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# REPORTS

# **DATE:** Oct. 11, 1994

#### BLAGG ENGINEERING, INC.

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

October 11, 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 GCU-181 Well Location San Juan County, New Mexico Unit F, Section 34, T29N, R12W

Dear Mr. Olson:

On behalf of Mr. Buddy Shaw, Amoco Production Company, this report includes the latest quarterly groundwater sampling results for the above referenced site. Please refer to a June 28, 1994 Blagg Engineering report for the previous sampling results. Sampling has been completed per your instructions in a September 16, 1993 letter to Mr. Buddy Shaw, with modifications per your January 18, 1994 letter.

Please note that no remediation or sampling has been completed north of the access road as noted on the attached diagram. This is due to legal entanglements with the property owner.

We trust this information will be of assistance in evaluating the experimental remediation system 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 632-0615.

Respectfully Submitted, BLAGG ENGINEERING, INC.

Pobert E. O'hell

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

- Attachments: Figure 1 Sampling Results Site Diagram Laboratory Reports QA/QC
- xc: Buddy Shaw, Amoco Denny Foust, NMOCD Aztec Office

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SEP94-WO.RPT

#### <u>Table 1</u> Amoco Production Company GCU 181 Groundwater Sampling

Oct. 11, 1994

SAMPLE I.D.	DATE	рН	COND.	BENZENE		E-BENZ.	T-XYL.	NITRATE NITROGEN mg/l	FCB/ 100 mls COLONIES
A00/ 45	2/0/04			ND	0.5	ND	2.1		
1/1/1/ #5	2/9/94	-	6300	ND	0.5		3.1		
	6/13/94	7	7800	<1	<1	<1	< 1		
	9/26/94	7.1	5200	ND	ND	ND	ND		
MW #7	2/9/94	7	10100	12.9	16.7	580	1300.3		
	6/13/94	7	11000	<1	10	<1	1480		
	9/26/94	7.2	9000	12.8	ND	606	73.3		
_T @ 10A	2/9/94	7	3200	41	37.7	0.4	325	0.08	0
	6/14/94	8	4400	< 1	< 1	132	118	0.109	< 1
	9/26/94	7.7	3800	6.7	12.2	61.5	502.9	1.05	0
MW #25	2/9/94	7	5500	ND	ND	0.3	1.8		
	6/13/94	7	5700	<1	<1	< 1	<1		
	9/26/94	7.3	5100	ND	ND	ND	ND		
MW #28	2/9/94	7	3800	0.4	1.8	ND	8.8	0.07	0
	6/14/94	7	4000	<1	<1	< 1	< 1	0.18	<1
	9/26/94	7.1	3900	ND	ND	0.4	ND	1.00	0
WP #31A	2/9/94	7	4800	ND	ND	ND	0.4		
	6/13/94	7	4500	<1	<1	<1	< 1		
	9/26/94	6.8	4800	ND	0.5	ND	ND		
MW #32	2/9/94	7	3900	149	13.3	ND	408.2	0.04	0
Т@32	6/14/94	8	4700	< 1	<1	< 1	<1	0.101	<1
	9/26/94	7.9	4000	ND	ND	ND	ND	0.85	0
WP #34A	2/9/94	7	5000	21.4	17.2	1.9	143	0.22	0
	6/14/94	7	13800	452	206	7933	3324	0.873	<1
	9/26/94	6.9	11000	0.9	ND	24.6	465.0	2.07	0
MW #36	2/9/94	7	5100	ND	ND	0.6	3.6		
	6/13/94	7	5600	< 1	< 1	< 1	< 1		
	9/26/94	7.2	4300	ND	ND	1.7	2.0		

Notes: MW

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

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

#### <u>Table 1 continued</u> Amoco Production Company GCU 181 Groundwater Sampling

Oct. 11, 1994

SAMPLE I.D.	DATE	рН	COND. umhos/cm	BENZENE PPB	TOLUENE PPB	E-BENZ. PPB	T-XYL. PPB	NITRATE NITROGEN mg/L	FCB/ 100 mls COLONIES
WP #39	2/9/94	7	3400	ND	ND	ND	0.2	0.05	0
	6/13/94	7	3400	< 1	< 1	<1	< 1		
	9/26/94	7.1	3200	ND	0.2	ND	0.7		
WP #40	2/9/94	7	3700	ND	ND	ND	3.8		
	6/13/94	7	3900	< 1	< 1	< 1	< 1		
	9/26/94	6.9	3900	ND	0.4	ND	0.4		
WP #41	2/9/94	7	6900	171	7400	810	12060	0.88	0
	6/14/94	7	12200	1026	1061	14803	8939	11.8	<1
	9/26/94	7.0	9500	83.5	18.3	414.0	7811	1.18	0

Notes:

MW = Monitor well WP = Well point

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

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





#### Blagg Engineering, Inc.

Project ID: Sample ID: Lab ID: Sample Matrix: Preservative: Condition:

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ENVIRONMENTAL LABORATOR

GCU - 181 MW - 5 0138 Water Cool, HCI Intact

Report Date:	10/07/94
Date Sampled:	09/26/94
Date Received:	09/26/94
Date Analyzed:	10/05/94

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:	<u>Surrogate</u>	Percent Recovery	Acceptance Limits
	Trifluorotoluene	97	88 - 110%
	Bromofluorobenzene	87	86 - 115%
Reference:	Method 602.2, Purgeal	ble Aromatics; Federal Regi	ster, Vol. 49, No. 209,

Oct. 1984.

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#### Blagg Engineering, Inc.

Project ID: Sample ID: Lab ID: Sample Matrix: Preservative: Condition: GCU - 181 MW - 7 0139 Water Cool, HCI Intact

Report Date:	10/07/94
Date Sampled:	09/26/94
Date Received:	09/26/94
Date Analyzed:	10/05/94

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	12.8	0.20
Toluene	ND	5.00
Ethylbenzene	606	5.00
m,p-Xylenes	64.9	10.0
o-Xylene	8.43	5.00

Total BTEX 692

ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	Percent Recovery	Acceptance Limits
	Trifluorotoluene	97	88 - 110%
	Bromofluorobenzene	93	86 - 115%
Reference:	Method 602.2 Purgeat	ale Aromatics: Federal Regi	ster Vol 49 No 209

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

Comments:

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#### Blagg Engineering, Inc.

Project ID: . Sample ID: Lab ID: Sample Matrix: Preservative: Condition: GCU - 181 T @ 10A 0140 Water Cool, HCI Intact

Report Date:	10/07/94
Date Sampled:	09/26/94
Date Received:	09/26/94
Date Analyzed:	10/05/94

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	6.71	0.20
Toluene	12.2	10.0
Ethylbenzene	61.5	10.0
m,p-Xylenes	404	20.0
o-Xylene	98.9	10.0

Total BTEX 584

ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	Percent Recovery	Acceptance Limits
	Trifluorotoluene	96	88 - 110%
	Bromofluorobenzene	89	86 - 115%
Reference	Method 602.2 Purgest	he Aromatics: Federal Regi	ster Vol 49 No 209

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

**Comments:** 

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# Water Analysis

**Blagg Engineering** 

Sample ID:	T @ 10A	Date Reported:	10/03/94
Laboratory ID:	0140	Date Sampled:	09/26/94
Sample Matrix:	Water	Time Sampled:	NA
Condition:	Cool/Intact	Date Received:	09/26/94

Parameter	Analytical Result	Units
Fecal Coliform	0	colonies/100mL
Nitrate as N	1.05	mg/L

U.S.E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and **Reference:** Wastes", 1983."Standard Methods For The Examination Of Water And Waste Water", 17th ed., 1989.

Alais Baulett Analyst

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#### **Blagg Engineering, Inc**

Project ID: Sample ID: Lab ID: Sample Matrix: Preservative: Condition:

GCU 181 MW - 25 0141 Water Cool, HCI Intact

Report Date: 10/07/94 Date Sampled: 09/26/94 Date Received: 09/26/94 Date Analyzed: 10/05/94

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:	<u>Surrogate</u>	Percent Recovery	Acceptance Limits
	Trifluorotoluene	95	88 - 110%
	Bromofluorobenzene	88	86 - 115%
Reference:	Method 602.2, Purgeat	ole Aromatics; Federal Regi	ster, Vol. 49, No. 209,

Oct. 1984.

**Comments:** 

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#### Blagg Engineering, Inc.

Project ID: Sample ID: Lab ID: Sample Matrix: Preservative: Condition:

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GCU - 181 MW - 28 0142 Water Cool, HCI Intact 
 Report Date:
 10/07/94

 Date Sampled:
 09/26/94

 Date Received:
 09/26/94

 Date Analyzed:
 10/05/94

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

Total BTEX 0.41

ND - Analyte not detected at the stated detection limit.

Quality Control:	Surrogate	Percent Recovery	Acceptance Limits
	Trifluorotoluene	92	88 - 110%
	Bromofluorobenzene	86	86 - 115%
Reference:	Method 602.2, Purgeal	ble Aromatics: Federal Regi	ster, Vol. 49, No. 209,

Comments:

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# Water Analysis

**Blagg Engineering** 

Sample ID:	MW-28	Date Reported:	10/03/94
Laboratory ID:	0142	Date Sampled:	09/26/94
Sample Matrix:	Water	Time Sampled:	NA
Condition:	Cool/Intact	Date Received:	09/26/94

Parameter	Analytical Result	Units
Fecal Coliform	0	colonies/100mL
Nitrate as N	1.00	mg/L

Reference: U.S.E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983."Standard Methods For The Examination Of Water And Waste Water", 17th ed., 1989.

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#### Blagg Engineering, Inc.

Project ID: Sample ID: Lab ID: Sample Matrix: Preservative: Condition:

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ENVIRONMENTAL LABORATORY

GCU - 181 WP - 31A 0143 Water Cool, HCI Intact

10/07/94
09/26/94
09/26/94
10/05/94

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

Total BTEX 0.45

ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	Percent Recovery	Acceptance Limits
	Trifluorotoluene	96	88 - 110%
	Bromofluorobenzene	87	86 - 115%
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Reference: Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209, Oct. 1984.

Comments:

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#### Blagg Engineering, Inc.

Project ID: Sample ID: Lab ID: Sample Matrix: Preservative: Condition: GCU - 181 T @ 32 0144 Water Cool, HCI Intact

Report Date:	10/07/94
Date Sampled:	09/26/94
Date Received:	09/26/94
Date Analyzed:	10/05/94

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

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

**Comments:** 

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Analyst

# Water Analysis

**Blagg Engineering** 

Sample ID:	Т @ 32	Date Reported:	10/03/94
Laboratory ID:	0144	Date Sampled:	09/26/94
Sample Matrix:	Water	Time Sampled:	NA
Condition:	Cool/Intact	Date Received:	09/26/94

Parameter	Analytical Result	Units
Fecal Coliform	0	colonies/100mL
Nitrate as N	0.85	mg/L

Reference: U.S.E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983."Standard Methods For The Examination Of Water And Waste Water", 17th ed., 1989.

Alpica Bartett Analyst

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#### Blagg Engineering, Inc.

Project ID: Sample ID: Lab ID: Sample Matrix: Preservative: Condition: GCU - 181 WP @ 34A 0145 Water Cool, HCI Intact

Report Date:	10/07/94
Date Sampled:	09/26/94
Date Received:	09/26/94
Date Analyzed:	10/05/94

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	0.92	0.20
Toluene	ND	10.0
Ethylbenzene	24.6	10.0
m,p-Xylenes	465	20.0
o-Xylene	ND	10.0

Total BTEX 491

ND - Analyte not detected at the stated detection limit.

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

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

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### **Water Analysis**

Blagg Engineering

Sample ID:	WP @ 34A	Date Reported:	10/03/94
Laboratory ID:	0145	Date Sampled:	09/26/94
Sample Matrix:	Water	Time Sampled:	NA
Condition:	Cool/Intact	Date Received:	09/26/94

Parameter	Analytical Result	Units
Fecal Coliform	0	colonies/100mL
Nitrate as N	2.07	mg/L

**Reference:** U.S.E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983."Standard Methods For The Examination Of Water And Waste Water", 17th ed., 1989.

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#### Blagg Engineering, Inc.

Project ID: Sample ID: Lab ID: Sample Matrix: Preservative: Condition:

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ENVIRONMENTAL LABORATOR

GCU - 181 MW -36 0147 Water Cool, HCI Intact

Report Date:	10/07/94
Date Sampled:	09/26/94
Date Received:	09/26/94
Date Analyzed:	10/06/94

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	0.20
Toluene	ND	0.20
Ethylbenzene	1.69	0.20
m,p-Xylenes	1.96	0.40
o-Xylene	ND	0.20

**Total BTEX** 3.65

ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	Percent Recovery	Acceptance Limits
	Trifluorotoluene	100	88 - 110%
	Bromofluorobenzene	101	86 - 115%
Reference:	Method 602.2, Purgeal Oct. 1984.	ble Aromatics; Federal Regi	ster, Vol. 49, No. 209,

Analyst

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#### Blagg Engineering, Inc.

Project ID: Sample ID: Lab ID: Sample Matrix: Preservative: Condition: GCU - 181 WP - 39 0146 Water Cool, HCI Intact

Report Date:	10/07/94
Date Sampled:	09/26/94
Date Received:	09/26/94
Date Analyzed:	10/06/94

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	0.20
Toluene	0.24	0.20
Ethylbenzene	ND	0.20
n,p-Xylenes	0.71	0.40
o-Xylene	ND	0.20

Total BTEX. 0.94

ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	Percent Recovery	Acceptance Limits
	Trifluorotoluene	101	88 - 110%
	Bromofluorobenzene	88	86 - 115%
Reference:	Method 602.2, Purgeal Oct. 1984.	ole Aromatics; Federal Regi	ster, Vol. 49, No. 209,

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#### Blagg Engineering, Inc.

Project ID: Sample ID: Lab ID: Sample Matrix: Preservative: Condition:

GCU - 181 WP - 40 0148 Water Cool, HCI Intact

Report Date: 10/07/94 Date Sampled: 09/26/94 Date Received: 09/26/94 Date Analyzed: 10/06/94

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	0.20
Toluene	0.41	0.20
Ethylbenzene	ND	0.20
m,p-Xylenes	0.42	0.40
o-Xylene	ND	0.20

**Total BTEX** 0.83

ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	Percent Recovery	Acceptance Limits
	Trifluorotoluene	93	88 - 110%
Reference:	Method 602.2, Purge	eable Aromatics; Federal Regi	ster, Vol. 49, No. 209,

Oct. 1984.

**Comments:** 

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#### Blagg Engineering, Inc.

Project ID: Sample ID: Lab ID: Sample Matrix: Preservative: Condition:

GCU - 181 WP - 41 0149 Water Cool, HCI Intact

Report Date:	10/07/94
Date Sampled:	09/26/94
Date Received:	09/26/94
Date Analyzed:	10/06/94

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	83.5	10.0
Toluene	18.3	10.0
Ethylbenzene	414	10.0
m,p-Xylenes	7,220	100
o-Xylene	591	10.0

Total BTEX 8329

ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	Percent Recovery	Acceptance Limits
-	Trifluorotoluene	103	88 - 110%
	Bromofluorobenzene	103	86 - 115%
Poforance	Mothod 602.2 Durgoot	alo Aromatico: Enderal Pagi	star Val 49 No. 209

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

Comments:

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# Water Analysis

#### **Blagg Engineering**

Sample ID:	WP-41	Date Reported:	10/03/94
Laboratory ID:	0149	Date Sampled:	09/26/94
Sample Matrix:	Water	Time Sampled:	NA
Condition:	Cool/Intact	Date Received:	09/26/94

Parameter	Analytical Result	Units
Fecal Coliform	0	colonies/100mL
Nitrate as N	1.18	mg/L

Reference: U.S.E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983."Standard Methods For The Examination Of Water And Waste Water", 17th ed., 1989.

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# QUALITY ASSURANCE / QUALITY CONTROL

### **Purgeable Aromatics**

#### **Duplicate Analysis**

Lab ID: Sample Matrix: Preservative: Condition:

139Dup Water Cool, HCI Intact

Report Date:	10/07/94
Date Sampled:	09/26/94
Date Received:	09/26/94
Date Analyzed:	10/05/94

Target Analyte	Original Conc. (ug/L)	Duplicate Conc. (ug/L)	Acceptance Range (ug/L)
Benzene	18.0	16.8	13.1 - 21.7
Toluene	ND	ND	NA
Ethylbenzene	606	600	397 - 809
m,p-Xylenes	64.9	60.2	NE
o-Xylene	8.43	6.52	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>	Percent Recovery	Acceptance Limits
Quality Control:	Trifluorotoluene	96	88 - 110%
	Bromofluorobenzene	93	86 - 115%

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

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#### Matrix Spike Analysis

Lab ID: Sample Matrix: Preservative: Condition:

138Spk Water Cool, HCI Intact

Report Date: 10/07/94 Date Sampled: 09/26/94 Date Received: 09/26/94 Date Analyzed: 10/05/94

Target Analyte	Spike Added (ug/L)	Original Conc. (ug/L)	Spiked Sample Conc. (ug/L)	% Recovery	Acceptance Limits (%)
Benzene	10	ND	9.75	97%	39 -150
Toluene	10	ND	9.80	98%	46 - 148
Ethylbenzene	10	ND	9.96	99%	32 - 160
m,p-Xylenes	20	ND	20.0	99%	NE
o-Xylene	10	ND	9.86	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:	<u>Surrogate</u>	Percent Recovery	Acceptance Limits
	Trifluorotoluene	96	88 - 110%
	Bromofluorobenzene	91	86 - 115%

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

**Comments:** 

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#### Matrix Spike Analysis

Lab ID: Sample Matrix: Preservative: Condition: 148Spk Water Cool, HCI Intact 
 Report Date:
 10/07/94

 Date Sampled:
 09/26/94

 Date Received:
 09/26/94

 Date Analyzed:
 10/06/94

Target Analyte	Spike Added (ug/L)	Original Conc. (ug/L)	Spiked Sample Conc. (ug/L)	% Recovery	Acceptance Limits (%)
Benzene	10	ND	9.67	96%	39 -150
Toluene	10	0.41	9.98	96%	46 - 148
Ethylbenzene	10	ND	9.71	96%	32 - 160
m,p-Xylenes	20	0.42	19.7	96%	NE
o-Xylene	10	ND	9.67	96%	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>	Percent Recovery	Acceptance Limits
-	Trifluorotoluene	92	88 - 110%
	Bromofluorobenzene	88	86 - 115%

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

**Comments:** 

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#### **VOLATILE AROMATIC HYDROCARBONS**

#### Matrix Spike Duplicate Analysis

Lab ID:	148Spkdup	Report Date:	10/07/94
Sample Matrix:	Water	Date Sampled:	09/26/94
Preservative:	Cool, HCI	Date Received:	09/26/94
Condition:	Intact	Date Analyzed:	10/06/94

Target Analyte	Spike Added (ug/L)	Sample Spike Recovery (%)	Duplicate Spike Recovery (%)	Acceptance Limits (%)
Benzene	10	96%	92%	76 - 112
Toluene	10	96%	94%	77 - 113
Ethylbenzene	10	96%	95%	62 - 129
m,p-Xylenes	20	96%	190%	NE
o-Xylene	10	96%	95%	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>	Percent Recovery	Acceptance Limits
	Trifluorotoluene	101	88 - 110%
	Bromofluorobenzene	91	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 which is not applied to the spike added.

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Analyst

#### **PURGEABLE AROMATICS Quality Control Report**

#### Method Blank Analysis

Sample Matrix: Lab ID:

Water MB34612 Report Date: 10/07/94 Date Analyzed: 10/05/94

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>	Percent Recovery	Acceptance Limits
	Trifluorotoluene	93	88 - 110%
	Bromofluorobenzene	86	86 - 115%
Reference:	Method 602.2 Purdeat	ole Aromatics: Federal Regi	ster Vol 49 No 209

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

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#### PURGEABLE AROMATICS Quality Control Report

#### Method Blank Analysis

Sample Matrix: Lab ID: Water MB34613 
 Report Date:
 10/07/94

 Date Analyzed:
 10/06/94

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>	Percent Recovery	Acceptance Limits
	Trifluorotoluene	99	88 - 110%
	Bromofluorobenzene	93	86 - 115%
Reference:	Method 602.2, Purgeat	ole Aromatics; Federal Regi	ster, Vol. 49, No. 209,

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

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# Water Analysis

#### **Quality Control**

#### **Blagg Engineering**

Laboratory ID:	QC
Sample Matrix:	Water
Condition:	Cool/Intact

Date Reported:

10/03/94

Parameter	Analytical Result	True Value	Units
Fecal Coliform	0	0	colonies/100mL
Nitrate as N	1.82	2.00	mg/L

Reference:U.S.E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983."Standard Methods For The Examination Of Water And Waste Water", 17th ed., 1989.

**Comments:** Certified QC not available for all parameters so duplicate analysis done to verify numbers.

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ARLTON • FARMINGTON, NM 874 ECT MANAGER: tica Lab I.D.: any: <u>BLA6</u> ss: <u>7.0. 60</u> e: <u>632</u> ss: ss: any: <u>632</u> ss: <u>5</u>	101 • (505) 326-2395 (	Petroleum Hydrocarbons (418.1) Gasoline / Diesel (mod. 8015) Gasoline (GRO)	Aromatic HCa(BTEX/MTBE (602/8020) Chlorinated Hydrocarbons (8010) SDWA Volatiles (502.1/503.1) Chlorinated Pesticides ( 708.48080)	Base / Neutral / Acid GC/MS (625 / 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 Other (specify): Other (specify):	Priority Pollutants RCRA Metals (Total) Cther (specify):	
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