3R - 19

REPORTS

DATE:

Feb 21-22, 1996

BLAGG ENGINEERING, INC.

P.O. Box 87, Bloomfield, New Mexico 87413 Phone: (505) 632-1199 Fax: (505) 632-3903

February 27, 1996

Mr. William C. Olson Hydrogeologist Environmental Bureau New Mexico Oil Conservation Division 2040 South Pacheco Santa Fe, New Mexico 87505

RE: Groundwater Sampling

Amoco GCU Com I 181 Well Location

San Juan County, New Mexico Unit F, Section 34, T29N, R12W

Dear Mr. Olson:

On behalf of Amoco Production Company, Blagg Engineering, Inc. has prepared this quarterly monitoring report for the above referenced site. Table 1 of this report includes the latest and previous quarterly groundwater sampling results. Figure 1 shows the current monitor well locations, groundwater elevations, and contours.

We trust this information will be of assistance in evaluating the remediation process used at this site. If you have any further questions regarding this report, or we can be of assistance in any other matters, please contact Blagg Engineering at 632-1199.

Respectfully submitted, BLAGG ENGINEERING, INC.

Robert E. O'neill

Robert E. Q'Neill, M.S.

Civil engineering, Environmental

Attachments: Table 1 - Sampling Results

Figure 1 - Site Diagram Laboratory Reports

QA/QC

xc: Buddy Shaw, Amoco

Denny Foust, NMOCD Aztec Office

REO/reo MAR96-WO.RPT

TABLE 1 AMOCO PRODUCTION COMPANY GCU COM | 181 GROUNDWATER SAMPLING FEBRUARY 21-22, 1996

SAMPLE	DATE	рН	COND.	BENZENE	TOLUENE	E-BENZ.	T-XYL.	NITRATE	FCB/
I.D.								NITROGEN	100 mls
MW #5	02/00/04		umhos/cm	ppb	ppb	ppb	ppb	mg/L	COLONIES
IVIVV #5	02/09/94 06/13/94	7.0 7.0	6300 7800	ND <1	0.5 <1	ND <1	3.1		
	09/26/94	7.0	5200	ND ND	ND	ND	ND		
	06/05/95	7.1	7700	ND	ND	2.1	ND		
	08/29/95	6.9	5500	ND	ND	ND	ND		
	11/20/95	7.0	4200	ND	ND	ND	ND		
	02/22/96	7.0	3600	ND	ND	ND	ND		
MW #7	02/09/94	7.0	10100	12.9	16.7	580.0	1300.3		
	06/13/94	7.0	11000	<1	10.0	<1	1480.0		
	09/26/94	7.2	9000	12.8	ND	606.0	73.3		
	06/05/95	7.2	10200	2.1	33.1	375.8	12.9		
	08/29/95	7.0	9000	9.2	21.7	200.0	21.6		
	11/20/95	7.2	7600	8.5	25.1	47.0	28.3		
VA/D #40D	02/22/96	7.2	5600	6.6	40.7	26.9	68.6		
WP #10B	06/05/95 08/29/95	7.2 6.1	15600 9000	1.7 1.2	ND 1.0	ND	4.6 2.4		
	11/20/95	6.4	7900	ND	0.6	0.8	1.9	+	
	02/21/96	6.2	7900	0.2	0.5	0.8	0.9		
MW #17	11/03/94	7.2	4000	ND	ND	ND	ND	+	
	06/05/95	7.4	3400	ND	ND	ND	0.8	 	
	08/29/95	7.0	3800	ND	ND	ND	ND ND		
	11/20/95	6.9	3200	ND	ND	ND	ND		
		WELL DES	TROYED W	HILE REMO	VING COMP	OST PILES			
WP #21A	06/05/95			DRY					
	08/29/95	6.9	4300	ND	1.0	0.5	0.4		
	11/20/95	6.8	3200	ND	1.3	0.8	ND_		
	01/03/96	6.8	3200	ND	ND	ND	4.4	-	
14)4/#25	02/21/96	6.7	3600	0.6	1.0	0.5	7.6		
MW #25	02/09/94 06/13/94	7.0 7.0	5500 5700	ND <1	ND <1	0.3 <1	1.8 <1		
	09/26/94	7.3	5100	ND	ND	ND	ND		
	06/05/95	7.3	5800	ND	ND	ND	0.7	-	
	08/29/95	7.0	5900	ND	ND	ND	ND	1	
	11/20/95	6.9	4700	ND	ND	ND	ND		
	02/22/96	7.2	3900	ND	ND	ND	ND		
MW #28	02/09/94	7.0	3800	0.4	1.8	ND	8.8	0.07	0
	06/14/94	7.0	4000	<1	<1	<1	<1	0.18	<1
	09/26/94	7.1	3900	ND	ND	0.4	ND	1	0
	06/05/95	7.4	3500	ND	ND	ND	0.7		
	08/29/95	7.2	3200	ND	ND	0.3	ND		
	11/20/95	7,0	3700	ND	ND	ND	ND		
VAID VICTA	00/00/0		TROYED W				- 0.4	-	
WP #31A	02/09/94	7.0	4800	ND .	ND	ND	0.4		
	06/13/94	7.0	4500	<1 ND	<1	<1 ND	<1 ND	 	
	09/26/94 06/05/95	6.8 7.1	4800 4500	ND ND	0.5 ND	ND ND	ND 0.5	 	
	08/29/95	6.4	4100	ND ND	1.7	ND ND	ND	+	
	11/20/95	6.7	4200	ND	ND	ND	ND		
		WELL DES	TROYED W	HILE REMO				 	
WP #32A	06/05/95	7.1	14000	3.2	ND	ND	2.8		
	08/29/95	6.1	8200	3.2	0.7	1.3	2.0		
	11/20/95	6.2	6500	0.8	0.6	0.8	ND		
	02/21/96	6.2	6300	0.4	0.4	0.5	0.6		
MW #36	02/09/94	7.0	5100	ND	ND	0.6	3.6		
	06/13/94	7.0	5600	<1	<1	<1	<1		
	09/26/94	7.2	4300	ND	ND	1.7	2.0		
	06/05/95	7.2	5600	ND	ND	ND	ND		
	08/29/95	6.9	4000	ND	ND	0.6	ND ND		
	11/20/95	7.0	3800	ND	ND ND	ND ND	ND		
	02/22/96	7.0	3200	ND	ND	ND	ND		

TABLE 1 AMOCO PRODUCTION COMPANY GCU COM I 181 GROUNDWATER SAMPLING FEBRUARY 21-22, 1996

SAMPLE	DATE	рΗ	COND.	BENZENE	TOLUENE	E-BENZ.	T-XYL.	NITRATE	FCB/
I.D.								NITROGEN	100 mls
_			umhos/cm	ppb	ppb	ppb	ppb	mg/L	COLONIES
WP #39	02/09/94	7.0	3400	ND	ND	ND	0.2	0.05	0
	06/13/94	7.0	3400	<1	<1	<1	<1		
	09/26/94	7.0	3200	ND	0.2	ND	0.7		
	06/05/95	7.0	3800	ND	ND	ND	0.5		
	08/29/95	6.8	3000	ND	ND	ND	ND		
	11/20/95	6.8	3100	ND	ND	ND	ND		
	02/21/96	6.8	2600	ND	0.4	ND	ND		
WP #40	02/09/94	7.0	3700	ND	ND	ND	3.8		
	06/13/94	7.0	3900	<1	<1	<1	<1		
	09/26/94	7.0	3900	ND	0.4	ND	0.4		
	06/05/95	6.7	3700	ND	ND	ND	ND		
	08/29/95	6.8	3500	ND	ND	ND	ND		
	11/20/95	6.9	2800	ND	ND	ND	ND		
	02/21/96	6.8	2600	ND	ND	ND	ND		
WP #41	02/09/94	7.0	6900	171.0	7400.0	810.0	12060.0	0.88	0
	06/14/94	7.0	12200	1026.0	1061.0	14803.0	8939.0	11.8	<1
	09/26/94	7.0	9500	83.5	18.3	414.0	7811.0	1.18	0
	06/05/95	6.7	13000	ND	86.5	95.4	2151.8		
	08/29/95	6.9	12800	ND	168.0	159.0	2570.0		
	11/20/95	7.0	11000	ND	371.0	355.0	5454.0		
	02/22/96	6.7	6900	62.4	324.0	333.0	6164.0		
WP #42	06/05/95	6.6	11500	1.0	1.9	ND	7.5		
	08/29/95	6.9	4500	ND	ND	1.2	1.3		
	11/20/95	6.8	3200	ND	3.7	2.0	1.1		
· 	01/03/96	6.9	3400	ND	ND	ND	6.8		
	02/21/96	6.7	3400	ND	3.1	2.4	2.3		
WP #43	01/08/96	7.0	2400	ND	0.5	0.4	ND		
	02/21/96	6.7	2900	ND	0.4	0.5	0.6		
WP # 44	01/08/96	7.2	3400	ND	0.8	1.2	2.5		
	02/21/96	6.7	3600	ND	0.7	1.4	0.8		

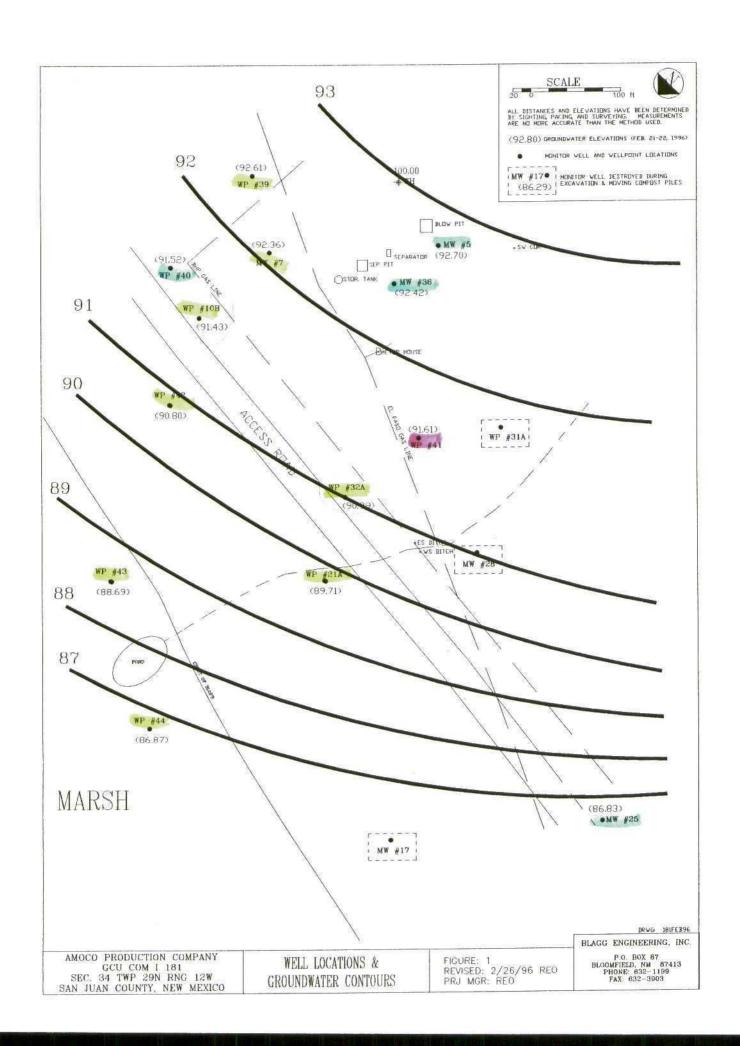
Notes:

MW = Monitor Well

FCB = Fecal Coliform Bacteria. EPA Method 600/4-79-020

WP= Wellpoint

Benzene, Toluene, Ethyl-benzene, Total Xylenes, per EPA Method 8020





Blagg Engineering, Inc.

Project ID:

Amoco/ GCU COM I 181

Report Date:

02/27/96

Sample ID:

MW - 5

Date Sampled:

02/22/96

Lab ID:

2714

Date Received:

02/22/96

Sample Matrix:

Water

Date Analyzed:

02/25/96

Preservative:

Cool, HgCl₂

Condition:

Intact

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	0.20
Toluene	ND	0.20
Ethylbenzene	ND	0.20
m,p-Xylenes	ND	0.40
o-Xylene	ND	0.20

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

93

88 - 110%

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,

Oct. 1984.

Comments:

Dewie Mass Analyst

Lanus Jamen
Review



Blagg Engineering, Inc.

Project ID:

Amoco/ GCU COM I 181

Report Date:

02/27/96

Sample ID:

MW - 7

Date Sampled: 02/22/96

Lab ID:

2715 Water Date Received: 02

02/22/96

Sample Matrix:

Water Cool, HgCl₂

Date Analyzed:

02/25/96

Preservative: Condition:

Intact

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	6.61	2.00
Toluene	40.7	2.00
Ethylbenzene	26.9	2.00
m,p-Xylenes	51.6	4.00
o-Xylene	17.0	2.00

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- 4 - 7 Maria A. B. 1994 A. A. S. A.	

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

117

88 - 110%

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,

Oct. 1984.

Comments:

High toluene-d8 recovery is due to matrix interference at the d8 retention time.

Maio Palanalyst

Tanico amon



Blagg Engineering, Inc.

Project ID:

Amoco/ GCU COM I 181

Report Date:

02/27/96

Sample ID:

WP - 10B

Date Sampled:

02/21/96

Lab ID:

2706

Date Received:

02/22/96

Sample Matrix: Preservative:

Water

Date Analyzed:

02/23/96

Condition:

Cool, HgCl₂ Intact

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	0.22	0.20
Toluene	0.47	0.20
Ethylbenzene	0.31	0.20
m,p-Xylenes	0.66	0.40
o-Xylene	0.28	0.20

I Atal RTEY

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

100

88 - 110%

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,

Oct. 1984.

Comments:

Derme Pale



Blagg Engineering, Inc.

Project ID:

Amoco/ GCU COM I 181

Sample ID:

WP - 21A

Report Date: 02/27/96

Lab ID:

2707

Date Sampled: 02/21/96 02/22/96

Sample Matrix:

Water

Date Received: Date Analyzed:

02/26/96

Preservative:

Cool, HgCl₂

Condition:

Intact

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)	
Benzene	0.59	0.20	
Toluene	1.03	0.20	
Ethylbenzene	0.54	0.20	
m,p-Xylenes	6.73	0.40	
o-Xylene	0.89	0.20	

- 1	
	Total BTEX 9.78
	Total BTEX 9.78
	I Ola Bick

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

95

88 - 110%

Ding Pol

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,

Oct. 1984.

Comments:

Review



Blagg Engineering, Inc.

Project ID:

Amoco/ GCU COM I 181

Report Date:

02/27/96

Sample ID:

MW - 25

Date Sampled:

Lab ID:

2716

Date Received:

02/22/96 02/22/96

Sample Matrix:

Water

Date Analyzed:

02/25/96

Preservative:

Cool, HgCl₂

Condition:

Intact

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	0.20
Toluene	ND	0.20
Ethylbenzene	ND	0.20
m,p-Xylenes	ND	0.40
o-Xylene	ND	0.20

Total BTEX: ND:	

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

91

88 - 110%

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,

Oct. 1984.

Comments:

Demie Alexandre

Janua James



Blagg Engineering, Inc.

Project ID:

Amoco/ GCU COM I 181

Report Date:

02/27/96

Sample ID:

WP - 32A

Date Sampled:

02/21/96

Lab ID:

2708

Date Received:

02/22/96

Sample Matrix:

Water

Date Analyzed:

02/25/96

Preservative:

Cool, HgCl₂

Condition:

Intact

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	0.40	0.20
Toluene	0.41	0.20
Ethylbenzene	0.45	0.20
m,p-Xylenes	0.57	0.40
o-Xylene	ND	0.20

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

94

88 - 110%

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,

Oct. 1984.

Comments:

Sampho-

Lanicalaunau Review



Blagg Engineering, Inc.

Project ID:

Amoco/ GCU COM I 181

Sample ID:

MW - 36

02/27/96

Lab ID:

2717

02/22/96

Sample Matrix:

Water

02/22/96

Report Date:

Date Sampled:

Date Received:

Date Analyzed:

Preservative:

Cool, HgCl₂

02/25/96

Condition:

Intact

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	0.20
Toluene	ND	0.20
Ethylbenzene	ND	0.20
m,p-Xylenes	ND	0.40
o-Xylene	ND	0.20

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ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

95

88 - 110%

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,

Oct. 1984.

Comments:

esine Man

Janico (au



Blagg Engineering, Inc.

Project ID:

Amoco/ GCU COM I181

Sample ID:

WP - 39

Report Date: 02/27/96

Lab ID:

02/21/96

Sample Matrix:

2709

Date Sampled: Date Received: 02/22/96

Water Cool, HgCl₂

02/25/96 Date Analyzed:

Preservative: Condition:

Intact

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	0.20
Toluene	0.37	0.20
Ethylbenzene	ND	0.20
m,p-Xylenes	ND	0.40
o-Xylene	ND	0.20

Total BTEX 0.37

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

95

88 - 110%

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,

Oct. 1984.

Comments:

Analyst



Blagg Engineering, Inc.

Project ID:

Amoco/ GCU COM I 181

02/27/96

Sample ID:

WP - 40

Lab ID:

2710

02/21/96

Sample Matrix:

Water

02/22/96

Preservative:

Cool, HgCl₂

Date Analyzed:

Report Date:

Date Sampled:

Date Received:

02/25/96

Condition:

Intact

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	0.20
Toluene	ND	0.20
Ethylbenzene	ND	0.20
m,p-Xylenes	ND	0.40
o-Xylene	ND	0.20

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ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

99

88 - 110%

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,

Oct. 1984.

Comments:

Sure Pal

anua annous Review



Blagg Engineering, Inc.

Project ID:

Amoco/ GCU COM I 181

02/27/96

Sample ID:

WP - 41

Report Date:

Lab ID:

Date Sampled:

02/22/96

2718

Date Received:

02/22/96

Sample Matrix:

Water Cool, HgCl₂ Date Analyzed:

02/23/96

Preservative: Condition:

Intact

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	62.4	40.0
Toluene	324	40.0
Ethylbenzene	333	40.0
m,p-Xylenes	5,430	80.0
o-Xylene	734	40.0

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ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

102

88 - 110%

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,

Oct. 1984.

Comments:

Lanua Jamen
Analyst

Desing She Review



Blagg Engineering, Inc.

Project ID:

Amoco/ GCU COM I 181

02/27/96

Sample ID:

WP - 42

Lab ID:

2711

02/21/96

Sample Matrix:

Water

Date Sampled: Date Received:

02/22/96

Preservative:

Cool, HgCl₂

Date Analyzed:

Report Date:

02/25/96

Condition:

Intact

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	0.20
Toluene	3.13	0.20
Ethylbenzene	2.36	0.20
m,p-Xylenes	0.79	0.40
o-Xylene	1.47	0.20

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

99

88 - 110%

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,

Oct. 1984.

Comments:

Memis Manalyst

Lanus Jamen



Blagg Engineering, Inc.

Project ID:

Amoco/ GCU COM I 181

Report Date:

02/27/96

Sample ID:

WP - 43

Date Sampled:

02/21/96

Lab ID:

2712

Date Received: Date Analyzed:

02/22/96 02/26/96

Sample Matrix: Preservative:

Water Cool, HgCl₂

Condition:

Intact

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	0.20
Toluene	0.39	0.20
Ethylbenzene	0.54	0.20
m,p-Xylenes	ND	0.40
o-Xylene	0.55	0.20

IULAI DI LA

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

97

88 - 110%

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,

Oct. 1984.

Comments:

Cine Pale Review



Blagg Engineering, Inc.

Project ID:

Amoco/ GCU COM I 181

Report Date:

02/27/96

Sample ID:

WP - 44

Date Sampled:

02/21/96

Lab ID:

2713

Date Received:

02/22/96

Sample Matrix: Preservative:

Water Cool, HgCl₂ Date Analyzed:

02/26/96

Condition:

Intact

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)	
Benzene	ND	0.20	
Toluene	0.72	0.20	
Ethylbenzene	1.41	0.20	
m,p-Xylenes	0.43	0.40	
o-Xylene	0.39	0.20	

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		308651999663, 600 V t. t. 1.000 Andrille t.	THE RESIDENCE AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDR	

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

99

88 - 110%

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Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,

Oct. 1984.

Comments:

Analyst asmow

Review



February 27, 1996

Bob O'Neill Blagg Engineering, Inc. PO Box 87 Bloomfield, NM 87413

Dear Mr. O'Neill:

Enclosed are the results for the analysis of the samples from location GCU COM I 181 received February 22, 1996. Analysis for Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) was performed on the samples, as per the accompanying chain of custody form.

BTEX analysis was performed on the samples according to EPA Method 602, using a Hewlett-Packard 5890 gas chromatograph equipped with an OI Analytical purge and trap (model 4560) and a photoionization detector. The samples had detectable levels of BTEX as stated on the

Quality control reports appear at the end of the analytical package and can be identified by title. Should you have any questions regarding the analysis, feel free to call.

Sincerely,

Dr. Denise A. Bohemier Laboratory Manager

Quality Control Report

Method Blank Analysis

Sample Matrix:

Water

Report Date:

02/27/96

Lab ID:

MB35118

Date Analyzed:

02/23/96

Target Analyte	Goncentration (ug/L)	Detection Limit (ug/L)	
Benzene	ND	0.20	
Toluene	ND	0.20	
Ethylbenzene	ND	0.20	
m,p-Xylenes	ND	0.40	
o-Xylene	ND	0.20	

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

100

88 - 110%

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,

Oct. 1984.

Comments:

Lanca Jamoin Analyst

Review

Quality Control Report

Method Blank Analysis

Sample Matrix:

Lab ID:

Water

MB35120

Report Date:

Date Analyzed:

02/27/96

02/25/96

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	0.20
Toluene	ND	0.20
Ethylbenzene	ND	0.20
m,p-Xylenes	ND	0.40
o-Xylene	ND	0.20

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

96

88 - 110%

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,

Oct. 1984.

Comments:

Manuel Pal

Canics aiman Review

Quality Control Report

Method Blank Analysis

Sample Matrix: Lab ID: Water MB35121 Report Date: Date Analyzed: 02/27/96 02/26/96

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	0.20
Toluene	ND	0.20
Ethylbenzene	ND	0.20
m,p-Xylenes	ND	0.40
o-Xylene	ND	0.20

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

94

88 - 110%

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,

Oct. 1984.

Comments:

Panica Comman

Demis Review

Matrix Spike Analysis

Lab ID:

2706Spk

Sample Matrix:

Water

Preservative:

Cool, HgCl2

Condition:

Intact

Report Date:

02/27/96

Date Sampled:

02/21/96

Date Received:

02/22/96

Date Analyzed:

02/23/96

Target Analyte	Spike Added (ug/L)	Original Conc. (ug/L)	Spiked Sample Conc. (ug/L)	% Recovery	Acceptance Limits (%)
Benzene	10	0.22	9.17	89%	39 -150
Toluene	10	0.47	9.45	90%	46 - 148
Ethylbenzene	10	0.31	9.40	91%	32 - 160
m,p-Xylenes	20	0.66	18.5	89%	NE
o-Xylene	10	0.28	9.24	90%	NE

ND - Analyte not detected at the stated detection limit.

NA - Not applicable or not calculated.

NE - Spike acceptance range not established by the EPA.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

97

88 - 110%

Juin Pal

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209, Oct. 1984.

Comments:

Analyst

Paviaw

Matrix Spike Analysis

Lab ID:

2710Spk

Sample Matrix:

Water

Preservative:

Cool, HgCl2

Condition:

Intact

Report Date:

02/27/96

Date Sampled:

02/21/96

Date Received: Date Analyzed:

02/22/96 02/25/96

Target Analyte	Spike Added (ug/L)	Original Conc. (ug/L)	Spiked Sample Conc. (ug/L)	% Recovery	Acceptance Limits (%)
Benzene	10	ND	10.5	105%	39 -150
Toluene	10	ND	10.4	102%	46 - 148
Ethylbenzene	10	ND	10.3	102%	32 - 160
m,p-Xylenes	20	ND	20.8	103%	NE
o-Xylene	10	ND	10.4	104%	NE

ND - Analyte not detected at the stated detection limit.

NA - Not applicable or not calculated.

NE - Spike acceptance range not established by the EPA.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

98

88 - 110%

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209, Oct. 1984.

Comments:

Demo/ha

Daview

Matrix Spike Analysis

Lab ID:

2707Spk

Sample Matrix:

Water

Preservative: Condition:

Cool, HgCl2

Intact

Report Date:

t Date:

02/27/96

Date Sampled: Date Received:

02/21/96 02/22/96

Date Analyzed:

02/26/96

Target Analyte	Spike Added (ug/L)	Original Conc. (ug/L)	Spiked Sample : Conc. (ug/L)	% Recovery	Acceptance Limits (%)
Benzene	10	0.59	11.6	111%	39 -150
Toluene	10	1.03	11.5	104%	46 - 148
Ethylbenzene	10	0.54	10.8	102%	32 - 160
m,p-Xylenes	20	6.73	28.6	110%	NE
o-Xylene	10	0.89	11.8	109%	NE

ND - Analyte not detected at the stated detection limit.

NA - Not applicable or not calculated.

NE - Spike acceptance range not established by the EPA.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

97

88 - 110%

Dine Pho

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209, Oct. 1984.

Comments:

MUM /MIL

Davian

Duplicate Analysis

Lab ID:

Sample Matrix:

Preservative:

2718Dup

Water

Condition:

Cool, HgCl2 Intact

Report Date:

02/27/96

Date Sampled:

02/22/96

Date Received:

02/22/96

Date Analyzed:

02/23/96

Carget Analyte	Original Conc. (ug/L)	Duplicate Conc. (ug/L)	Acceptance Range (ug/L)
Benzene	62.4	49.8	44.8 - 67.4
Toluene	324	325	265 - 384
Ethylbenzene	333	325	216 - 442
m,p-Xylenes	5,430	5,370	NE
o-Xylene	734	721	NE

ND - Analyte not detected at the stated detection limit.

NA - Not applicable or not calculated.

NE - Duplicate acceptance range not established by the EPA.

Surrogate

Trifluorotoluene

Percent Recovery

Acceptance Limits

Dering Pak

102

88 - 110%

Reference:

Quality Control:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209, Oct. 1984.

Comments:

anica armou

VOLATILE AROMATIC HYDROCARBONS

Matrix Spike Duplicate Analysis

Lab ID:

2710Spkdup

Sample Matrix:

Water

Intact

Preservative: Condition:

Cool, HgCl2

Report Date:

02/27/96

Date Sampled:

02/21/96

Date Received:

02/22/96

Date Analyzed:

02/25/96

Target Analyte	Spike Added (ug/L)	Sample Spike Recovery (%)	Duplicate Spike Recovery (%)	Acceptance Limits (%)
Benzene	10	· 105%	100%	83 - 122
Toluene	10	102%	98%	81 - 119
Ethylbenzene	10	102%	97%	65 - 134
m,p-Xylenes	20	103%	97%	NE
o-Xylene	10	104%	98%	NE

ND - Analyte not detected at the stated detection limit.

NA - Not applicable or not calculated.

NE - Spike acceptance range not established by the EPA.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

93

88 - 110%

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,

Oct. 1984.

Comments:

Analyst

Poviou

Duplicate Analysis

Lab ID:

Sample Matrix:

Preservative:

2705Dup

Water

Condition:

Cool, HgCl2 Intact

Report Date:

Date Sampled:

02/27/96

Date Received:

02/21/96 02/22/96

Date Analyzed:

02/26/96

Target Analyte	arget Analyte Original Conc.		Acceptance Range (ug/L)					
Benzene	418	434	348 - 504					
Toluene	ND	ND	NA					
Ethylbenzene	455	500	314 - 640					
m,p-Xylenes	3,710	3,690	NE					
o-Xylene	960	889	NE					

ND - Analyte not detected at the stated detection limit.

NA - Not applicable or not calculated.

NE - Duplicate acceptance range not established by the EPA.

Surrogate

Percent Recovery

Acceptance Limits

Duis/bb

Quality Control:

Trifluorotoluene

94

88 - 110%

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209, Oct. 1984.

Comments:

Tanua arman
Analyst

ENVISONMENTAL LABORATORY 807 S. CARLTON • FARMINGTON, NM 87401 • (505) 326-2395

WATER ANALYSES

ORGANIC ANALYSES

CHAIN OF CUSTODY

PROJECT MANAGER: Analytica Lab I.D.:

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Please Fill Out Thoroughly. White/Yellow: Analytica Pink: Client 1000 Shaded areas for lab use only. COMMENTS ਰ Hg Cl2 -PRES -Other (specify): METALS Date: Тіте: RCRA Metals TCLP (1311) RCRA Metals (Total) Priority Pollutants Relinquished By: Received By: Other (specify): WATER ANALYSES Oil and Grease Nutrients: NH4+ / NO2- / NO3- / TKN Solids: TDS / TSS / SS 2-22-66 CHAIN OF CUSTODY 1030 BOD / Fecal / Total Coliform Specific Anions (specify): Specific Cations (specify): Cation / Anion 2-22-94 R. F. ONOU Relinquished By: Received By: Other (specify): BEE TCLP Extraction Polynuclear Aromatic Hydrocarbons (8100) ORGANIC ANALYSES Base / Neutral / Acid GC/MS (625 / 8270) Volatiles GC/MS (624 / 8240 / 8260) Time: Time: Herbicides (615 / 8150) Chlorinated Pesticides / PCBs (608 / 8080) SDWA Volatiles (502.1 / 503.1) R. E. O'rold Chlorinated Hydrocarbons (8010) Aromatic HCs(BTEX/MTBE (602 / 8020) Required Turnaround Time (Prior Authorization Required for Rush) Received By: Sampled By: Gasoline (GRO) BEL Company: Сотрапу: Gasoline / Diesel (mod. 8015) Petroleum Hydrocarbons (418.1) Cipe Custody Seals: Y / N / NA (A) Sample Receipt *6* = *3* ENVIRONMENTAL LABORATORY 807 S. CARLTON • FARMINGTON, NM 87401 • (505) 326-2395 Matrix 5555 SAMI 7 Received Intact: = No. Containers Received Cold: BLAGG 632 2480 0430 2-22 0915 0001 2-22-1015 Time 2-2 77-7 2-22 Ē Date PROJECT MANAGER: 0-730 AMOS Project Information Analytica Lab I.D.: ر ا Sample ID MW-25 25-36 7 M. J. Company: Address: Shipped Via: Company: Proj. Name: 7881 Address: Phone: Bill To: 9.00 3 Proj. #: Fax: