

3R - 19

REPORTS

DATE:

Sept. 1, 1995

BLAGG ENGINEERING, INC.

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

September 1, 1995

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

RECEIVED
SEP 05 1995
Environmental Bureau
Oil Conservation Division

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 and groundwater elevations.

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. O'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

SEP95-WO.RPT

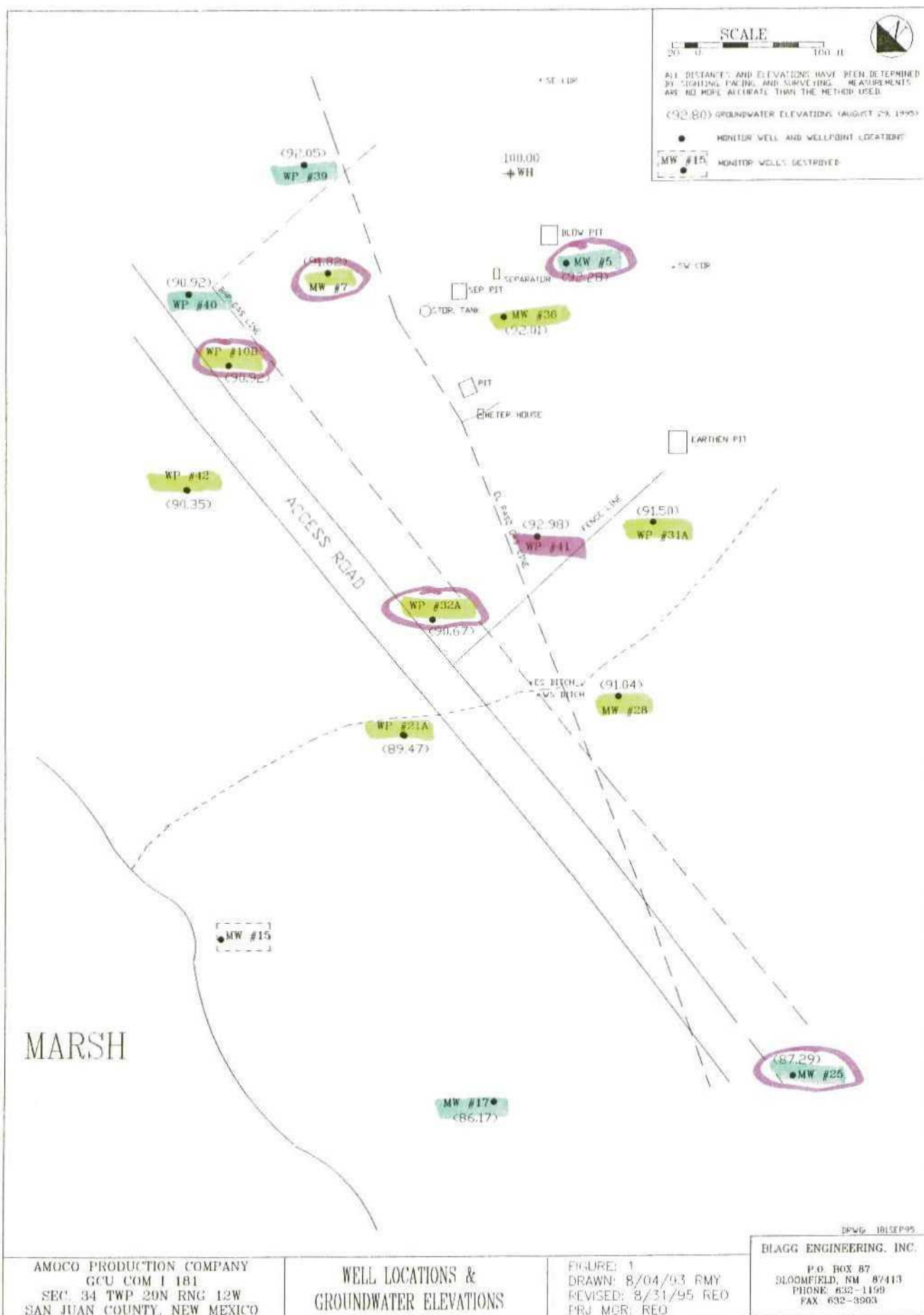


TABLE 1
AMOCO PRODUCTION COMPANY
GCU COM I 181
GROUNDWATER SAMPLING
AUGUST 29, 1995

SAMPLE I.D.	DATE	pH	COND. umhos/cm	BENZENE ppb	TOLUENE ppb	E-BENZ. ppb	T-XYL. ppb	NITRATE NITROGEN mg/L	FCB/ 100 mls COLONIES
MW #5	02/09/94	7.0	6300	ND	0.5	ND	3.1		
	06/13/94	7.0	7800	<1	<1	<1	<1		
	09/26/94	7.1	5200	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		
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		
T @10A	02/09/94	7.0	3200	41.0	37.7	0.4	325.0	0.08	0
	06/14/94	8.0	4400	<1	<1	132.0	118.0	0.109	<1
	09/26/94	7.7	3800	6.7	12.2	61.5	502.9	1.05	0
WP #10B	06/05/95	7.2	15600	1.7	ND	ND	4.6		
	08/29/95	6.1	9000	1.2	1.0	0.8	2.4		
MW #13	11/03/94	7.4	47100	0.9	0.4	0.4	1.3		
MW #15	11/03/94	7.5	4400	ND	0.8	ND	0.9		
	06/05/95	7.4	4100	ND	ND	ND	0.9		
	08/29/95	WELL HAS BEEN DESTROYED							
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		
MW #21	11/03/94	7.5	5200	13.8	12.9	2.3	16.9		
WP #21A	06/05/95			DRY					
	08/29/95	6.9	4300	ND	1.0	0.5	0.4		
MW #25	02/09/94	7.0	5500	ND	ND	0.3	1.8		
	06/13/94	7.0	5700	<1	<1	<1	<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		
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		
WP #31A	02/09/94	7.0	4800	ND	ND	ND	0.4		
	06/13/94	7.0	4500	<1	<1	<1	<1		
	09/26/94	6.8	4800	ND	0.5	ND	ND		
	06/05/95	7.1	4500	ND	ND	ND	0.5		
	08/29/95	6.4	4100	ND	1.7	ND	ND		
MW #32	02/09/94	7.0	3900	149.0	13.3	ND	408.2	0.04	0
T @32	06/14/94	8.0	4700	<1	<1	<1	<1	0.101	<1
	09/26/94	7.9	4000	ND	ND	ND	ND	0.85	0
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		
WP #34A	02/09/94	7.0	5000	21.4	17.2	1.9	143.0	0.22	0
	06/14/94	7.0	13800	452.0	206.0	7933.0	3324.0	0.873	<1
	09/26/94	6.9	11000	0.9	ND	24.6	465.0	2.07	0
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		
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		

TABLE 1
AMOCO PRODUCTION COMPANY
GCU COM I 181
GROUNDWATER SAMPLING
AUGUST 29, 1995

SAMPLE I.D.	DATE	pH	COND. umhos/cm	BENZENE ppb	TOLUENE ppb	E-BENZ. ppb	T-XYL. ppb	NITRATE NITROGEN mg/L	FCB/ 100 mls COLONIES
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		
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		
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		

Notes: MW = Monitor Well FCB = Fecal Coliform Bacteria. EPA Method 600/4-79-020
WP= Wellpoint T = Trench

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

PURGEABLE AROMATICS

Blagg Engineering, Inc.

Project ID: Amoco - GCU COM I 181
Sample ID: MW - 5
Lab ID: 1393
Sample Matrix: Water
Preservative: Cool, HgCl₂
Condition: Intact

Report Date: 08/31/95
Date Sampled: 08/29/95
Date Received: 08/29/95
Date Analyzed: 08/30/95

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

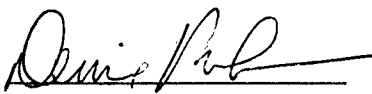
Total BTEX	ND
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ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	100	88 - 110%
	Bromofluorobenzene	90	86 - 115%

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

Comments:


Analyst


Review

PURGEABLE AROMATICS

Blagg Engineering, Inc.

Project ID: Amoco - GCU COM I 181
Sample ID: MW - 7
Lab ID: 1394
Sample Matrix: Water
Preservative: Cool, HgCl₂
Condition: Intact

Report Date: 08/31/95
Date Sampled: 08/29/95
Date Received: 08/29/95
Date Analyzed: 08/30/95

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	9.21	2.00
Toluene	21.7	2.00
Ethylbenzene	200	2.00
m,p-Xylenes	17.7	4.00
o-Xylene	3.86	2.00

Total BTEX	252
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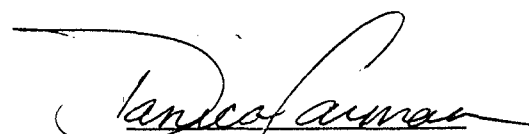
ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	101	88 - 110%
	Bromofluorobenzene	103	86 - 115%

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

Comments:


Analyst


Review

PURGEABLE AROMATICS

Blagg Engineering, Inc.

Project ID: Amoco - GCU COM I 181
Sample ID: WP - 10B
Lab ID: 1395
Sample Matrix: Water
Preservative: Cool, HgCl₂
Condition: Intact

Report Date: 08/31/95
Date Sampled: 08/29/95
Date Received: 08/29/95
Date Analyzed: 08/30/95

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	1.24	0.20
Toluene	1.04	0.20
Ethylbenzene	0.77	0.20
m,p-Xylenes	1.72	0.40
o-Xylene	0.71	0.20

Total BTEX	5.48
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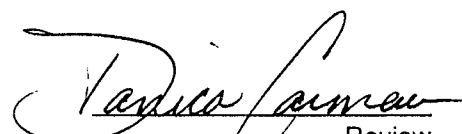
ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	93	88 - 110%
	Bromofluorobenzene	87	86 - 115%

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

Comments:


Analyst


Review

PURGEABLE AROMATICS

Blagg Engineering, Inc.

Project ID: Amoco - GCU COM I 181
 Sample ID: MW - 17
 Lab ID: 1396
 Sample Matrix: Water
 Preservative: Cool, HgCl₂
 Condition: Intact

Report Date: 08/31/95
 Date Sampled: 08/29/95
 Date Received: 08/29/95
 Date Analyzed: 08/30/95

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
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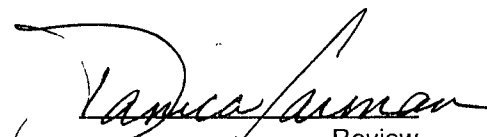
ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	101	88 - 110%
	Bromofluorobenzene	95	86 - 115%

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

Comments:


 Analyst


 Review

PURGEABLE AROMATICS

Blagg Engineering, Inc.

Project ID: Amoco - GCU COM I 181
Sample ID: WP - 21A
Lab ID: 1397
Sample Matrix: Water
Preservative: Cool, HgCl₂
Condition: Intact

Report Date: 08/31/95
Date Sampled: 08/29/95
Date Received: 08/29/95
Date Analyzed: 08/30/95

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	0.20
Toluene	0.96	0.20
Ethylbenzene	0.52	0.20
m,p-Xylenes	ND	0.40
o-Xylene	0.41	0.20

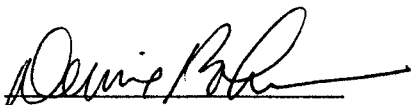
Total BTEX	1.90
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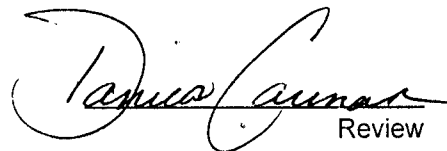
ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Bromofluorobenzene	87	86 - 115%

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

Comments: Coelution of TFT with a compound in the sample resulted in an extremely high surrogate recovery.


Analyst


Review

PURGEABLE AROMATICS

Blagg Engineering, Inc.

Project ID: Amoco - GCU COM I 181
Sample ID: MW - 25
Lab ID: 1398
Sample Matrix: Water
Preservative: Cool, HgCl₂
Condition: Intact

Report Date: 08/31/95
Date Sampled: 08/29/95
Date Received: 08/29/95
Date Analyzed: 08/30/95

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
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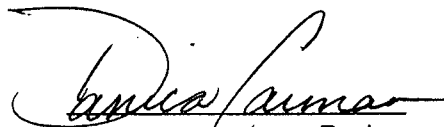
ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	102	88 - 110%
	Bromofluorobenzene	93	86 - 115%

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

Comments:


Analyst


Review

PURGEABLE AROMATICS

Blagg Engineering, Inc.

Project ID: Amoco - GCU COM I 181
Sample ID: MW - 28
Lab ID: 1399
Sample Matrix: Water
Preservative: Cool, HgCl₂
Condition: Intact

Report Date: 08/31/95
Date Sampled: 08/29/95
Date Received: 08/29/95
Date Analyzed: 08/31/95

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	0.20
Toluene	ND	0.20
Ethylbenzene	0.29	0.20
m,p-Xylenes	ND	0.40
o-Xylene	ND	0.20

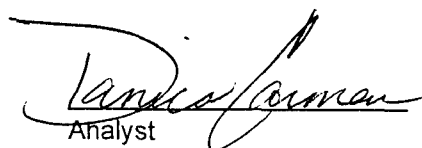
Total BTEX	0.29
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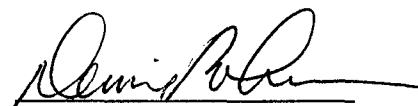
ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	97	88 - 110%
	Bromofluorobenzene	94	86 - 115%

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

Comments:


Analyst


Review

PURGEABLE AROMATICS

Blagg Engineering, Inc.

Project ID: Amoco - GCU COM I 181
Sample ID: WP - 31A
Lab ID: 1400
Sample Matrix: Water
Preservative: Cool, HgCl₂
Condition: Intact

Report Date: 08/31/95
Date Sampled: 08/29/95
Date Received: 08/29/95
Date Analyzed: 08/31/95

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	0.20
Toluene	1.74	0.20
Ethylbenzene	ND	0.20
m,p-Xylenes	ND	0.40
o-Xylene	ND	0.20

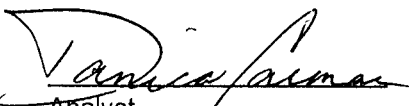
Total BTEX	1.74
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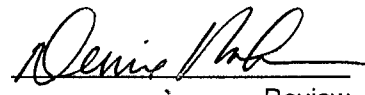
ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	99	88 - 110%
	Bromofluorobenzene	91	86 - 115%

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

Comments:


Analyst


Review

PURGEABLE AROMATICS

Blagg Engineering, Inc.

Project ID: Amoco - GCU COM I 181
Sample ID: WP - 32A
Lab ID: 1401
Sample Matrix: Water
Preservative: Cool, HgCl₂
Condition: Intact

Report Date: 08/31/95
Date Sampled: 08/29/95
Date Received: 08/29/95
Date Analyzed: 08/30/95

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	3.16	0.20
Toluene	0.71	0.20
Ethylbenzene	1.27	0.20
m,p-Xylenes	1.53	0.40
o-Xylene	0.50	0.20

Total BTEX	7.16
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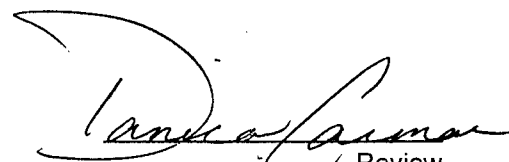
ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	92	88 - 110%
	Bromofluorobenzene	86	86 - 115%

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

Comments:


Analyst


Review

PURGEABLE AROMATICS

Blagg Engineering, Inc.

Project ID: Amoco - GCU COM I 181
Sample ID: MW - 36
Lab ID: 1402
Sample Matrix: Water
Preservative: Cool, HgCl₂
Condition: Intact

Report Date: 08/31/95
Date Sampled: 08/29/95
Date Received: 08/29/95
Date Analyzed: 08/31/95

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

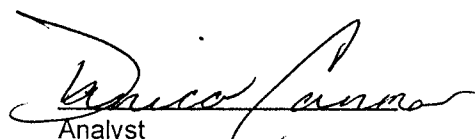
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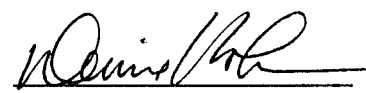
ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	100	88 - 110%
	Bromofluorobenzene	96	86 - 115%

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

Comments:


Analyst


Review

PURGEABLE AROMATICS

Blagg Engineering, Inc.

Project ID: Amoco - GCU COM I 181
Sample ID: WP - 39
Lab ID: 1403
Sample Matrix: Water
Preservative: Cool, HgCl₂
Condition: Intact

Report Date: 08/31/95
Date Sampled: 08/29/95
Date Received: 08/29/95
Date Analyzed: 08/31/95

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

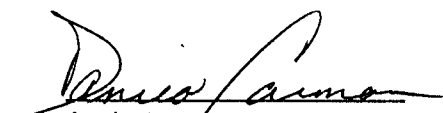
Total BTEX	ND
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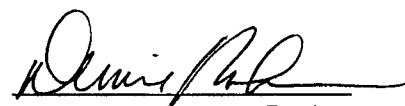
ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	98	88 - 110%
	Bromofluorobenzene	95	86 - 115%

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

Comments:


Analyst


Review

PURGEABLE AROMATICS

Blagg Engineering, Inc.

Project ID: Amoco - GCU COM I 181
Sample ID: WP - 40
Lab ID: 1404
Sample Matrix: Water
Preservative: Cool, HgCl₂
Condition: Intact

Report Date: 08/31/95
Date Sampled: 08/29/95
Date Received: 08/29/95
Date Analyzed: 08/31/95

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

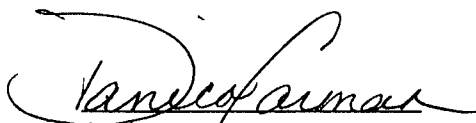
Total BTEX	ND
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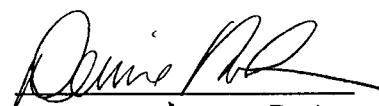
ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	95	88 - 110%
	Bromofluorobenzene	93	86 - 115%

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

Comments:


Analyst


Review

PURGEABLE AROMATICS

Blagg Engineering, Inc.

Project ID: Amoco - GCU COM I 181
Sample ID: WP - 41
Lab ID: 1405
Sample Matrix: Water
Preservative: Cool, HgCl₂
Condition: Intact

Report Date: 08/31/95
Date Sampled: 08/29/95
Date Received: 08/29/95
Date Analyzed: 08/30/95

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	10.0
Toluene	168	10.0
Ethylbenzene	159	10.0
m,p-Xylenes	2,300	20.0
o-Xylene	270	10.0

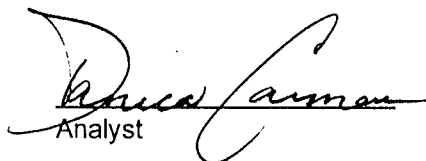
Total BTEX -	2,900
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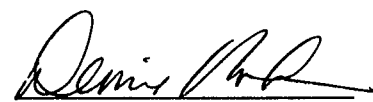
ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	89	88 - 110%
	Bromofluorobenzene	90	86 - 115%

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

Comments:


Analyst


Review

PURGEABLE AROMATICS

Blagg Engineering, Inc.

Project ID: Amoco - GCU COM I 181
Sample ID: WP - 42
Lab ID: 1406
Sample Matrix: Water
Preservative: Cool, HgCl₂
Condition: Intact

Report Date: 08/31/95
Date Sampled: 08/29/95
Date Received: 08/29/95
Date Analyzed: 08/30/95

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	0.20
Toluene	ND	0.20
Ethylbenzene	1.22	0.20
m,p-Xylenes	0.81	0.40
o-Xylene	0.46	0.20

Total BTEX	2.50
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ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	90	88 - 110%
	Bromofluorobenzene	90	86 - 115%

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

Comments:


Analyst


Review

QUALITY ASSURANCE / QUALITY CONTROL
DOCUMENTATION

PURGEABLE AROMATICS

Quality Control Report

Method Blank Analysis

Sample Matrix: Water
Lab ID: MB34941

Report Date: 08/31/95
Date Analyzed: 08/30/95

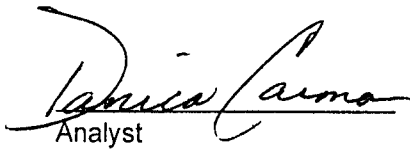
Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	0.20
Toluene	ND	0.20
Ethylbenzene	ND	0.20
m,p-Xylenes	ND	0.40
o-Xylene	ND	0.20

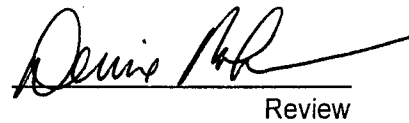
ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	99	88 - 110%
	Bromofluorobenzene	93	86 - 115%

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

Comments:


Analyst


Review

PURGEABLE AROMATICS

Quality Control Report

Method Blank Analysis

Sample Matrix: Water
Lab ID: MB34942

Report Date: 08/31/95
Date Analyzed: 08/31/95

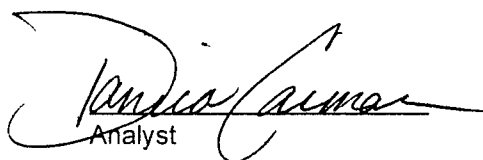
Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	0.20
Toluene	ND	0.20
Ethylbenzene	ND	0.20
m,p-Xylenes	ND	0.40
o-Xylene	ND	0.20

ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	98	88 - 110%
	Bromofluorobenzene	94	86 - 115%

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

Comments:


Analyst


Review

Purgeable Aromatics

Duplicate Analysis

Lab ID: 1394Dup
Sample Matrix: Water
Preservative: Cool, HgCl₂
Condition: Intact

Report Date: 08/31/95
Date Sampled: 08/29/95
Date Received: 08/29/95
Date Analyzed: 08/30/95

Target Analyte	Original Conc. (ug/L)	Duplicate Conc. (ug/L)	Acceptance Range (ug/L)
Benzene	9.21	10.3	6.83 - 12.7
Toluene	21.7	26.9	19.0 - 29.6
Ethylbenzene	200	198	130 - 268
m,p-Xylenes	17.7	20.5	NE
o-Xylene	3.86	4.92	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.

	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
Quality Control:	Trifluorotoluene	95	88 - 110%
	Bromofluorobenzene	97	86 - 115%

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

Comments:


Analyst


Review

Purgeable Aromatics

Matrix Spike Analysis

Lab ID: 1393Spk
Sample Matrix: Water
Preservative: Cool, HgCl₂
Condition: Intact

Report Date: 08/31/95
Date Sampled: 08/29/95
Date Received: 08/29/95
Date Analyzed: 08/30/95

Target Analyte	Spike Added (ug/L)	Original Conc. (ug/L)	Spiked Sample Conc. (ug/L)	% Recovery	Acceptance Limits (%)
Benzene	10	ND	10.2	102%	39 - 150
Toluene	10	ND	10.1	100%	46 - 148
Ethylbenzene	10	ND	10.0	100%	32 - 160
m,p-Xylenes	20	ND	20.1	100%	NE
o-Xylene	10	ND	9.96	100%	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:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	100	88 - 110%
	Bromofluorobenzene	98	86 - 115%

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

Comments:


Analyst


Review

Purgeable Aromatics

Matrix Spike Analysis

Lab ID: 1400Spk
Sample Matrix: Water
Preservative: Cool, HgCl₂
Condition: Intact

Report Date: 08/31/95
Date Sampled: 08/29/95
Date Received: 08/29/95
Date Analyzed: 08/31/95

Target Analyte	Spike Added (ug/L)	Original Conc. (ug/L)	Spiked Sample Conc. (ug/L)	% Recovery	Acceptance Limits (%)
Benzene	10	ND	9.94	99%	39 - 150
Toluene	10	1.74	12.0	102%	46 - 148
Ethylbenzene	10	ND	10.2	102%	32 - 160
m,p-Xylenes	20	ND	20.6	102%	NE
o-Xylene	10	ND	10.2	102%	NE

ND - Analyte not detected at the stated detection limit.

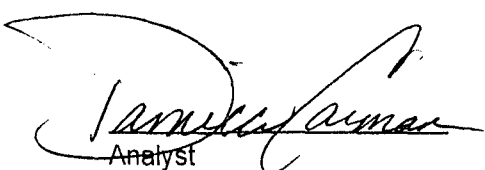
NA - Not applicable or not calculated.

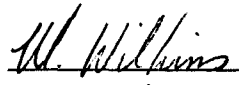
NE - Spike acceptance range not established by the EPA.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	104	88 - 110%
	Bromofluorobenzene	108	86 - 115%

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

Comments:


Analyst


Review

VOLATILE AROMATIC HYDROCARBONS

Matrix Spike Duplicate Analysis

Lab ID: 1400Spkdup
Sample Matrix: Water
Preservative: Cool, HgCl₂
Condition: Intact

Report Date: 08/31/95
Date Sampled: 08/29/95
Date Received: 08/29/95
Date Analyzed: 08/31/95

Target Analyte	Spike Added (ug/L)	Sample Spike Recovery (%)	Duplicate Spike Recovery (%)	Acceptance Limits (%)
Benzene	10	99%	98%	80 - 118
Toluene	10	102%	101%	82 - 121
Ethylbenzene	10	102%	101%	83 - 120
m,p-Xylenes	20	102%	101%	NE
o-Xylene	10	102%	100%	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:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	93	88 - 110%
	Bromofluorobenzene	97	86 - 115%

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

Comments: Calculation of spike recovery requires consideration of a sample dilution factor


Analyst


Review

107 S. CARLTON • FARMINGTON, NM 87401 • (505) 326-2395

PROJECT MANAGER: R. E. O'NEILL

Analytica Lab I.D.:

Company:

Address:

Phone:

Fax:

Bill To:

Company:

Address:

BLA66 ENVIRBLOOMFIELD632-1199SAME

CHAIN OF CUSTODY

1/2

0930

ORGANIC ANALYSES				WATER ANALYSES				METALS																								
Sample ID	Date	Time	Matrix	Lab ID	Petroleum Hydrocarbons (418.1)	Gasoline / Diesel (mod. 8015)	Gasoline (GRO)	Aromatic HCs BTEX/MTBE (602/8020)	Chlorinated Hydrocarbons (8010)	SDWA Volatiles (502.1/503.1)	Chlorinated Pesticides / PCBs (608 / 8080)	Herbicides (615 / 8150)	Volatiles GC/MS (624 / 8240 / 8260)	Base / Neutral / Acid GC/MS (625 / 8270)	Polynuclear Aromatic Hydrocarbons (8100)	TCLP Extraction	Other (specify):	Cation / Anion	Specific Cations (specify):	Specific Anions (specify):	BOD / Fecal / Total Coliform	Solids : TDS / TSS / SS	Nutrients: NH4+ / NO2- / NO3- / TKN	Oil and Grease	Other (specify):	Priority Pollutants	RCRA Metals (Total)	RCRA Metals TCLP (1311)	Other (specify):			
MW-5	8-29	1100	water																													
MW-7	"	1150	"																													
WP-108	"	1325	"																													
MW-17	"	0900	"																													
WP-21A	"	0930	"																													
MW-25	"	1005	"																													
MW-28	"	1445	"																													
WP-31A	"	1420	"																													

Project Information		Sample Receipt		Sampled by:		Relinquished by:	
Proj. #:	No. Containers:	Signature	Date:	Signature	Date:	Signature	Date:
Amoco	Y/N/NA	R. E. O'NEILL	8-29	R. E. O'NEILL	8-29		
Proj Name: CCY com + 181	Custody Seals:	Company:	Time:	Company:	Time:	Company:	Time:
P.O. No.	Received Intact:	BLA66 ENVIR	---	BLA66 ENVIR	1500		
Shipped Via:	Received Cold						
Required Turnaround Time (Prior Authorization Required for Rush)				Received By:			
				Signature	Date:	Signature	Date:
				Company:	Time:	Company:	Time:

Received By:		Received By:	
Signature	Date:	Signature	Date:
Amoco	8/29	Amoco	8/29
Company:	Time:	Company:	Time:
Amoco	3:05	Amoco	3:05
Company:	Time:	Company:	Time:

PROJECT MANAGER: R.E. OWEN

Analytica Lab I.D.:

Company:

Address:

Phone:

Fax:

Bill To:

Company:

Address:

Sample ID	Date	Time	Matrix	Lab ID
WP-32A	8-29	1340	WATER	
MW-36	"	1130	"	
WP-39	"	1045	"	
WP-40	"	1030	"	
WP-41	"	1400	"	
WP-42	"	0950	"	

Project Information

Proj. #: A4000

Proj Name: GUY LOM I 181

P.O. No.

Shipped Via:

Required Turnaround Time (Prior Authorization Required for Rush)

Sample Receipt

No. Containers:

Custody Seals: Y/N/NA

Received Intact:

Received Cold

CHAIN OF CUSTODY

ORGANIC ANALYSES										WATER ANALYSES						METALS									
Petroleum Hydrocarbons (418.1)	Gasoline / Diesel (mod. 8015)	Gasoline (GRO)	Aromatic HCs BTEX/MTBE (602/8020)	Chlorinated Hydrocarbons (8010)	SDWA Volatiles (502.1/503.1)	Chlorinated Pesticides / PCBs (608 / 8080)	Herbicides (615 / 8150)	Volatiles GC/MS (624 / 8240 / 8260)	Base / Neutral / Acid GC/MS (625 / 8270)	Polynuclear Aromatic Hydrocarbons (8100)	TCLP Extraction	Other (specify):	Cation / Anion	Specific Cations (specify):	Specific Anions (specify):	BOD / Fecal / Total Coliform	Solids : TDS / TSS / SS	Nutrients: NH4+ / NO2- / NO3- / TKN	Oil and Grease	Other (specify):	Priority Pollutants	RCRA Metals (Total)	RCRA Metals TCLP (1311)	Other (specify):	
✓			✓																						
✓			✓																						
✓			✓																						
✓			✓																						
✓			✓																						
✓			✓																						

Relinquished by:

Signature

Date:

Signature

Date:

Company:

Time:

Company:

Time:

Received By:

Signature

Date:

Signature

Date:

Company:

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Time: