OCD's files shows that Amoco Production Company (Amoco) has also conducted soil and ground water remedial actions at the site. While Amoco supplied the OCD with some initial reports on Amoco's soil and ground water actions, the OCD has no record of receiving any correspondence from Amoco since June 29, 1994. Therefore, the OCD requires that Amoco submit a comprehensive report on all soil and ground water investigation and remedial actions at the Jaquez Com C#1 and E#1 well sites. The report shall be submitted to the OCD Santa Fe Office by February 2, 2000 with a copy provided to the OCD Aztec District Office.

If you have any questions or comments, please call me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: OCD Aztec District Office
Jeff Blagg, Blagg Engineering, Inc.
John Jaquez