

BP AMERICA PRODUCTION CO

LEEPER GAS COM #001

API# 30-045-11142

C-141

Part 3 of 3

On Site Technologies, LTD.

Date: 22-Oct-99

CLIENT: Blagg Engineering
Work Order: 9910009
Project: Leeper GC #1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS WATER	Batch ID: GC-1_991015	Test Code: SW8021B	Units: µg/L	Analysis Date: 10/15/99				Prep Date:			
Client ID:	9910009	Run ID:	GC-1_991015A		SeqNo:		20606				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	41.4	0.5	40	0	103.5%	87	119				
Ethylbenzene	41.95	0.5	40	0	104.9%	89	117				
m,p-Xylene	78.11	1	80	0.2588	97.3%	88	114				
Methyl tert-Butyl Ether	38.6	1	40	0	96.5%	69	129				
o-Xylene	41.1	0.5	40	0.0849	102.6%	90	116				
Toluene	41.28	0.5	40	0.2295	102.6%	90	115				

Sample ID: LCS WATER	Batch ID: GC-1_991016	Test Code: SW8021B	Units: µg/L	Analysis Date: 10/16/99				Prep Date:			
Client ID:	9910009	Run ID:	GC-1_991016A	SeqNo: 20633							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	43.3	0.5	40	0	108.3%	87	119				
Ethylbenzene	43.99	0.5	40	0	110.0%	89	117				
m,p-Xylene	81.97	1	80	0.1669	102.3%	88	114				
Methyl tert-Butyl Ether	42.42	1	40	0	106.0%	69	129				
o-Xylene	43.13	0.5	40	0	107.8%	90	116				
Toluene	43.27	0.5	40	0.1699	107.7%	90	115				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 22-Oct-99

CLIENT: Blagg Engineering
Work Order: 9910009
Project: Leeper GC #1

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: CCV1 BTEX_9910	Batch ID: GC-1_991015	Test Code: SW8021B	Units: µg/L			Analysis Date: 10/15/99			Prep Date:		
Client ID:	9910009	Run ID:	GC-1_991015A			SeqNo:		20603			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.62	0.5	20	0	108.1%	85	115				
Ethylbenzene	21.89	0.5	20	0	109.4%	85	115				
m,p-Xylene	41.04	1	40	0	102.6%	85	115				
Methyl tert-Butyl Ether	19.65	1	20	0	98.3%	85	115				
o-Xylene	21.52	0.5	20	0	107.6%	85	115				
Toluene	21.49	0.5	20	0	107.5%	85	115				
1,4-Difluorobenzene	90.6	0	100	0	90.6%	80	120				
4-Bromochlorobenzene	93.38	0	100	0	93.4%	80	120				
Fluorobenzene	89.25	0	100	0	89.3%	80	120				

Sample ID: CCV2 BTEX_9910	Batch ID: GC-1_991015	Test Code: SW8021B	Units: µg/L			Analysis Date: 10/15/99			Prep Date:		
Client ID:	9910009	Run ID:	GC-1_991015A			SeqNo:	20604				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.53	0.5	20	0	107.6%	85	115				
Ethylbenzene	21.71	0.5	20	0	108.6%	85	115				
m,p-Xylene	40.48	1	40	0	101.2%	85	115				
Methyl tert-Butyl Ether	20.44	1	20	0	102.2%	85	115				
o-Xylene	21.36	0.5	20	0	106.8%	85	115				
Toluene	21.36	0.5	20	0	106.8%	85	115				
1,4-Difluorobenzene	90.39	0	100	0	90.4%	80	120				
4-Bromochlorobenzene	94.89	0	100	0	94.9%	80	120				
Fluorobenzene	89.54	0	100	0	89.5%	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 9910009
Project: Leeper GC #1

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID: CCV3 BTEX_9910		Batch ID: GC-1_991015		Test Code: SW8021B		Units: µg/L		Analysis Date: 10/15/99			Prep Date:	
Client ID:		9910009		Run ID: GC-1_991015A		SeqNo: 20605						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	41.66	0.5	40	0	104.2%	85	115					
Ethylbenzene	41.74	0.5	40	0	104.4%	85	115					
m,p-Xylene	77.74	1	80	0	97.2%	85	115					
Methyl tert-Butyl Ether	40.98	1	40	0	102.4%	85	115					
o-Xylene	41	0.5	40	0	102.5%	85	115					
Toluene	41.38	0.5	40	0	103.4%	85	115					
1,4-Difluorobenzene	89.97	0	100	0	90.0%	80	120					
4-Bromochlorobenzene	93.68	0	100	0	93.7%	80	120					
Fluorobenzene	88.9	0	100	0	88.9%	80	120					

Sample ID: CCV1 BTEX_9910		Batch ID: GC-1_991016		Test Code: SW8021B		Units: µg/L		Analysis Date: 10/16/99			Prep Date:	
Client ID:		9910009		Run ID:		GC-1_991016A		SeqNo: 20630				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	22.24	0.5	20	0	111.2%	85	115					
Ethylbenzene	22.69	0.5	20	0	113.4%	85	115					
m,p-Xylene	42.46	1	40	0	106.2%	85	115					
Methyl tert-Butyl Ether	21.7	1	20	0	108.5%	85	115					
o-Xylene	22.21	0.5	20	0	111.1%	85	115					
Toluene	22.26	0.5	20	0	111.3%	85	115					
1,4-Difluorobenzene	90.46	0	100	0	90.5%	80	120					
4-Bromochlorobenzene	92.68	0	100	0	92.7%	80	120					
Fluorobenzene	89.18	0	100	0	89.2%	80	120					

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 9910009
Project: Leeper GC #1

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: CCV2 BTEX_9910		Batch ID: GC-1_991016		Test Code: SW8021B		Units: µg/L		Analysis Date: 10/16/99			Prep Date:	
Client ID:		9910009		Run ID:		GC-1_991016A		SeqNo: 20831				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	21.14	0.5	20	0	105.7%	85	115					
Ethylbenzene	22.06	0.5	20	0	110.3%	85	115					
m,p-Xylene	40.28	1	40	0	100.7%	85	115					
Methyl tert-Butyl Ether	21.6	1	20	0	108.0%	85	115					
o-Xylene	21.6	0.5	20	0	108.0%	85	115					
Toluene	21.25	0.5	20	0	106.3%	85	115					
1,4-Difluorobenzene	90.35	0	100	0	90.4%	80	120					
4-Bromochlorobenzene	92.29	0	100	0	92.3%	80	120					
Fluorobenzene	88.98	0	100	0	89.0%	80	120					

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 22-Oct-99

CLIENT: Blagg Engineering
 Work Order: 9910009
 Project: Leeper GC #1
 Test No: SW8021B

QC SUMMARY REPORT SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
9910009-01A	90.4	93.5	89.8
9910009-02A	90.9	91.9	91.9
9910009-03A	90.4	92.8	89
9910009-04A	91	97.2	90.3
9910012-01A	90.4	94.2	89.7
9910013-01A	89.2	91.8	88.6
9910015-01A	95.3	95.5	90.5
9910015-01AMS	95.1	93.7	90.3
9910015-01AMSD	95	95.4	91.1
9910015-02A	100	96.8	93.7
9910015-03A	91.1	93.8	90.1
9910015-04A	91	93.8	90.5
9910015-05A	90.9	93.8	89.9
9910015-05AMS	89.4	92.8	88.6
9910015-05AMSD	89.5	92.7	88.7
9910015-06A	90.7	93.8	90.6
9910015-07A	96.1	93.5	92.7
9910015-20A	91.1	94.4	90.2
9910015-21A	91	93.8	89.9
9910015-22A	90.6	93.4	89.9
9910015-23A	91	93	90
9910015-24A	90.5	92.9	90.1
9910015-25A	90.9	92.7	90.2
9910015-26A	90.2	94.5	89.5
9910017-01A	91	92.9	90.2
9910017-02A	90.9	93.4	89.9
9910017-03A	90.8	93.6	90.2

Acronym

Surrogate

QC Limits

14FBZ

= 1,4-Difluorobenzene

80-120

4BCBZ

= 4-Bromochlorobenzene

80-120

FLBZ

= Fluorobenzene

80-120

* Surrogate recovery outside acceptance limits

1

CLIENT: Blagg Engineering
Work Order: 9910009
Project: Leeper GC #1
Test No: SW8021B

QC SUMMARY REPORT SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
9910017-04A	93.9	94.7	88.9
9910017-05A	93.9	93.4	89.1
CCV1 BTEX_99100	90.4	92.7	89.2
CCV2 BTEX_99100	90.4	92.3	89
CCV3 BTEX_99100	90	93.7	88.9
LCS WATER	90.4	92.2	89
MBI	96.6	99.3	100

Acronym	Surrogate	QC Limits
14FBZ	= 1,4-Difluorobenzene	80-120
4BCBZ	= 4-Bromochlorobenzene	80-120
FLBZ	= Fluorobenzene	80-120

* Surrogate recovery outside acceptance limits

BLAGG ENGINEERING, INC.
MONITOR WELL SAMPLING DATA

CLIENT : BP AMOCO

CHAIN-OF-CUSTODY # : _____

LOCATION : LEEPER GC # 1

LABORATORY (S) USED : _____

Date : January 3, 2000

SAMPLER : _____

Filename : 01-03-00.WK4

PROJECT MANAGER : J C B

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	VOLUME PURGED (gal.)	FREE PRODUCT (ft)
M-WELL	106.41	93.71	12.70	25.00	-	-	-	-	-
2	104.79	93.40	11.39	15.21	-	-	-	-	-
4	105.41	93.69	11.72	19.88	-	-	-	-	-
5	108.04	93.63	14.41	23.50	-	-	-	-	-
6	107.40	93.47	13.93	23.00	-	-	-	-	-
7	107.17	93.44	13.73	22.00	-	-	-	-	-

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".

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 14-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper GC 1
Work Order:	0001002	Client Sample ID:	MW-4; 0103001430
Lab ID:	0001002-01A	Matrix:	AQUEOUS
Project:	Leeper GC 1	Collection Date:	1/3/2000 2:30:00 PM
		COC Record:	10344

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	1/5/2000
Toluene	ND	0.5		µg/L	1	1/5/2000
Ethylbenzene	ND	0.5		µg/L	1	1/5/2000
m,p-Xylene	ND	1		µg/L	1	1/5/2000
o-Xylene	ND	0.5		µg/L	1	1/5/2000

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
	B - Analyte detected in the associated Method Blank	Surr: - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 14-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper GC 1
Work Order:	0001002	Client Sample ID:	MW-5; 0104001039
Lab ID:	0001002-02A	Matrix:	AQUEOUS
Project:	Leeper GC 1	Collection Date:	1/4/2000 10:39:00 AM
		COC Record:	10344

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DM
Benzene	ND	0.5		µg/L	1	1/5/2000
Toluene	ND	0.5		µg/L	1	1/5/2000
Ethylbenzene	ND	0.5		µg/L	1	1/5/2000
m,p-Xylene	ND	1		µg/L	1	1/5/2000
o-Xylene	ND	0.5		µg/L	1	1/5/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

1 - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surrogate - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 14-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper GC 1
Work Order:	0001002	Client Sample ID:	MW-6; 0104001305
Lab ID:	0001002-03A	Matrix:	AQUEOUS
Project:	Leeper GC 1	Collection Date:	1/4/2000 1:05:00 PM
		COC Record:	10344

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	1/5/2000
Toluene	ND	0.5		µg/L	1	1/5/2000
Ethylbenzene	ND	0.5		µg/L	1	1/5/2000
m,p-Xylene	ND	1		µg/L	1	1/5/2000
o-Xylene	ND	0.5		µg/L	1	1/5/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Sur - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 14-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper GC 1
Work Order:	0001002	Client Sample ID:	MW-7; 0104001518
Lab ID:	0001002-04A	Matrix:	AQUEOUS
Project:	Leeper GC 1	Collection Date:	1/4/2000 3:18:00 PM
		COC Record:	10344

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	1/5/2000
Toluene	0.8	0.5		µg/L	1	1/5/2000
Ethylbenzene	ND	0.5		µg/L	1	1/5/2000
m,p-Xylene	ND	1		µg/L	1	1/5/2000
o-Xylene	ND	0.5		µg/L	1	1/5/2000

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
	B - Analyte detected in the associated Method Blank	Surr: - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT



CHAIN OF CUSTODY RECORD

612 E. Murray Dr. • P.O. Box 2606 • Farmington, NM 87499
LAB (505) 325-5667 • FAX (505) 327-1498

Date: _____

Page: _____ of _____

Purchase Order No.:		Project No.:		REPORT RESULTS TO		Name				Title																																																																																																																
SEND INVOICE TO		Name				Company																																																																																																																				
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PROJECT LOCATION: SAMPLER'S SIGNATURE: <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th rowspan="2" style="width:30%;">SAMPLE IDENTIFICATION</th> <th colspan="4">SAMPLE</th> <th rowspan="2" style="width:5%;">Number of Containers</th> <th colspan="12" style="text-align: center;">ANALYSIS REQUESTED</th> <th rowspan="2" style="width:10%;">LAB ID</th> </tr> <tr> <th>DATE</th> <th>TIME</th> <th>MATRIX</th> <th>PRES.</th> <th colspan="12" style="height: 150px;"></th> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td colspan="12" rowspan="10"></td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </table>						SAMPLE IDENTIFICATION	SAMPLE				Number of Containers	ANALYSIS REQUESTED												LAB ID	DATE	TIME	MATRIX	PRES.																																																																																														
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On Site Technologies, LTD.

Date: 14-Jan-00

CLIENT: Blagg Engineering
Work Order: 0001002
Project: Leeper GC 1

QC SUMMARY REPORT
Method Blank

Sample ID: MB1	Batch ID: GC-1_000105	Test Code: SW8021B	Units: µg/L	Analysis Date: 1/5/2000				Prep Date:			
Client ID:	0001002	Run ID:	GC-1_000105A	SeqNo: 22456							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.1773	0.5									J
Ethylbenzene	.1232	0.5									J
m,p-Xylene	.1894	1									J
Methyl tert-Butyl Ether	ND	1									
o-Xylene	.0695	0.5									J
Toluene	.1583	0.5									J

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

D - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 14-Jan-00

CLIENT: Blagg Engineering
Work Order: 0001002
Project: Leeper GC 1

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 9912031-24AMS	Batch ID: GC-1_000105	Test Code: SW8021B	Units: µg/L	Analysis Date: 1/5/2000				Prep Date:			
Client ID:	0001002	Run ID:	GC-1_000105A	SeqNo: 22457							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2292	5	400	1898	98.6%	80	116				E
Ethylbenzene	1184	5	400	616.1	141.9%	80	118				S
m,p-Xylene	1413	10	800	521.4	111.4%	77	116				
Methyl tert-Butyl Ether	502.7	10	400	113.8	97.2%	62	122				
o-Xylene	567.2	5	400	152.8	103.6%	83	117				
Toluene	421	5	400	5.569	103.9%	80	116				

Sample ID: 9912031-24AMSD	Batch ID: GC-1_000105	Test Code: SW8021B	Units: µg/L	Analysis Date: 1/5/2000					Prep Date:		
Client ID:	0001002	Run ID:	GC-1_000105A		SeqNo:		22458				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2256	5	400	1898	89.5%	80	116	2292	1.6%	7	E
Ethylbenzene	1181	5	400	616.1	141.1%	80	118	1184	0.3%	7	S
m,p-Xylene	1408	10	800	521.4	110.6%	77	116	1413	0.5%	7	
Methyl tert-Butyl Ether	499.4	10	400	113.8	96.4%	62	122	502.7	0.7%	7	
o-Xylene	566.9	5	400	152.8	103.5%	83	117	567.2	0.0%	6	
Toluene	415.2	5	400	5.569	102.4%	80	116	421	1.4%	6	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 14-Jan-00

CLIENT: Blagg Engineering
Work Order: 0001002
Project: Leeper GC I.

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: LCS WATER		Batch ID: GC-1_000105		Test Code: SW8021B		Units: µg/L		Analysis Date: 1/5/2000			Prep Date:	
Client ID:		0001002		Run ID: GC-1_000105A				SeqNo: 22455				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	41.1	0.5	40	0.1773	102.3%	87	119					
Ethylbenzene	40.96	0.5	40	0.1232	102.1%	89	117					
m,p-Xylene	78.38	1	80	0.1894	97.7%	88	114					
Methyl tert-Butyl Ether	40.64	1	40	0	101.6%	69	129					
o-Xylene	41.11	0.5	40	0.0695	102.6%	90	116					
Toluene	40.72	0.5	40	0.1583	101.4%	90	115					

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 14-Jan-00

CLIENT: Blagg Engineering
Work Order: 0001002
Project: Leeper GC I

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 BTEX_0001	Batch ID: GC-1_000105	Test Code: SW8021B	Units: µg/L	Analysis Date: 1/5/2000	Prep Date:						
Client ID:	0001002	Run ID: GC-1_000105A		SeqNo: 22453							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.5	0.5	20	0	102.5%	85	115				
Ethylbenzene	20.64	0.5	20	0	103.2%	85	115				
m,p-Xylene	39.09	1	40	0	97.7%	85	115				
Methyl tert-Butyl Ether	20.38	1	20	0	101.9%	85	115				
o-Xylene	20.49	0.5	20	0	102.5%	85	115				
Toluene	20.41	0.5	20	0	102.0%	85	115				
1,4-Difluorobenzene	89.92	0	100	0	89.9%	80	120				
4-Bromochlorobenzene	89.65	0	100	0	89.7%	80	120				
Fluorobenzene	89.28	0	100	0	89.3%	80	120				

Sample ID: CCV2 BTEX_0001	Batch ID: GC-1_000105	Test Code: SW8021B	Units: µg/L	Analysis Date: 1/5/2000	Prep Date:						
Client ID:	0001002	Run ID: GC-1_000105A		SeqNo: 22454							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.2	0.5	20	0	101.0%	85	115				
Ethylbenzene	20.35	0.5	20	0	101.8%	85	115				
m,p-Xylene	38.59	1	40	0	98.5%	85	115				
Methyl tert-Butyl Ether	21.12	1	20	0	105.6%	85	115				
o-Xylene	20.34	0.5	20	0	101.7%	85	115				
Toluene	20.2	0.5	20	0	101.0%	85	115				
1,4-Difluorobenzene	89.97	0	100	0	90.0%	80	120				
4-Bromochlorobenzene	89.54	0	100	0	89.5%	80	120				
Fluorobenzene	88.99	0	100	0	89.0%	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 14-Jan-00

CLIENT: Blagg Engineering
Work Order: 0001002
Project: Leeper GC 1
Test No: SW8021B

QC SUMMARY REPORT SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0001002-01A	90.2	88.6	89.8
0001002-02A	90.4	89.4	89.4
0001002-03A	90.1	89.6	89.9
0001002-04A	90	89.5	89.7
9912031-21A	86	83.8	85.6
9912031-22A	86.3	84.2	85.4
9912031-24A	90.4	89.4	88.6
9912031-24AMS	90.1	89.3	88
9912031-24AMSD	90.2	88.8	88.5
9912031-25A	89.4	89.8	89.2
9912031-26A	95.3	87.2	90.4
CCV1 BTEX_00010	89.9	89.6	89.3
CCV2 BTEX_00010	90	89.5	89
LCS WATER	89.5	90.3	89
MBI	90.1	89.3	90

Acronym	Surrogate	QC Limits
14FBZ	= 1,4-Difluorobenzene	80-120
4BCBZ	= 4-Bromochlorobenzene	80-120
FLBZ	= Fluorobenzene	80-120

* Surrogate recovery outside acceptance limits

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 14-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper/Martinez
Work Order:	0001008	Client Sample ID:	Decon Rinsate-0106000840
Lab ID:	0001008-01A	Matrix:	AQUEOUS
Project:	Leeper/Martinez	Collection Date:	1/6/2000 8:40:00 AM
		COC Record:	10372

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	1/10/2000
Toluene	ND	0.5		µg/L	1	1/10/2000
Ethylbenzene	ND	0.5		µg/L	1	1/10/2000
m,p-Xylene	ND	1		µg/L	1	1/10/2000
o-Xylene	ND	0.5		µg/L	1	1/10/2000

Qualifiers:

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

R - RPD outside accepted recovery limits

J - Analyte detected below Practical Quantitation Limit

E - Value above quantitation range

B - Analyte detected in the associated Method Blank

Surr - Surrogate

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P.O. BOX 2606 • FARMINGTON, NM 87499

TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT

OIR: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 14-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper/Martinez
Work Order:	0001008	Client Sample ID:	Trip Blank-0106000900
Lab ID:	0001008-02A	Matrix:	AQUEOUS
Project:	Leeper/Martinez	Collection Date:	1/6/2000 9:00:00 AM
		COC Record:	10372

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DM
Benzene	ND	0.5		µg/L	1	1/10/2000
Toluene	ND	0.5		µg/L	1	1/10/2000
Ethylbenzene	ND	0.5		µg/L	1	1/10/2000
m,p-Xylene	ND	1		µg/L	1	1/10/2000
o-Xylene	ND	0.5		µg/L	1	1/10/2000

Qualifiers:

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

R - RPD outside accepted recovery limits

J - Analyte detected below Practical Quantitation Limit

E - Value above quantitation range

B - Analyte detected in the associated Method Blank

Surr - Surrogate

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 14-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper/Martinez
Work Order:	0001008	Client Sample ID:	Martinez Initial-0107001110
Lab ID:	0001008-03A	Matrix:	AQUEOUS
Project:	Leeper/Martinez	Collection Date:	1/7/2000 11:10:00 AM
		COC Record:	10372

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID						
		SW8021B				Analyst: DM
Benzene	ND	0.5		µg/L	1	1/10/2000
Toluene	ND	0.5		µg/L	1	1/10/2000
Ethylbenzene	ND	0.5		µg/L	1	1/10/2000
m,p-Xylene	ND	1		µg/L	1	1/10/2000
o-Xylene	ND	0.5		µg/L	1	1/10/2000

Qualifiers:

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

R - RPD outside accepted recovery limits

J - Analyte detected below Practical Quantitation Limit

E - Value above quantitation range

B - Analyte detected in the associated Method Blank

Surr: - Surrogate

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 14-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper/Martinez
Work Order:	0001008	Client Sample ID:	Decon Rinsate-0107001130
Lab ID:	0001008-04A	Matrix:	AQUEOUS
Project:	Leeper/Martinez	Collection Date:	1/7/2000 11:30:00 AM
		COC Record:	10372

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	1/10/2000
Toluene	ND	0.5		µg/L	1	1/10/2000
Ethylbenzene	ND	0.5		µg/L	1	1/10/2000
m,p-Xylene	ND	1		µg/L	1	1/10/2000
o-Xylene	ND	0.5		µg/L	1	1/10/2000

Qualifiers:

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

R - RPD outside accepted recovery limits

J - Analyte detected below Practical Quantitation Limit

E - Value above quantitation range

B - Analyte detected in the associated Method Blank

Surr - Surrogate

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P.O. BOX 2606 • FARMINGTON, NM 87499

TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 14-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper/Martinez
Work Order:	0001008	Client Sample ID:	Martinez Final-0107001240
Lab ID:	0001008-05A	Matrix:	AQUEOUS
Project:	Leeper/Martinez	Collection Date:	1/7/2000 12:40:00 PM
		COC Record:	10372

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	1/10/2000
Toluene	ND	0.5		µg/L	1	1/10/2000
Ethylbenzene	ND	0.5		µg/L	1	1/10/2000
m,p-Xylene	ND	1		µg/L	1	1/10/2000
o-Xylene	ND	0.5		µg/L	1	1/10/2000

Qualifiers:

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

R - RPD outside accepted recovery limits

J - Analyte detected below Practical Quantitation Limit

E - Value above quantitation range

B - Analyte detected in the associated Method Blank

Surr: - Surrogate

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P.O. BOX 2606 • FARMINGTON, NM 87499

TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 14-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper/Martinez
Work Order:	0001008	Client Sample ID:	MW#4-0107001435
Lab ID:	0001008-06A	Matrix:	AQUEOUS
Project:	Leeper/Martinez	Collection Date:	1/7/2000 2:35:00 PM
		COC Record:	10372

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	1/10/2000
Toluene	ND	0.5		µg/L	1	1/10/2000
Ethylbenzene	ND	0.5		µg/L	1	1/10/2000
m,p-Xylene	ND	1		µg/L	1	1/10/2000
o-Xylene	ND	0.5		µg/L	1	1/10/2000

Qualifiers:

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

R - RPD outside accepted recovery limits

J - Analyte detected below Practical Quantitation Limit

E - Value above quantitation range

B - Analyte detected in the associated Method Blank

Surrogate - Surrogate

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P.O. BOX 2606 • FARMINGTON, NM 87499

TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 14-Jan-00

Client: Blagg Engineering

Client Sample Info: Leeper/Martinez

Work Order: 0001008

Client Sample ID: MW#5-0107001515

Lab ID: 0001008-07A Matrix: AQUEOUS

Collection Date: 1/7/2000 3:15:00 PM

Project: Leeper/Martinez

COC Record: 10372

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	1/10/2000
Toluene	ND	0.5		µg/L	1	1/10/2000
Ethylbenzene	ND	0.5		µg/L	1	1/10/2000
m,p-Xylene	ND	1		µg/L	1	1/10/2000
o-Xylene	ND	0.5		µg/L	1	1/10/2000

Qualifiers:

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

R - RPD outside accepted recovery limits

J - Analyte detected below Practical Quantitation Limit

E - Value above quantitation range

B - Analyte detected in the associated Method Blank

Surr - Surrogate

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P.O. BOX 2606 • FARMINGTON, NM 87499

TECHNOLOGY BLINDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 14-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper/Martinez
Work Order:	0001008	Client Sample ID:	MW#6-0107001605
Lab ID:	0001008-08A	Matrix:	AQUEOUS
Project:	Leeper/Martinez	Collection Date:	1/7/2000 4:05:00 PM
		COC Record:	10372

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	1/10/2000
Toluene	ND	0.5		µg/L	1	1/10/2000
Ethylbenzene	ND	0.5		µg/L	1	1/10/2000
m,p-Xylene	ND	1		µg/L	1	1/10/2000
o-Xylene	ND	0.5		µg/L	1	1/10/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surrogate - Surrogate

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P.O. BOX 2606 • FARMINGTON, NM 87499

TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 14-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper/Martinez
Work Order:	0001008	Client Sample ID:	MW#7-0107001655
Lab ID:	0001008-09A	Matrix:	AQUEOUS
Project:	Leeper/Martinez	Collection Date:	1/7/2000 4:55:00 PM
		COC Record:	10372

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DM
Benzene	ND	0.5		µg/L	1	1/10/2000
Toluene	ND	0.5		µg/L	1	1/10/2000
Ethylbenzene	ND	0.5		µg/L	1	1/10/2000
m,p-Xylene	ND	1		µg/L	1	1/10/2000
o-Xylene	ND	0.5		µg/L	1	1/10/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr - Surrogate

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P.O. BOX 2606 • FARMINGTON, NM 87499

TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 14-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper/Martinez
Work Order:	0001008	Client Sample ID:	GW-1
Lab ID:	0001008-10A	Matrix:	AQUEOUS
Project:	Leeper/Martinez	Collection Date:	1/7/2000
		COC Record:	10372

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	1/10/2000
Toluene	ND	0.5		µg/L	1	1/10/2000
Ethylbenzene	ND	0.5		µg/L	1	1/10/2000
m,p-Xylene	ND	1		µg/L	1	1/10/2000
o-Xylene	ND	0.5		µg/L	1	1/10/2000

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
	B - Analyte detected in the associated Method Blank	Sum - Surrogate

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P.O. BOX 2606 • FARMINGTON, NM 87499

• TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT •



CHAIN OF CUSTODY RECORD

10372

612 E. Murray Dr. • P.O. Box 2606 • Farmington, NM 87499
LAB: (505) 325-5667 • FAX: (505) 327-1496

Date: 1/6-7/00
Page: 1 of 1

Purchase Order No.:		Project No. <u>LEEPER</u>		Name		Title									
SEND INVOICE TO	Name <u>JEFF BLAGG</u>		Company		Mailing Address <u>SAME</u>										
	Company <u>BLAGG ENGINEERING</u>		Dept.		City, State, Zip										
	Address <u>P.O. Box 87</u>				Telephone No. <u>632-1199</u>										
	City, State, Zip <u>BLOOMFIELD NM 87413</u>				Telefax No. <u>632-3903</u>										
PROJECT LOCATION: <u>LEEPER / MARTINEZ</u>				REPORT RESULTS TO Number of Containers	ANALYSIS REQUESTED										
SAMPLER'S SIGNATURE: <u>J.C. Blagg / Nelson</u>					LAB ID										
SAMPLE IDENTIFICATION															
		DATE	TIME		MATRIX	PRES.									
DECON RINSATE - 0106000840		<u>1/6/00</u>	<u>0840</u>		<u>WATER</u>	<u>HgCl2</u>	<u>2</u>	<u>X</u>							
TRIP BLANK - 0106000900		<u>"</u>	<u>0900</u>		<u>"</u>	<u>"</u>	<u>2</u>	<u>X</u>							
MARTINEZ INITIAL - 0107001110		<u>1/7/00</u>	<u>1110</u>		<u>"</u>	<u>"</u>	<u>2</u>	<u>X</u>							
DECON RINSATE - 0107001130		<u>"</u>	<u>1130</u>		<u>"</u>	<u>"</u>	<u>2</u>	<u>X</u>							
MARTINEZ FINAL - 0107001240		<u>"</u>	<u>1240</u>		<u>"</u>	<u>"</u>	<u>2</u>	<u>X</u>							
MW # 4 - 0107001435		<u>"</u>	<u>1435</u>		<u>"</u>	<u>"</u>	<u>2</u>	<u>X</u>							
MW # 5 - 0107001515		<u>"</u>	<u>1515</u>	<u>"</u>	<u>"</u>	<u>2</u>	<u>X</u>								
MW # 6 - 0107001605		<u>"</u>	<u>1605</u>	<u>"</u>	<u>"</u>	<u>2</u>	<u>X</u>								
MW # 7 - 0107001655		<u>"</u>	<u>1655</u>	<u>"</u>	<u>"</u>	<u>2</u>	<u>X</u>								
GW-1		<u>"</u>	<u>---</u>	<u>"</u>	<u>"</u>	<u>2</u>	<u>X</u>								
Relinquished by: <u>J.C. Blagg</u>		Date/Time <u>1/6/00 0840</u>		Received by: <u>[Signature]</u>		Date/Time <u>1/6/00 0840</u>									
Relinquished by: <u>[Signature]</u>		Date/Time <u>1/6/00 0840</u>		Received by: <u>[Signature]</u>		Date/Time <u>1/6/00 0840</u>									
Relinquished by:		Date/Time		Received by:		Date/Time									
Method of Shipment:				Rush	☒ 24-48 Hours	10 Working Days	By Date								
Authorized by: <u>J.C. Blagg</u> Date <u>1/10/00</u> (Client Signature Must Accompany Request)				Special Instructions / Remarks:											

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

On Site Technologies, LTD.

Date: 14-Jan-00

CLIENT: Blagg Engineering

Work Order: 0001008

Project: Leeper/Martinez

QC SUMMARY REPORT

Method Blank

Sample ID: MB1		Batch ID: GC-1_000110		Test Code: SW8021B		Units: µg/L		Analysis Date: 1/10/2000				Prep Date:	
Client ID:		0001008		Run ID:		GC-1_000110A		SeqNo:		22505			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Benzene	.0446	0.5										J	
Ethylbenzene	ND	0.5											
m,p-Xylene	ND	1											
Methyl tert-Butyl Ether	ND	1											
o-Xylene	ND	0.5											
Toluene	.0735	0.5										J	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 14-Jan-00

CLIENT: Blagg Engineering
Work Order: 0001008
Project: Leeper/Martinez

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0001005-10AMS	Batch ID: GC-1_000110	Test Code: SW8021B	Units: µg/L	Analysis Date: 1/10/2000				Prep Date:			
Client ID:	0001008	Run ID:	GC-1_000110A	SeqNo: 22506							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	411.7	5	400	4.392	101.8%	80	116				
Ethylbenzene	407.9	5	400	0.529	101.8%	80	118				
m,p-Xylene	777.6	10	800	0	97.2%	77	116				
Methyl tert-Butyl Ether	422.1	10	400	0	105.5%	62	122				
o-Xylene	409.1	5	400	0	102.3%	83	117				
Toluene	410	5	400	3.528	101.6%	80	116				

Sample ID: 0001005-10AMSD	Batch ID: GC-1_000110	Test Code: SW8021B	Units: µg/L	Analysis Date: 1/10/2000				Prep Date:			
Client ID:	0001008	Run ID:	GC-1_000110A		SeqNo:		22507				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	397	5	400	4.392	98.2%	80	116	411.7	3.6%	7	
Ethylbenzene	399.1	5	400	0.529	99.6%	80	118	407.9	2.2%	7	
m,p-Xylene	761.1	10	800	0	95.1%	77	116	777.6	2.1%	7	
Methyl tert-Butyl Ether	415.3	10	400	0	103.8%	62	122	422.1	1.6%	7	
o-Xylene	401.1	5	400	0	100.3%	83	117	409.1	2.0%	6	
Toluene	400.9	5	400	3.528	99.3%	80	116	410	2.2%	6	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 14-Jun-00

CLIENT: Blagg Engineering
Work Order: 0001008
Project: Leeper/Martinez

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: LCS WATER	Batch ID: GC-1_000110	Test Code: SW8021B	Units: µg/L		Analysis Date: 1/10/2000				Prep Date:		
Client ID:	0001008	Run ID:	GC-1_000110A		SeqNo:		22504				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	41.16	0.5	40	0.0446	102.8%	87	119				
Ethylbenzene	41.32	0.5	40	0	103.3%	89	117				
m,p-Xylene	78.99	1	80	0	98.7%	88	114				
Methyl tert-Butyl Ether	40.79	1	40	0	102.0%	69	129				
o-Xylene	41.4	0.5	40	0	103.5%	90	116				
Toluene	40.89	0.5	40	0.0735	102.0%	90	115				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 14-Jan-00

CLIENT: Blagg Engineering
Work Order: 0001008
Project: Leeper/Martinez

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 BTEX_0001	Batch ID: GC-1_000110	Test Code: SW8021B	Units: µg/L	Analysis Date: 1/10/2000				Prep Date:			
Client ID:	0001008	Run ID:	GC-1_000110A		SeqNo:		22501				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.62	0.5	20	0	103.1%	85	115				
Ethylbenzene	21.06	0.5	20	0	105.3%	85	115				
m,p-Xylene	39.82	1	40	0	99.5%	85	115				
Methyl tert-Butyl Ether	20.89	1	20	0	104.5%	85	115				
o-Xylene	21.04	0.5	20	0	105.2%	85	115				
Toluene	20.57	0.5	20	0	102.9%	85	115				
1,4-Difluorobenzene	90.15	0	100	0	90.2%	80	120				
4-Bromochlorobenzene	89.33	0	100	0	89.3%	80	120				
Fluorobenzene	88.96	0	100	0	89.0%	80	120				

Sample ID: CCV2 BTEX_0001	Batch ID: GC-1_000110	Test Code: SW8021B	Units: µg/L	Analysis Date: 1/10/2000				Prep Date:			
Client ID:	0001008	Run ID:	GC-1_000110A		SeqNo:		22502				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.85	0.5	20	0	99.3%	85	115				
Ethylbenzene	20.18	0.5	20	0	100.9%	85	115				
m,p-Xylene	38.16	1	40	0	95.4%	85	115				
Methyl tert-Butyl Ether	20.86	1	20	0	104.3%	85	115				
o-Xylene	20.28	0.5	20	0	101.4%	85	115				
Toluene	19.84	0.5	20	0	99.2%	85	115				
1,4-Difluorobenzene	89.42	0	100	0	89.4%	80	120				
4-Bromochlorobenzene	89.77	0	100	0	89.8%	80	120				
Fluorobenzene	88.72	0	100	0	88.7%	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 0001008
Project: Leeper/Martinez

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: CCV3 BTEX_0001		Batch ID: GC-1_000110		Test Code: SW8021B		Units: µg/L		Analysis Date: 1/10/2000			Prep Date:	
Client ID:		0001008		Run ID: GC-1_000110A				SeqNo: 22503				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	22.07	0.5	20	0	110.4%	85	115					
Ethylbenzene	22.55	0.5	20	0	112.8%	85	115					
m,p-Xylene	42.73	1	40	0	106.8%	85	115					
Methyl tert-Butyl Ether	22.83	1	20	0	114.2%	85	115					
o-Xylene	22.61	0.5	20	0	113.1%	85	115					
Toluene	22.24	0.5	20	0	111.2%	85	115					
1,4-Difluorobenzene	89.76	0	100	0	89.8%	80	120					
4-Bromochlorobenzene	90.35	0	100	0	90.3%	80	120					
Fluorobenzene	88.54	0	100	0	88.5%	80	120					

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 14-Jan-00

CLIENT: Blagg Engineering
 Work Order: 0001008
 Project: Leeper/Martinez
 Test No: SW8021B

QC SUMMARY REPORT SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0001005-01A	90	89.7	89.4
0001005-02A	89.8	89.8	89.5
0001005-03A	90	89.4	89.6
0001005-04A	90.3	89.2	89.8
0001005-05A	89.5	89.4	89.6
0001005-06A	89.5	89.3	89.4
0001005-07A	89.8	89.6	89.4
0001005-08A	88	86.7	93.5
0001005-09A	87	87.2	93.1
0001005-10AMS	88.3	88.7	87.9
0001005-10AMSD	87.6	89	87.5
0001008-01A	89	90.6	88.8
0001008-02A	90	90.4	89.2
0001008-03A	90.2	89.6	89.5
0001008-04A	89.4	90.5	89.1
0001008-05A	90.3	89.5	89.2
0001008-06A	89.9	89.6	89.5
0001008-07A	89.7	89.9	89.5
0001008-08A	89.8	89.4	89.5
0001008-09A	90.4	88.7	89.7
0001008-10A	89.8	89.7	89.6
CCV1 BTEX_00010	90.2	89.3	89
CCV2 BTEX_00010	89.4	89.8	88.7
CCV3 BTEX_00010	89.8	90.3	88.5
LCS WATER	89.6	90.6	88.6
MBI	89.7	89.3	89.3

Acronym	Surrogate	QC Limits
14FBZ	= 1,4-Difluorobenzene	80-120
4BCBZ	= 4-Bromochlorobenzene	80-120
FLBZ	= Fluorobenzene	80-120

* Surrogate recovery outside acceptance limits

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

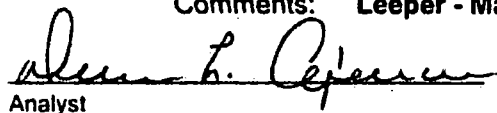
Client: Blagg / AMOCO
Sample ID: Martinez Well 0107001110
Laboratory Number: G679
Chain of Custody: 7003
Sample Matrix: Water
Preservative: Cool
Condition: Cool & Intact

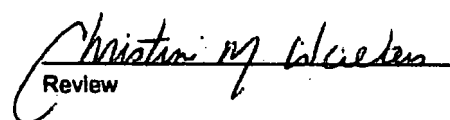
Project #: 403410
Date Reported: 01-08-00
Date Sampled: 01-07-00
Date Received: 01-08-00
Date Extracted: N/A
Date Analyzed: 01-08-00

Parameter	Analytical Result	Units		Units
pH	7.38	s.u.		
Conductivity @ 25° C	904	umhos/cm		
Total Dissolved Solids @ 180C	450	mg/L		
Total Dissolved Solids (Calc)	446	mg/L		
SAR	0.0	ratio		
Total Alkalinity as CaCO3	394	mg/L		
Total Hardness as CaCO3	392	mg/L		
Bicarbonate as HCO3	394	mg/L	6.46	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	<0.1	mg/L	0.00	meq/L
Nitrite Nitrogen	<0.001	mg/L	0.00	meq/L
Chloride	22.4	mg/L	0.63	meq/L
Fluoride	0.63	mg/L	0.03	meq/L
Phosphate	1.3	mg/L	0.04	meq/L
Sulfate	31.9	mg/L	0.66	meq/L
Iron	<0.001	mg/L		
Calcium	136	mg/L	6.79	meq/L
Magnesium	12.7	mg/L	1.05	meq/L
Potassium	1.8	mg/L	0.05	meq/L
Sodium	<0.1	mg/L	0.00	meq/L
Cations			7.88	meq/L
Anions			7.83	meq/L
Cation/Anion Difference			0.63%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Water And Waste Water", 18th ed., 1992.

Comments: Leeper - Martinez.


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Review

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

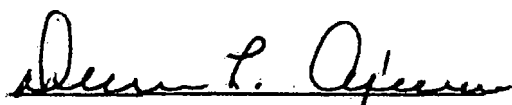
Water Analysis

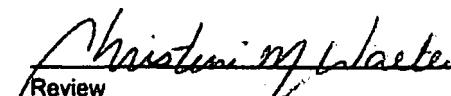
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Sample ID:	Martinez Well 010700 1110	Date Reported:	01-08-00
Laboratory Number:	G679	Date Sampled:	01-07-00
Sample Matrix:	Water	Date Received:	01-08-00
Preservative:	Cool	Date Analyzed:	01-08-00
Condition:	Cool & Intact	Chain of Custody:	7003

Parameter	Analytical Result	Units
Manganese	0.1	mg/L
Ferrous Iron	<0.01	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", 18th ed., 1992.

Comments: Leeper - Martinez.


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client: Blagg / AMOCO
Sample ID: Martinez Well 0107001240
Laboratory Number: G680
Chain of Custody: 7003
Sample Matrix: Water
Preservative: Cool
Condition: Cool & Intact

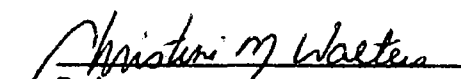
Project #: 403410
Date Reported: 01-08-00
Date Sampled: 01-07-00
Date Received: 01-08-00
Date Extracted: N/A
Date Analyzed: 01-08-00

Parameter	Analytical Result	Units		Units
pH	7.13	s.u.		
Conductivity @ 25° C	837	umhos/cm		
Total Dissolved Solids @ 180C	420	mg/L		
Total Dissolved Solids (Calc)	413	mg/L		
SAR	0.4	ratio		
Total Alkalinity as CaCO3	251	mg/L		
Total Hardness as CaCO3	308	mg/L		
Bicarbonate as HCO3	251	mg/L	4.11	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	<0.1	mg/L	0.00	meq/L
Nitrite Nitrogen	<0.001	mg/L	0.00	meq/L
Chloride	14.4	mg/L	0.41	meq/L
Fluoride	0.74	mg/L	0.04	meq/L
Phosphate	0.9	mg/L	0.03	meq/L
Sulfate	113	mg/L	2.35	meq/L
Iron	0.350	mg/L		
Calcium	97.6	mg/L	4.87	meq/L
Magnesium	15.6	mg/L	1.28	meq/L
Potassium	1.7	mg/L	0.04	meq/L
Sodium	17.1	mg/L	0.74	meq/L
Cations			6.94	meq/L
Anions			6.94	meq/L
Cation/Anion Difference			0.02%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Water And Waste Water", 18th ed., 1992.

Comments: Leeper - Martinez.


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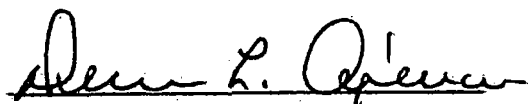
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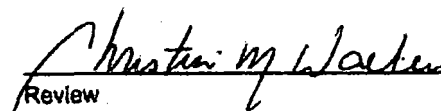
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Sample ID:	Martinez Well 010700 1240	Date Reported:	01-08-00
Laboratory Number:	G680	Date Sampled:	01-07-00
Sample Matrix:	Water	Date Received:	01-08-00
Preservative:	Cool	Date Analyzed:	01-08-00
Condition:	Cool & Intact	Chain of Custody:	7003

Parameter	Analytical Result	Units
Manganese	0.4	mg/L
Ferrous Iron	0.13	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", 18th ed., 1992.

Comments: Leeper - Martinez.


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

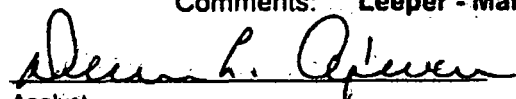
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Sample ID: MW - 4 0107001435
Laboratory Number: G681
Chain of Custody: 7003
Sample Matrix: Water
Preservative: Cool
Condition: Cool & Intact

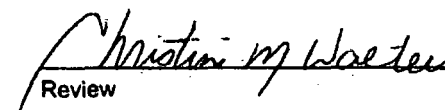
Project #: 403410
Date Reported: 01-08-00
Date Sampled: 01-07-00
Date Received: 01-08-00
Date Extracted: N/A
Date Analyzed: 01-08-00

Parameter	Analytical Result	Units		Units
pH	7.08	s.u.		
Conductivity @ 25° C	905	umhos/cm		
Total Dissolved Solids @ 180C	450	mg/L		
Total Dissolved Solids (Calc)	440	mg/L		
SAR	0.5	ratio		
Total Alkalinity as CaCO3	286	mg/L		
Total Hardness as CaCO3	326	mg/L		
Bicarbonate as HCO3	286	mg/L	4.69	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	<0.1	mg/L	0.00	meq/L
Nitrite Nitrogen	<0.001	mg/L	0.00	meq/L
Chloride	17.1	mg/L	0.48	meq/L
Fluoride	0.72	mg/L	0.04	meq/L
Phosphate	0.5	mg/L	0.02	meq/L
Sulfate	106	mg/L	2.21	meq/L
Iron	<0.001	mg/L		
Calcium	101	mg/L	5.04	meq/L
Magnesium	16.7	mg/L	1.37	meq/L
Potassium	1.8	mg/L	0.05	meq/L
Sodium	22.3	mg/L	0.97	meq/L
Cations			7.43	meq/L
Anions			7.43	meq/L
Cation/Anion Difference			0.00%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Water And Waste Water", 18th ed., 1992.

Comments: Leeper - Martinez.


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Review

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

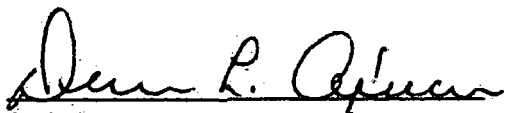
Water Analysis

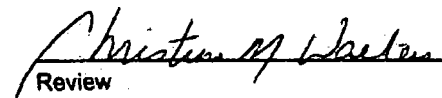
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Laboratory Number:	G681	Date Sampled:	01-07-00
Sample Matrix:	Water	Date Received:	01-08-00
Preservative:	Cool	Date Analyzed:	01-08-00
Condition:	Cool & Intact	Chain of Custody:	7003

Parameter	Analytical Result	Units
Manganese	0.3	mg/L
Ferrous Iron	<0.01	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", 18th ed., 1992.

Comments: Leeper - Martinez.


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

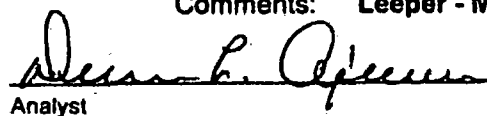
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Sample ID: MW - 5 0107001515
Laboratory Number: G682
Chain of Custody: 7003
Sample Matrix: Water
Preservative: Cool
Condition: Cool & Intact

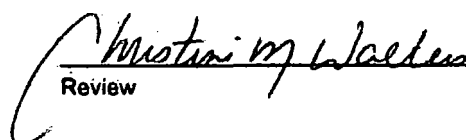
Project #: 403410
Date Reported: 01-08-00
Date Sampled: 01-07-00
Date Received: 01-08-00
Date Extracted: N/A
Date Analyzed: 01-08-00

Parameter	Analytical Result	Units	Units
pH	7.06	s.u.	
Conductivity @ 25° C	885	umhos/cm	
Total Dissolved Solids @ 180C	440	mg/L	
Total Dissolved Solids (Calc)	433	mg/L	
SAR	0.5	ratio	
Total Alkalinity as CaCO3	288	mg/L	
Total Hardness as CaCO3	324	mg/L	
Bicarbonate as HCO3	288	mg/L	4.72 meq/L
Carbonate as CO3	<0.1	mg/L	0.00 meq/L
Hydroxide as OH	<0.1	mg/L	0.00 meq/L
Nitrate Nitrogen	<0.1	mg/L	0.00 meq/L
Nitrite Nitrogen	<0.001	mg/L	0.00 meq/L
Chloride	17.2	mg/L	0.49 meq/L
Fluoride	0.74	mg/L	0.04 meq/L
Phosphate	0.5	mg/L	0.02 meq/L
Sulfate	100	mg/L	2.08 meq/L
Iron	<0.001	mg/L	
Calcium	102	mg/L	5.09 meq/L
Magnesium	16.6	mg/L	1.37 meq/L
Potassium	1.8	mg/L	0.05 meq/L
Sodium	19.3	mg/L	0.84 meq/L
Cations			7.34 meq/L
Anions			7.34 meq/L
Cation/Anion Difference			0.01%

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Water And Waste Water", 18th ed., 1992.

Comments: Leeper - Martinez.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

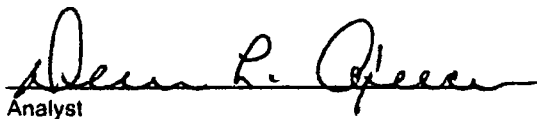
Water Analysis

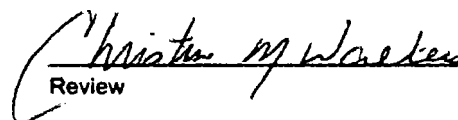
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Sample ID:	MW - 5 010700 1515	Date Reported:	01-08-00
Laboratory Number:	G682	Date Sampled:	01-07-00
Sample Matrix:	Water	Date Received:	01-08-00
Preservative:	Cool	Date Analyzed:	01-08-00
Condition:	Cool & Intact	Chain of Custody:	7003

Parameter	Analytical Result	Units
Manganese	0.3	mg/L
Ferrous Iron	<0.01	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", 18th ed., 1992.

Comments: Leeper - Martinez.


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Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

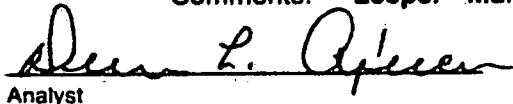
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Sample ID: MW - 6 0107001605
Laboratory Number: G683
Chain of Custody: 7003
Sample Matrix: Water
Preservative: Cool
Condition: Cool & Intact

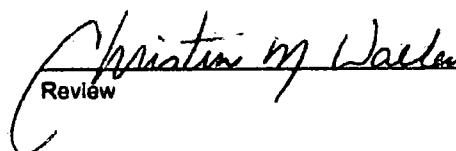
Project #: 403410
Date Reported: 01-08-00
Date Sampled: 01-07-00
Date Received: 01-08-00
Date Extracted: N/A
Date Analyzed: 01-08-00

Parameter	Analytical Result	Units	Units
pH	7.09	s.u.	
Conductivity @ 25° C	904	umhos/cm	
Total Dissolved Solids @ 180C	450	mg/L	
Total Dissolved Solids (Calc)	451	mg/L	
SAR	0.6	ratio	
Total Alkalinity as CaCO3	264	mg/L	
Total Hardness as CaCO3	320	mg/L	
Bicarbonate as HCO3	264	mg/L	4.33 meq/L
Carbonate as CO3	<0.1	mg/L	0.00 meq/L
Hydroxide as OH	<0.1	mg/L	0.00 meq/L
Nitrate Nitrogen	<0.1	mg/L	0.00 meq/L
Nitrite Nitrogen	<0.001	mg/L	0.00 meq/L
Chloride	17.0	mg/L	0.48 meq/L
Fluoride	0.88	mg/L	0.05 meq/L
Phosphate	1.1	mg/L	0.03 meq/L
Sulfate	128	mg/L	2.66 meq/L
Iron	<0.001	mg/L	
Calcium	99.2	mg/L	4.95 meq/L
Magnesium	17.6	mg/L	1.45 meq/L
Potassium	1.8	mg/L	0.05 meq/L
Sodium	25.5	mg/L	1.11 meq/L
Cations			7.55 meq/L
Anions			7.55 meq/L
Cation/Anion Difference			0.01%

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Water And Waste Water", 18th ed., 1992.

Comments: Leeper - Martinez.


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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

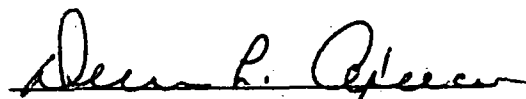
Water Analysis

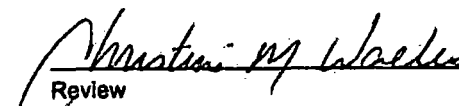
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	MW - 6 010700 1605	Date Reported:	01-08-00
Laboratory Number:	G683	Date Sampled:	01-07-00
Sample Matrix:	Water	Date Received:	01-08-00
Preservative:	Cool	Date Analyzed:	01-08-00
Condition:	Cool & Intact	Chain of Custody:	7003

Parameter	Analytical Result	Units
Manganese	0.1	mg/L
Ferrous Iron	<0.01	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", 18th ed., 1992.

Comments: Leeper - Martinez.


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

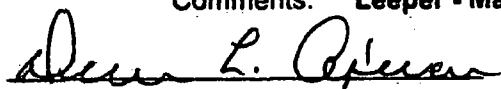
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Sample ID: MW - 7 010700 1655
Laboratory Number: G684
Chain of Custody: 7003
Sample Matrix: Water
Preservative: Cool
Condition: Cool & Intact

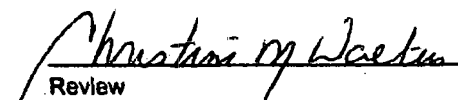
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Date Reported: 01-08-00
Date Sampled: 01-07-00
Date Received: 01-08-00
Date Extracted: N/A
Date Analyzed: 01-08-00

Parameter	Analytical Result	Units	Units
pH	7.25	s.u.	
Conductivity @ 25° C	912	umhos/cm	
Total Dissolved Solids @ 180C	455	mg/L	
Total Dissolved Solids (Calc)	452	mg/L	
SAR	0.5	ratio	
Total Alkalinity as CaCO3	262	mg/L	
Total Hardness as CaCO3	328	mg/L	
Bicarbonate as HCO3	262	mg/L	4.29 meq/L
Carbonate as CO3	<0.1	mg/L	0.00 meq/L
Hydroxide as OH	<0.1	mg/L	0.00 meq/L
Nitrate Nitrogen	<0.1	mg/L	0.00 meq/L
Nitrite Nitrogen	<0.001	mg/L	0.00 meq/L
Chloride	15.0	mg/L	0.42 meq/L
Fluoride	0.86	mg/L	0.05 meq/L
Phosphate	0.6	mg/L	0.02 meq/L
Sulfate	133	mg/L	2.77 meq/L
Iron	0.001	mg/L	
Calcium	102	mg/L	5.09 meq/L
Magnesium	17.6	mg/L	1.45 meq/L
Potassium	1.8	mg/L	0.05 meq/L
Sodium	22.2	mg/L	0.97 meq/L
Cations			7.55 meq/L
Anions			7.55 meq/L
Cation/Anion Difference			0.01%

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Water And Waste Water", 18th ed., 1992.

Comments: Leeper - Martinez.


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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

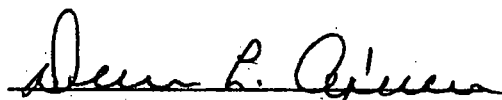
Water Analysis

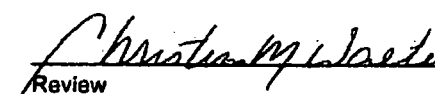
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Sample ID:	MW - 7 010700 1655	Date Reported:	01-08-00
Laboratory Number:	G684	Date Sampled:	01-07-00
Sample Matrix:	Water	Date Received:	01-08-00
Preservative:	Cool	Date Analyzed:	01-08-00
Condition:	Cool & Intact	Chain of Custody:	7003

Parameter	Analytical Result	Units
Manganese	0.1	mg/L
Ferrous Iron	<0.01	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", 18th ed., 1992.

Comments: Leeper - Martinez.


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

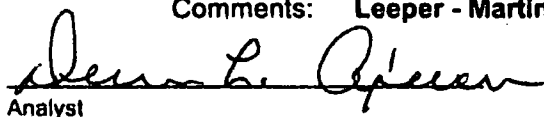
Client: Blagg / AMOCO
Sample ID: GW - 1
Laboratory Number: G685
Chain of Custody: 7003
Sample Matrix: Water
Preservative: Cool
Condition: Cool & Intact

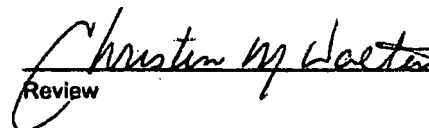
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Date Reported: 01-08-00
Date Sampled: 01-07-00
Date Received: 01-08-00
Date Extracted: N/A
Date Analyzed: 01-08-00

Parameter	Analytical Result	Units		Units
pH	7.07	s.u.		
Conductivity @ 25° C	890	umhos/cm		
Total Dissolved Solids @ 180C	444	mg/L		
Total Dissolved Solids (Calc)	441	mg/L		
SAR	0.5	ratio		
Total Alkalinity as CaCO3	290	mg/L		
Total Hardness as CaCO3	324	mg/L		
Bicarbonate as HCO3	290	mg/L	4.75	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	<0.1	mg/L	0.00	meq/L
Nitrite Nitrogen	<0.001	mg/L	0.00	meq/L
Chloride	17.2	mg/L	0.49	meq/L
Fluoride	0.74	mg/L	0.04	meq/L
Phosphate	0.5	mg/L	0.02	meq/L
Sulfate	104	mg/L	2.17	meq/L
Iron	<0.001	mg/L		
Calcium	102	mg/L	5.09	meq/L
Magnesium	16.6	mg/L	1.37	meq/L
Potassium	1.8	mg/L	0.05	meq/L
Sodium	22.0	mg/L	0.96	meq/L
Cations			7.46	meq/L
Anions			7.46	meq/L
Cation/Anion Difference			0.01%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Water And Waste Water", 18th ed., 1992.

Comments: Leeper - Martinez.


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

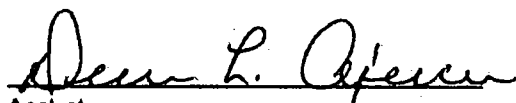
Water Analysis

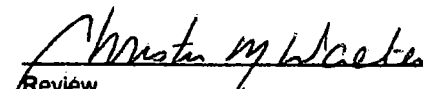
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	GW - 1	Date Reported:	01-08-00
Laboratory Number:	G685	Date Sampled:	01-07-00
Sample Matrix:	Water	Date Received:	01-08-00
Preservative:	Cool	Date Analyzed:	01-08-00
Condition:	Cool & Intact	Chain of Custody:	7003

Parameter	Analytical Result	Units
Manganese	0.3	mg/L
Ferrous Iron	<0.01	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", 18th ed., 1992.

Comments: Leeper - Martinez.


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CHAIN OF CUSTODY RECORD

7003

Client / Project Name BLAGE / AMOCO			Project Location LEEPER - MARTINEZ		ANALYSIS / PARAMETERS								
Sampler: NELSON VELEZ			Client No. 403410		No. of Containers	MAJOR IONS	TOTAL FC TCLIN	MANGANESE				Remarks	
Sample No/ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix									
MARTINEZ WELL 0107001110	1/7/00	1110	G679	WATER	1	X	X	X					
MARTINEZ WELL 0107001240	"	1240	G680	"	1	X	X	X					
MW-4 0107001435	"	1435	G681	"	1	X	X	X					
MW-5 0107001515	"	1515	G682	"	1	X	X	X					
MW-6 0107001605	"	1605	G683	"	1	X	X	X					
MW-7 0107001655	"	1655	G684	"	1	X	X	X					
GW-1	"	----	G685	"	1	X	X	X					
Relinquished by: (Signature) <i>Nelson Velez</i>				Date 1/7/00	Time 1813	Received by: (Signature) <i>J. C. Blage</i>				Date 1/7/00	Time 1813		
Relinquished by: (Signature) <i>Jeff Blage</i>				Date 1/8/00	Time 0700	Received by: (Signature) <i>Desha P. Apicene</i>				Date 1/8/00	Time 0700		
Relinquished by: (Signature)						Received by: (Signature)							
ENVIROTECH INC. 5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615										Sample Receipt			
											Y	N	N/A
										Received Intact	☒		
										Cool - Ice/Blue Ice	☒		

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

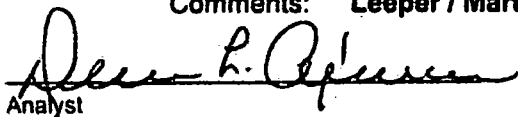
CATION / ANION ANALYSIS

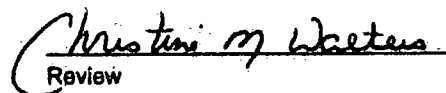
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	MW 2 - 011800 1315	Date Reported:	01-19-00
Laboratory Number:	G700	Date Sampled:	01-18-00
Chain of Custody:	7008	Date Received:	01-18-00
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	01-19-00
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		Units
pH	6.87	S.U.		
Conductivity @ 25° C	1,100	umhos/cm		
Total Dissolved Solids @ 180C	550	mg/L		
Total Dissolved Solids (Calc)	549	mg/L		
SAR	0.0	ratio		
Total Alkalinity as CaCO3	523	mg/L		
Total Hardness as CaCO3	496	mg/L		
Bicarbonate as HCO3	523	mg/L	8.57	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	1.6	mg/L	0.03	meq/L
Nitrite Nitrogen	<0.001	mg/L	0.00	meq/L
Chloride	42.5	mg/L	1.20	meq/L
Fluoride	0.81	mg/L	0.04	meq/L
Phosphate	4.2	mg/L	0.13	meq/L
Sulfate	<0.1	mg/L	0.00	meq/L
Iron	23.5	mg/L		
Calcium	139	mg/L	6.94	meq/L
Magnesium	36.1	mg/L	2.97	meq/L
Potassium	7.5	mg/L	0.19	meq/L
Sodium	<0.1	mg/L	0.00	meq/L
Cations			10.10	meq/L
Anions			9.97	meq/L
Cation/Anion Difference			1.30%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Water And Waste Water", 18th ed., 1992.

Comments: Leeper / Martinez.


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

Water Analysis

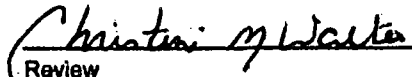
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	MW 2 - 011800 1315	Date Reported:	01-21-00
Laboratory Number:	G700	Date Sampled:	01-18-00
Sample Matrix:	Water	Date Received:	01-18-00
Preservative:	Cool	Date Analyzed:	01-21-00
Condition:	Cool & Intact	Chain of Custody:	7008

Parameter	Analytical Result	Units
Manganese	0.1	mg/L
Ferrous Iron	0.02	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", 18th ed., 1992.

Comments: Leeper / Martinez.


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	MW 6 - 011800 0940	Date Reported:	01-19-00
Laboratory Number:	G701	Date Sampled:	01-18-00
Chain of Custody:	7008	Date Received:	01-18-00
Sample Matrix:	Water	Date Analyzed:	01-19-00
Preservative:	Cool	Date Digested:	01-19-00
Condition:	Cool & Intact	Analysis Needed:	Trace Metals

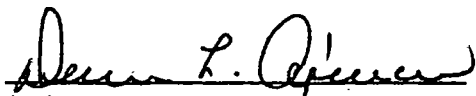
Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Arsenic	0.059	0.001
Barium	0.066	0.001
Cadmium	0.025	0.001
Chromium	0.016	0.001
Lead	0.039	0.001
Mercury	0.009	0.001
Selenium	0.008	0.001
Silver	0.003	0.001

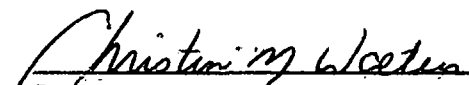
ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Comments: Leeper / Martinez.


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

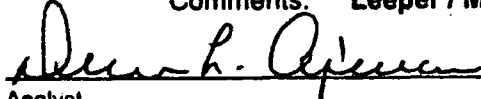
Client: Blagg / AMOCO
Sample ID: MW 8 - 011800 1017
Laboratory Number: G702
Chain of Custody: 7008
Sample Matrix: Water
Preservative: Cool
Condition: Cool & Intact

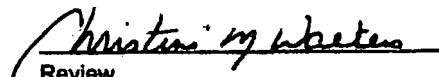
Project #: 403410
Date Reported: 01-19-00
Date Sampled: 01-18-00
Date Received: 01-18-00
Date Extracted: N/A
Date Analyzed: 01-19-00

Parameter	Analytical Result	Units	Units
pH	7.15	s.u.	
Conductivity @ 25° C	845	umhos/cm	
Total Dissolved Solids @ 180C	420	mg/L	
Total Dissolved Solids (Calc)	413	mg/L	
SAR	0.2	ratio	
Total Alkalinity as CaCO3	267	mg/L	
Total Hardness as CaCO3	324	mg/L	
Bicarbonate as HCO3	267	mg/L	4.38 meq/L
Carbonate as CO3	<0.1	mg/L	0.00 meq/L
Hydroxide as OH	<0.1	mg/L	0.00 meq/L
Nitrate Nitrogen	<0.1	mg/L	0.00 meq/L
Nitrite Nitrogen	0.005	mg/L	0.00 meq/L
Chloride	9.8	mg/L	0.28 meq/L
Fluoride	0.89	mg/L	0.05 meq/L
Phosphate	<0.1	mg/L	0.00 meq/L
Sulfate	109	mg/L	2.27 meq/L
Iron	0.042	mg/L	
Calcium	99.6	mg/L	4.97 meq/L
Magnesium	18.3	mg/L	1.51 meq/L
Potassium	5.5	mg/L	0.14 meq/L
Sodium	8.1	mg/L	0.35 meq/L
Cations			6.97 meq/L
Anions			6.97 meq/L
Cation/Anion Difference			0.01%

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Water And Waste Water", 18th ed., 1992.

Comments: Leeper / Martinez.


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

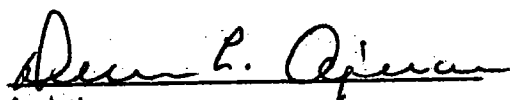
Water Analysis

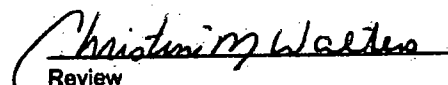
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Sample ID:	MW 8 - 011800 1017	Date Reported:	01-21-00
Laboratory Number:	G702	Date Sampled:	01-18-00
Sample Matrix:	Water	Date Received:	01-18-00
Preservative:	Cool	Date Analyzed:	01-21-00
Condition:	Cool & Intact	Chain of Custody:	7008

Parameter	Analytical Result	Units
Manganese	<0.1	mg/L
Ferrous Iron	<0.01	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", 18th ed., 1992.

Comments: Leeper / Martinez.


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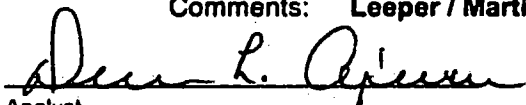
CATION / ANION ANALYSIS

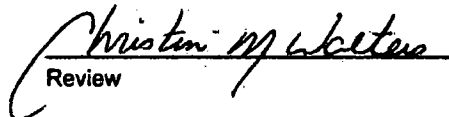
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	MW 9 - 011800 1052	Date Reported:	01-19-00
Laboratory Number:	G703	Date Sampled:	01-18-00
Chain of Custody:	7008	Date Received:	01-18-00
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	01-19-00
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		Units
pH	7.18	s.u.		
Conductivity @ 25° C	875	umhos/cm		
Total Dissolved Solids @ 180C	435	mg/L		
Total Dissolved Solids (Calc)	427	mg/L		
SAR	0.4	ratio		
Total Alkalinity as CaCO3	258	mg/L		
Total Hardness as CaCO3	317	mg/L		
Bicarbonate as HCO3	258	mg/L	4.23	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	<0.1	mg/L	0.00	meq/L
Nitrite Nitrogen	0.011	mg/L	0.00	meq/L
Chloride	12.1	mg/L	0.34	meq/L
Fluoride	0.92	mg/L	0.05	meq/L
Phosphate	<0.1	mg/L	0.00	meq/L
Sulfate	121	mg/L	2.52	meq/L
Iron	<0.001	mg/L		
Calcium	100	mg/L	4.99	meq/L
Magnesium	16.4	mg/L	1.35	meq/L
Potassium	3.2	mg/L	0.08	meq/L
Sodium	16.5	mg/L	0.72	meq/L
Cations			7.14	meq/L
Anions			7.14	meq/L
Cation/Anion Difference			0.03%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Water And Waste Water", 18th ed., 1992.

Comments: Leeper / Martinez.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

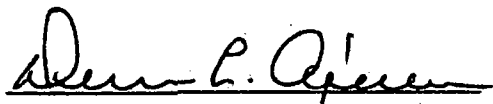
Water Analysis

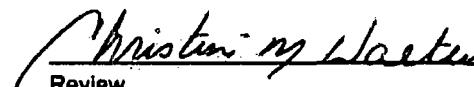
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	MW 9 - 011800 1052	Date Reported:	01-21-00
Laboratory Number:	G703	Date Sampled:	01-18-00
Sample Matrix:	Water	Date Received:	01-18-00
Preservative:	Cool	Date Analyzed:	01-21-00
Condition:	Cool & Intact	Chain of Custody:	7008

Parameter	Analytical Result	Units
Manganese	<0.1	mg/L
Ferrous Iron	<0.01	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", 18th ed., 1992.

Comments: Leeper / Martinez.


Analyst


Review

ENVIROTECH LABS

CATION / ANION ANALYSIS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

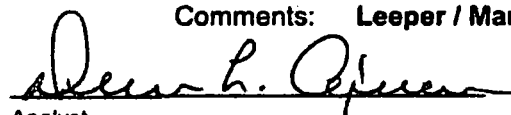
Client: Blagg / AMOCO
Sample ID: MW 10 - 011800 1304
Laboratory Number: G704
Chain of Custody: 7008
Sample Matrix: Water
Preservative: Cool
Condition: Cool & Intact

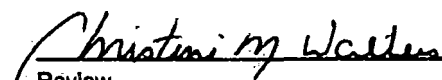
Project #: 403410
Date Reported: 01-19-00
Date Sampled: 01-18-00
Date Received: 01-18-00
Date Extracted: N/A
Date Analyzed: 01-19-00

Parameter	Analytical Result	Units	Units
pH	7.18	s.u.	
Conductivity @ 25° C	995	umhos/cm	
Total Dissolved Solids @ 180C	495	mg/L	
Total Dissolved Solids (Calc)	489	mg/L	
SAR	0.6	ratio	
Total Alkalinity as CaCO3	226	mg/L	
Total Hardness as CaCO3	344	mg/L	
Bicarbonate as HCO3	226	mg/L	3.70 meq/L
Carbonate as CO3	<0.1	mg/L	0.00 meq/L
Hydroxide as OH	<0.1	mg/L	0.00 meq/L
Nitrate Nitrogen	<0.1	mg/L	0.00 meq/L
Nitrite Nitrogen	0.009	mg/L	0.00 meq/L
Chloride	17.9	mg/L	0.50 meq/L
Fluoride	0.84	mg/L	0.04 meq/L
Phosphate	<0.1	mg/L	0.00 meq/L
Sulfate	180	mg/L	3.74 meq/L
Iron	0.201	mg/L	
Calcium	109	mg/L	5.43 meq/L
Magnesium	17.6	mg/L	1.45 meq/L
Potassium	3.3	mg/L	0.08 meq/L
Sodium	23.7	mg/L	1.03 meq/L
Cations			7.99 meq/L
Anions			7.99 meq/L
Cation/Anion Difference			0.01%

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Water And Waste Water", 18th ed., 1992.

Comments: Leeper / Martinez.


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Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

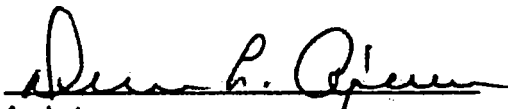
Water Analysis

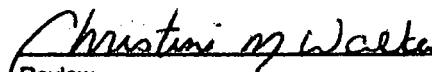
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	MW 10 - 011800 1304	Date Reported:	01-21-00
Laboratory Number:	G704	Date Sampled:	01-18-00
Sample Matrix:	Water	Date Received:	01-18-00
Preservative:	Cool	Date Analyzed:	01-21-00
Condition:	Cool & Intact	Chain of Custody:	7008

Parameter	Analytical Result	Units
Manganese	<0.1	mg/L
Ferrous Iron	0.01	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", 18th ed., 1992.

Comments: Leeper / Martinez.


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Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

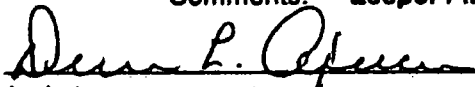
Client: Blagg / AMOCO
Sample ID: MW 11 - 011800 1237
Laboratory Number: G705
Chain of Custody: 7008
Sample Matrix: Water
Preservative: Cool
Condition: Cool & Intact

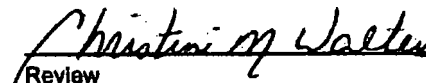
Project #: 403410
Date Reported: 01-19-00
Date Sampled: 01-18-00
Date Received: 01-18-00
Date Extracted: N/A
Date Analyzed: 01-19-00

Parameter	Analytical Result	Units		Units
pH	7.15	s.u.		
Conductivity @ 25° C	905	umhos/cm		
Total Dissolved Solids @ 180C	450	mg/L		
Total Dissolved Solids (Calc)	441	mg/L		
SAR	0.4	ratio		
Total Alkalinity as CaCO3	250	mg/L		
Total Hardness as CaCO3	329	mg/L		
Bicarbonate as HCO3	250	mg/L	4.10	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	<0.1	mg/L	0.00	meq/L
Nitrite Nitrogen	0.007	mg/L	0.00	meq/L
Chloride	12.5	mg/L	0.35	meq/L
Fluoride	0.91	mg/L	0.05	meq/L
Phosphate	<0.1	mg/L	0.00	meq/L
Sulfate	137	mg/L	2.84	meq/L
Iron	<0.001	mg/L		
Calcium	103	mg/L	5.13	meq/L
Magnesium	17.4	mg/L	1.43	meq/L
Potassium	3.5	mg/L	0.09	meq/L
Sodium	15.9	mg/L	0.69	meq/L
Cations			7.34	meq/L
Anions			7.34	meq/L
Cation/Anion Difference			0.01%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Water And Waste Water", 18th ed., 1992.

Comments: Leeper / Martinez.


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Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

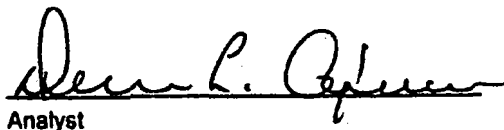
Water Analysis

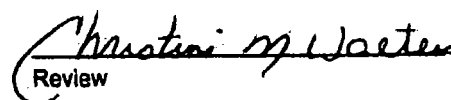
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	MW 11 - 011800 1237	Date Reported:	01-21-00
Laboratory Number:	G705	Date Sampled:	01-18-00
Sample Matrix:	Water	Date Received:	01-18-00
Preservative:	Cool	Date Analyzed:	01-21-00
Condition:	Cool & Intact	Chain of Custody:	7008

Parameter	Analytical Result	Units
Manganese	<0.1	mg/L
Ferrous Iron	<0.01	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", 18th ed., 1992.

Comments: Leeper / Martinez.


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Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

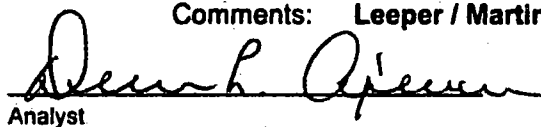
CATION / ANION ANALYSIS

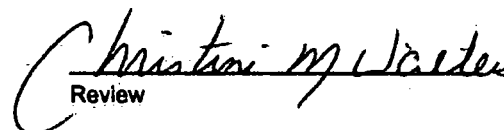
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	MW 12 - 011800 1159	Date Reported:	01-19-00
Laboratory Number:	G708	Date Sampled:	01-18-00
Chain of Custody:	7008	Date Received:	01-18-00
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	01-19-00
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		Units
pH	7.22	s.u.		
Conductivity @ 25° C	865	umhos/cm		
Total Dissolved Solids @ 180C	430	mg/L		
Total Dissolved Solids (Calc)	426	mg/L		
SAR	0.3	ratio		
Total Alkalinity as CaCO3	294	mg/L		
Total Hardness as CaCO3	335	mg/L		
Bicarbonate as HCO3	294	mg/L	4.82	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	<0.1	mg/L	0.00	meq/L
Nitrite Nitrogen	0.005	mg/L	0.00	meq/L
Chloride	8.5	mg/L	0.24	meq/L
Fluoride	0.89	mg/L	0.05	meq/L
Phosphate	0.1	mg/L	0.00	meq/L
Sulfate	104	mg/L	2.17	meq/L
Iron	0.002	mg/L		
Calcium	96.0	mg/L	4.79	meq/L
Magnesium	23.2	mg/L	1.91	meq/L
Potassium	3.6	mg/L	0.09	meq/L
Sodium	11.1	mg/L	0.48	meq/L
Cations			7.27	meq/L
Anions			7.27	meq/L
Cation/Anion Difference			0.01%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Water And Waste Water", 18th ed., 1992.

Comments: Leeper / Martinez.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

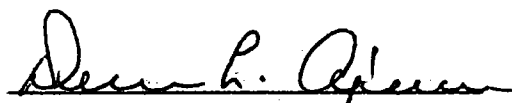
Water Analysis

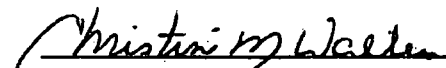
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	MW 12 - 011800 1159	Date Reported:	01-21-00
Laboratory Number:	G706	Date Sampled:	01-18-00
Sample Matrix:	Water	Date Received:	01-18-00
Preservative:	Cool	Date Analyzed:	01-21-00
Condition:	Cool & Intact	Chain of Custody:	7008

Parameter	Analytical Result	Units
Manganese	<0.1	mg/L
Ferrous Iron	<0.01	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", 18th ed., 1992.

Comments: Leeper / Martinez.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

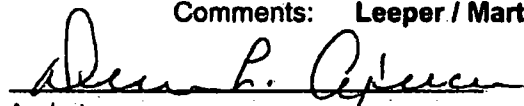
Client: Blagg / AMOCO
Sample ID: MW 13 - 011800 1124
Laboratory Number: G707
Chain of Custody: 7008
Sample Matrix: Water
Preservative: Cool
Condition: Cool & Intact

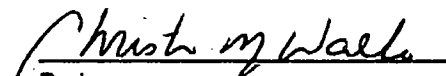
Project #: 403410
Date Reported: 01-19-00
Date Sampled: 01-18-00
Date Received: 01-18-00
Date Extracted: N/A
Date Analyzed: 01-19-00

Parameter	Analytical Result	Units		Units
pH	7.16	s.u.		
Conductivity @ 25° C	805	umhos/cm		
Total Dissolved Solids @ 180C	400	mg/L		
Total Dissolved Solids (Calc)	395	mg/L		
SAR	0.0	ratio		
Total Alkalinity as CaCO3	343	mg/L		
Total Hardness as CaCO3	342	mg/L		
Bicarbonate as HCO3	343	mg/L	5.62	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	<0.1	mg/L	0.00	meq/L
Nitrite Nitrogen	0.005	mg/L	0.00	meq/L
Chloride	12.6	mg/L	0.36	meq/L
Fluoride	0.89	mg/L	0.05	meq/L
Phosphate	<0.1	mg/L	0.00	meq/L
Sulfate	45.0	mg/L	0.94	meq/L
Iron	0.165	mg/L		
Calcium	103	mg/L	5.15	meq/L
Magnesium	20.5	mg/L	1.69	meq/L
Potassium	4.6	mg/L	0.12	meq/L
Sodium	<0.1	mg/L	0.00	meq/L
Cations			6.96	meq/L
Anions			6.96	meq/L
Cation/Anion Difference			0.09%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Water And Waste Water", 18th ed., 1992.

Comments: Leeper / Martinez.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

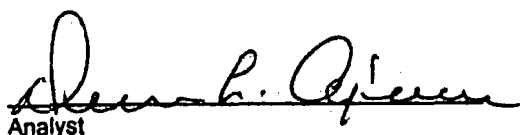
Water Analysis

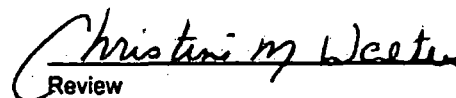
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	MW 13 - 011800 1124	Date Reported:	01-21-00
Laboratory Number:	G707	Date Sampled:	01-18-00
Sample Matrix:	Water	Date Received:	01-18-00
Preservative:	Cool	Date Analyzed:	01-21-00
Condition:	Cool & Intact	Chain of Custody:	7008

Parameter	Analytical Result	Units
Manganese	<0.1	mg/L
Ferrous Iron	0.03	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", 18th ed., 1992.

Comments: Leeper / Martinez.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	MW 13 - 011800 1124	Date Reported:	01-19-00
Laboratory Number:	G707	Date Sampled:	01-18-00
Chain of Custody:	7008	Date Received:	01-18-00
Sample Matrix:	Water	Date Analyzed:	01-19-00
Preservative:	Cool	Date Digested:	01-19-00
Condition:	Cool & Intact	Analysis Needed:	Trace Metals

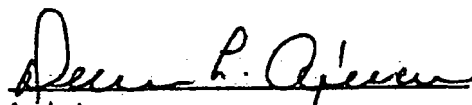
Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Arsenic	0.058	0.001
Barium	0.107	0.001
Cadmium	0.030	0.001
Chromium	0.021	0.001
Lead	0.041	0.001
Mercury	0.005	0.001
Selenium	0.006	0.001
Silver	0.004	0.001

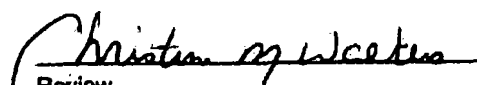
ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Comments: Leeper / Martinez.


Analyst


Review



Ms. Kim McNeill
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

LOG NO: C0-01446
Received: 20 JAN 00
Reported: 03 FEB 00

Project: ENV-BLAGG/001038
Sampled By: Client
Code: 08210023
Page 1

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
01446-2	001038-02 MW #13 15	01-18-00/11:24
PARAMETER		01446-2
Polynuclear Aromatic Hydrocarbons (8310)		
Acenaphthene, ug/l		<1.0
Acenaphthylene, ug/l		1.0
Anthracene, ug/l		<1.0
Benzo(a)anthracene, ug/l		<1.0
Benzo(a)pyrene, ug/l		<1.0
Benzo(b)fluoranthene, ug/l		1.1
Benzo(g,h,i)perylene, ug/l		1.5
Benzo(k)fluoranthene, ug/l		1.7
Chrysene, ug/l		<1.0
Dibenzo(a,h)anthracene, ug/l		5.4
Fluoranthene, ug/l		<1.0
Fluorene, ug/l		<1.0
Indeno(1,2,3-cd)pyrene, ug/l		<1.0
Naphthalene, ug/l		<1.0
Phenanthrene, ug/l		<1.0
Pyrene, ug/l		<1.0
1-Methylnaphthalene, ug/l		<1.0
2-Methylnaphthalene, ug/l		<1.0
Surrogate - 2-Chloroanthracene		102 %
Analyst		SB
Prep Date		01.25.00
Analysis Date		01.29.00
Batch ID		PAW385
Prep Method		3520
Dilution Factor		1

CHAIN OF CUSTODY RECORD

7008

Client / Project Name BLAGG/AMOCO			Project Location LEEPER/MARTINEZ		ANALYSIS / PARAMETERS								
Sampler: J.C. Blagg			Client No. 403410		No. of Containers	MAJOR IONS +MA + FE Total	B RORA METALS	PAH 8310				Remarks	
Sample No/ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix									
MW2-0118001315	1/18/02	1315	G700	WATER	1	X							
MW6-0118000940	"	0940	G701	"	1		X						
MW8-0118001017	"	1017	G702	"	1	X							
MW9-0118001052	"	1052	G703	"	1	X							
MW10-0118001304	"	1304	G704	"	1	X							
MW11-0118001237	"	1237	G705	"	1	X							
MW12-0118001159	"	1159	G706	"	1	X							
MW13-0118001124	"	1124	G707	"	4	X	X	X					
Relinquished by: (Signature) J.C. Blagg					Date 1/18/02	Time 1508	Received by: (Signature) [Signature]					Date 1/18/02	Time 1509
Relinquished by: (Signature)							Received by: (Signature)						
Relinquished by: (Signature)							Received by: (Signature)						
ENVIROTECH INC. 5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615										Sample Receipt			
											Y	N	N/A
										Received Intact	✓		
										Cool - Ice/Blue Ice	✓		

ANALYSIS REQUEST

NUMBER OF CONTAINERS

2

DISTRIBUTION: White - PUJ, Canary - Originator

Network Project Manager: Kimberly D. McNeill					ANALYSIS REQUEST																					
Pinnacle Laboratories, Inc. 2709-D Pan American Freeway, NE Albuquerque, New Mexico 87107 (505) 344-3777 Fax (505) 344-4413					Metals (8) RCRA	RCRA TCLP METALS	Metals-13 PP List	Metals-TAL	TOX	TOC	Gen Chemistry	Oil and Grease	Volatile Organics GC/MS (8260)	BOD	COD	PESTICIDES/PCB (608/8080)	8270 BY GC/MS	PNA (8310)	8240 (TCLP 1311) ZHE	Herbicides (615/8150)	Base/Neutral Acid Compounds GC/MS (625/8270)	URANIUM	RADIUM 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
SAMPLE ID	DATE	TIME	MATRIX	LAB ID																						
001038	1/18		AQ																							
-02	↓	1124	↓															X								

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:		RELINQUISHED BY:		1. RELINQUISHED BY:		2. RELINQUISHED BY:	
PROJECT #:	001038	Total Number of Containers		PENSACOLA - STL-FL	X	Signature:	Time:	Signature:	Time:	Signature:	Time:
PROJ. NAME:	ENV	Chain of Custody Seals		PORTLAND - ESL-OR		Signature:	Time:	Signature:	Time:	Signature:	Time:
QC LEVEL:	STD IV	Received Intact?		STL - CT		Printed Name:	Date:	Printed Name:	Date:	Printed Name:	Date:
QC REQUIRED:	MS MSD BLANK	Received Good Cond./Co'd		STL - NEW JERSEY		Signature:	Time:	Signature:	Time:	Signature:	Time:
TAT:	STANDARD RUSHII	LAB NUMBER:		N. CREEK		Printed Name:	Date:	Printed Name:	Date:	Printed Name:	Date:
				BARRINGER		Signature:	Time:	Signature:	Time:	Signature:	Time:
DUE DATE:	1/21	COMMENTS:		SEQUOIA		Signature:	Time:	Signature:	Time:	Signature:	Time:
RUSH SURCHARGE:	—					Printed Name:	Date:	Printed Name:	Date:	Printed Name:	Date:
CLIENT DISCOUNT:	—					Signature:	Time:	Signature:	Time:	Signature:	Time:
SPECIAL CERTIFICATION						Printed Name:	Date:	Printed Name:	Date:	Printed Name:	Date:
REQUIRED: YES NO						Signature:	Time:	Signature:	Time:	Signature:	Time:

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS Quality Control / Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	01-19-TM QA/QC	Date Reported:	01-19-00
Laboratory Number:	G701	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Analysis Requested:	Trace Metals	Date Analyzed:	01-19-00
Condition:	N/A	Date Digested:	01-19-00

Blank & Duplicate Conc. (mg/L)	Instrument Blank (mg/L)	Method Blank	Detection Limit	Sample	Duplicate	% Diff.	Acceptance Range
Arsenic	ND	ND	0.001	0.059	0.059	0.0%	0% - 30%
Barium	ND	ND	0.001	0.066	0.065	1.5%	0% - 30%
Cadmium	ND	ND	0.001	0.025	0.025	0.0%	0% - 30%
Chromium	ND	ND	0.001	0.016	0.016	0.0%	0% - 30%
Lead	ND	ND	0.001	0.039	0.039	0.0%	0% - 30%
Mercury	ND	ND	0.001	0.009	0.009	0.0%	0% - 30%
Selenium	ND	ND	0.001	0.008	0.008	0.0%	0% - 30%
Silver	ND	ND	0.001	0.003	0.003	0.0%	0% - 30%

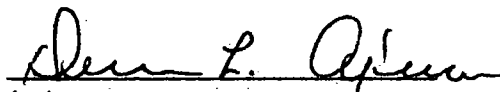
Spike Conc. (mg/L)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	1.00	0.059	1.06	100%	80% - 120%
Barium	1.00	0.066	1.07	100%	80% - 120%
Cadmium	0.500	0.025	0.524	100%	80% - 120%
Chromium	1.00	0.016	1.02	100%	80% - 120%
Lead	1.00	0.039	1.04	100%	80% - 120%
Mercury	0.500	0.009	0.508	100%	80% - 120%
Selenium	0.500	0.008	0.507	100%	80% - 120%
Silver	1.00	0.003	1.00	100%	80% - 120%

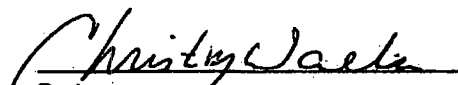
ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission
Spectroscopy, SW-846, USEPA, December 1996.

Comments: QA/QC for samples G701 and G707.


Analyst


Review



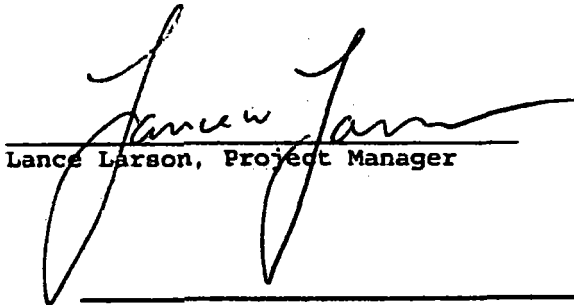
Ms. Kim McNeill
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

LOG NO: C0-01446
Received: 20 JAN 00
Reported: 03 FEB 00

Project: ENV-BLAGG/001038
Sampled By: Client
Code: 08210023
Page 2

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED		
01446-3	Method Blank			
01446-4	Lab Control Standard & Recovery			
01446-5	Matrix Spike & Recovery			
01446-6	Matrix Spike Duplicate & Recovery			
PARAMETER	01446-3	01446-4	01446-5	01446-6
Polynuclear Aromatic Hydrocarbons (8310)				
Acenaphthene, ug/l	<1.0	---	---	---
Acenaphthylene, ug/l	<1.0	92 %	96 %	85 %
Anthracene, ug/l	<1.0	---	---	---
Benzo(a)anthracene, ug/l	<1.0	---	---	---
Benzo(a)pyrene, ug/l	<1.0	---	---	---
Benzo(b)fluoranthene, ug/l	<1.0	---	---	---
Benzo(g,h,i)perylene, ug/l	<1.0	---	---	---
Benzo(k)fluoranthene, ug/l	<1.0	109 %	111 %	107 %
Chrysene, ug/l	<1.0	107 %	109 %	109 %
Dibenzo(a,h)anthracene, ug/l	<1.0	---	---	---
Fluoranthene, ug/l	<1.0	---	---	---
Fluorene, ug/l	<1.0	---	---	---
Indeno(1,2,3-cd)pyrene, ug/l	<1.0	---	---	---
Naphthalene, ug/l	<1.0	---	---	---
Phenanthrene, ug/l	<1.0	98 %	107 %	91 %
Pyrene, ug/l	<1.0	103 %	126 %	118 %
1-Methylnaphthalene, ug/l	<1.0	---	---	---
2-Methylnaphthalene, ug/l	<1.0	---	---	---
Surrogate - 2-Chloroanthracene	93 %	106 %	107 %	104 %
Analyst	SB	SB	SB	SB
Prep Date	01.25.00	01.25.00	01.25.00	01.25.00
Analysis Date	01.29.00	01.29.00	01.29.00	01.29.00
Batch ID	PAW385	PAW385	PAW385	PAW385
Prep Method	3520	3520	3520	3520
Dilution Factor	1	1	1	1


Lance Larson, Project Manager

3355 McLemore Drive, Pensacola, FL 32514
Tel: (850) 474-1001 • Fax: (850) 478-2671

a part of
Severn Trent Services Inc.

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 24-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper/Martinez
Work Order:	0001021	Client Sample ID:	MW-2; 0118001315
Lab ID:	0001021-01A	Matrix:	AQUEOUS
Project:	Leeper/Martinez	Collection Date:	1/18/2000 1:15:00 PM
		COC Record:	10348

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	140	10		µg/L	20	1/20/2000
Toluene	30	10		µg/L	20	1/20/2000
Ethylbenzene	120	10		µg/L	20	1/20/2000
m,p-Xylene	3200	20		µg/L	20	1/20/2000
o-Xylene	170	10		µg/L	20	1/20/2000

Qualifiers:

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

R - RPD outside accepted recovery limits

J - Analyte detected below Practical Quantitation Limit

E - Value above quantitation range

B - Analyte detected in the associated Method Blank

Surr: - Surrogate

1 of 1

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 24-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper/Martinez
Work Order:	0001021	Client Sample ID:	MW-8; 0118001017
Lab ID:	0001021-02A	Matrix:	AQUEOUS
Project:	Leeper/Martinez	Collection Date:	1/18/2000 10:17:00 AM
		COC Record:	10348

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	1/20/2000
Toluene	ND	0.5		µg/L	1	1/20/2000
Ethylbenzene	ND	0.5		µg/L	1	1/20/2000
m,p-Xylene	ND	1		µg/L	1	1/20/2000
o-Xylene	ND	0.5		µg/L	1	1/20/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

1 of 1

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LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 24-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper/Martinez
Work Order:	0001021	Client Sample ID:	MW-9; 0118001052
Lab ID:	0001021-03A	Matrix:	AQUEOUS
Project:	Leeper/Martinez	Collection Date:	1/18/2000 10:52:00 AM
		COC Record:	10348

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	1/20/2000
Toluene	ND	0.5		µg/L	1	1/20/2000
Ethylbenzene	ND	0.5		µg/L	1	1/20/2000
m,p-Xylene	ND	1		µg/L	1	1/20/2000
o-Xylene	ND	0.5		µg/L	1	1/20/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr. - Surrogate

1 of 1

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LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 24-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper/Martinez
Work Order:	0001021	Client Sample ID:	MW-10; 0118001304
Lab ID:	0001021-04A	Matrix:	AQUEOUS
Project:	Leeper/Martinez	Collection Date:	1/18/2000 1:04:00 PM
		COC Record:	10348

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	9.6	0.5		µg/L	1	1/20/2000
Toluene	ND	0.5		µg/L	1	1/20/2000
Ethylbenzene	12	0.5		µg/L	1	1/20/2000
m,p-Xylene	77	1		µg/L	1	1/20/2000
o-Xylene	0.7	0.5		µg/L	1	1/20/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surrogate - Surrogate

1 of 1

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TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 24-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper/Martinez
Work Order:	0001021	Client Sample ID:	MW-11; 0118001237
Lab ID:	0001021-05A	Matrix:	AQUEOUS
Project:	Leeper/Martinez	Collection Date:	1/18/2000 12:37:00 PM
		COC Record:	10348

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	31	0.5		µg/L	1	1/20/2000
Toluene	ND	0.5		µg/L	1	1/20/2000
Ethylbenzene	3.3	0.5		µg/L	1	1/20/2000
m,p-Xylene	49	1		µg/L	1	1/20/2000
o-Xylene	14	0.5		µg/L	1	1/20/2000

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
	B - Analyte detected in the associated Method Blank	Sum - Surrogate

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TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT

1 of 1

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 24-Jun-00

Client:	Blagg Engineering	Client Sample Info:	Leeper/Martinez
Work Order:	0001021	Client Sample ID:	MW-12; 0118001159
Lab ID:	0001021-06A	Matrix:	AQUEOUS
Project:	Leeper/Martinez	Collection Date:	1/18/2000 11:59:00 AM
		COC Record:	10348

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	1/20/2000
Toluene	ND	0.5		µg/L	1	1/20/2000
Ethylbenzene	ND	0.5		µg/L	1	1/20/2000
m,p-Xylene	ND	1		µg/L	1	1/20/2000
o-Xylene	ND	0.5		µg/L	1	1/20/2000

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
	B - Analyte detected in the associated Method Blank	Surr. - Surrogate

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



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ANALYTICAL REPORT

Date: 24-Jun-00

Client:	Blagg Engineering	Client Sample Info:	Leeper/Martinez
Work Order:	0001021	Client Sample ID:	MW-13: 0118001124
Lab ID:	0001021-07A	Matrix:	AQUEOUS
Project:	Leeper/Martinez	Collection Date:	1/18/2000 11:24:00 AM
		COC Record:	10348

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	2.6	0.5		µg/L	1	1/20/2000
Toluene	ND	0.5		µg/L	1	1/20/2000
Ethylbenzene	2.5	0.5		µg/L	1	1/20/2000
m,p-Xylene	18	1		µg/L	1	1/20/2000
o-Xylene	1	0.5		µg/L	1	1/20/2000

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
	B - Analyte detected in the associated Method Blank	Surr - Surrogate

1 of 1

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



CHAIN OF CUSTODY RECORD

612 E. Murray Dr • P.O. Box 2606 • Farmington, NM 87499
LAB: (505) 325-5667 • FAX (505) 327-1496

Date: 2/2/92

Page: _____ of _____

Purchase Order No.:		Project No. <u>LE 70</u>		REPORT RESULTS TO	Name		Title					
SEND INVOICE TO	Name				Company							
	Company		Dept.		Mailing Address							
	Address				City, State, Zip							
City, State, Zip				Number of Containers	Telephone No.		Telefax No.					
PROJECT LOCATION:					ANALYSIS REQUESTED							
SAMPLER'S SIGNATURE:												
SAMPLE IDENTIFICATION		SAMPLE			LAB ID							
		DATE	TIME	MATRIX								
Relinquished by:		Date/Time		Received by:		Date/Time						
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	By Date					
Authorized by: _____ Date: _____ (Client Signature Must Accompany Request)				Special Instructions / Remarks:								

On Site Technologies, LTD.

Date: 24-Jan-00

CLIENT: Blagg Engineering
Work Order: 0001021
Project: Leeper/Martinez

QC SUMMARY REPORT
Method Blank

Sample ID: MB1	Batch ID: GC-1_000120	Test Code: SW8021B	Units: µg/L	Analysis Date: 1/20/2000	Prep Date:						
Client ID:	0001021	Run ID: GC-1_000120A		SeqNo: 22986							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.1572	0.5									J
Ethylbenzene	.3691	0.5									J
m,p-Xylene	.473	1									J
Methyl tert-Butyl Ether	ND	1									
o-Xylene	.2471	0.5									J
Toluene	.3683	0.5									J

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 24-Jan-00

CLIENT: Blagg Engineering
Work Order: 0001021
Project: Leeper/Martinez

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0001020-02AMS	Batch ID: GC-1_000120	Test Code: SW8021B	Units: µg/L	Analysis Date: 1/20/2000	Prep Date:						
Client ID: 0001021	Run ID: GC-1_000120A	SeqNo: 22987									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	11540	50	4000	7821	93.1%	73	126				
Ethylbenzene	4396	50	4000	502.4	97.4%	88	113				
m,p-Xylene	12890	100	8000	5458	92.9%	83	112				
Methyl tert-Butyl Ether	4403	100	4000	510.9	97.3%	81	125				
o-Xylene	6117	50	4000	2263	96.4%	93	110				
Toluene	10610	50	4000	6848	94.1%	76	126				

Sample ID: 0001020-02AMSD	Batch ID: GC-1_000120	Test Code: SW8021B	Units: µg/L	Analysis Date: 1/20/2000	Prep Date:						
Client ID: 0001021	Run ID: GC-1_000120A	SeqNo: 22988									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	11670	50	4000	7821	96.3%	73	126	11540	1.1%	6	
Ethylbenzene	4452	50	4000	502.4	98.7%	88	113	4396	1.2%	5	
m,p-Xylene	13040	100	8000	5458	94.8%	83	112	12890	1.2%	7	
Methyl tert-Butyl Ether	4551	100	4000	510.9	101.0%	81	125	4403	3.3%	9	
o-Xylene	6209	50	4000	2263	98.7%	93	110	6117	1.5%	6	
Toluene	10750	50	4000	6848	97.5%	76	126	10610	1.2%	6	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 24-Jan-00

CLIENT: Blagg Engineering
Work Order: 0001021
Project: Leeper/Martinez

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: LCS WATER	Batch ID: GC-1_000120	Test Code: SW8021B	Units: µg/L	Analysis Date 1/20/2000				Prep Date:			
Client ID:	0001021	Run ID:	GC-1_000120A	SeqNo: 22985							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	41.01	0.5	40	0.1572	102.1%	89	112				
Ethylbenzene	41.45	0.5	40	0.4517	102.5%	93	112				
m,p-Xylene	79.34	1	80	0.543	98.5%	88	108				
Methyl tert-Butyl Ether	41.58	1	40	0	103.9%	87	115				
o-Xylene	41.54	0.5	40	0.4209	102.8%	93	112				
Toluene	41.42	0.5	40	0.3683	102.6%	92	111				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 24-Jan-00

CLIENT: Blagg Engineering
Work Order: 0001021
Project: Leeper/Martinez

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: CCV1 BTEX_0001	Batch ID: GC-1_000120	Test Code: SW8021B	Units: µg/L	Analysis Date: 1/20/2000	Prep Date:						
Client ID: 0001021	Run ID: GC-1_000120A	SeqNo: 22981									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.48	0.5	20	0	102.4%	85	115				
Ethylbenzene	21.17	0.5	20	0	105.9%	85	115				
m,p-Xylene	40.17	1	40	0	100.4%	85	115				
Methyl tert-Butyl Ether	21.02	1	20	0	105.1%	85	115				
o-Xylene	21.28	0.5	20	0	106.4%	85	115				
Toluene	21.2	0.5	20	0	106.0%	85	115				
1,4-Difluorobenzene	89.26	0	100	0	89.3%	80	105				
4-Bromochlorobenzene	84.36	0	100	0	84.4%	78	108				
Fluorobenzene	88.71	0	100	0	88.7%	78	108				

Sample ID: CCV2 BTEX_0001	Batch ID: GC-1_000120	Test Code: SW8021B	Units: µg/L	Analysis Date: 1/20/2000	Prep Date:						
Client ID: 0001021	Run ID: GC-1_000120A	SeqNo: 22982									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.14	0.5	20	0	100.7%	85	115				
Ethylbenzene	20.8	0.5	20	0	104.0%	85	115				
m,p-Xylene	39.43	1	40	0	98.6%	85	115				
Methyl tert-Butyl Ether	21.37	1	20	0	106.9%	85	115				
o-Xylene	21.07	0.5	20	0	105.3%	85	115				
Toluene	20.8	0.5	20	0	104.0%	85	115				
1,4-Difluorobenzene	89.65	0	100	0	89.6%	80	105				
4-Bromochlorobenzene	88.82	0	100	0	88.8%	78	108				
Fluorobenzene	88.71	0	100	0	88.7%	78	108				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 0001021
Project: Leeper/Martinez

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV3 BTEX_0001		Batch ID: GC-1_000120		Test Code: SW8021B		Units: µg/L		Analysis Date: 1/20/2000		Prep Date:	
Client ID:		0001021		Run ID: GC-1_000120A		SeqNo: 22983					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.38	0.5	20	0	101.9%	85	115				
Ethylbenzene	20.73	0.5	20	0	103.7%	85	115				
m,p-Xylene	39.44	1	40	0	98.6%	85	115				
Methyl tert-Butyl Ether	20.91	1	20	0	104.6%	85	115				
o-Xylene	20.92	0.5	20	0	104.6%	85	115				
Toluene	20.82	0.5	20	0	104.1%	85	115				
1,4-Difluorobenzene	89.58	0	100	0	89.6%	80	105				
4-Bromochlorobenzene	87.76	0	100	0	87.8%	78	108				
Fluorobenzene	88.33	0	100	0	88.3%	78	108				

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 24-Jan-00

CLIENT: Blagg Engineering
Work Order: 0001021
Project: Leeper/Martinez
Test No: SW8021B

**QC SUMMARY REPORT
SURROGATE RECOVERIES**

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0001020-01A	90.5	87.4	89
0001020-02A	87.8	88.2	87
0001020-02AMS	87.1	88.9	86.5
0001020-02AMSD	87.1	88.2	86.8
0001020-03A	89.7	87	88.3
0001020-04A	89.4	86.6	88.5
0001021-01A	87	85.1	87.9
0001021-02A	90	88.4	89.5
0001021-03A	90	88.1	89.5
0001021-04A	84.4	82.5	95
0001021-05A	86.6	87.8	87.5
0001021-06A	90.5	88.6	89.3
0001021-07A	87.3	84.4	89.7
CCV1 BTEX_00010	89.3	84.4	88.7
CCV2 BTEX_00010	89.6	88.8	88.7
CCV3 BTEX_00010	89.6	87.8	88.3
LCS WATER	88.9	89.5	88.1
MB1	90	86.3	89.3

Acronym

Surrogate

QC Limits

14FBZ = 1,4-Difluorobenzene
4BCBZ = 4-Bromochlorobenzene
FLBZ = Fluorobenzene

80-105
78-108
78-108

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 31-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper - Martinez
Work Order:	0001031	Client Sample ID:	MW8 - 0127001039
Lab ID:	0001031-01A	Matrix:	AQUEOUS
Project:	Leeper - Martinez	Collection Date:	1/27/2000 10:39:00 AM
		COC Record:	10351

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	1/28/2000
Toluene	ND	0.5		µg/L	1	1/28/2000
Ethylbenzene	ND	0.5		µg/L	1	1/28/2000
m,p-Xylene	ND	1		µg/L	1	1/28/2000
o-Xylene	ND	0.5		µg/L	1	1/28/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Sum - Sumigate

1 of 1

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• TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT •

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 31-Jun-00

Client:	Blagg Engineering	Client Sample Info:	Leeper - Martinez
Work Order:	0001031	Client Sample ID:	MW9 - 0127001113
Lab ID:	0001031-02A	Matrix:	AQUEOUS
Project:	Leeper - Martinez	Collection Date:	1/27/2000 11:13:00 AM
		COC Record:	10351

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	1/27/2000
Toluene	ND	0.5		µg/L	1	1/27/2000
Ethylbenzene	ND	0.5		µg/L	1	1/27/2000
m,p-Xylene	ND	1		µg/L	1	1/27/2000
o-Xylene	ND	0.5		µg/L	1	1/27/2000

Qualifiers:

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

R - RPD outside accepted recovery limits

J - Analyte detected below Practical Quantitation Limit

E - Value above quantitation range

B - Analyte detected in the associated Method Blank

Sur: - Surrogate

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OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 31-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper - Martinez
Work Order:	0001031	Client Sample ID:	MW10 - 0127001325
Lab ID:	0001031-03A	Matrix:	AQUEOUS
Project:	Leeper - Martinez	Collection Date:	1/27/2000 1:25:00 PM
		COC Record:	10351

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	2.2	0.5		µg/L	1	1/27/2000
Toluene	ND	0.5		µg/L	1	1/27/2000
Ethylbenzene	3.6	0.5		µg/L	1	1/27/2000
m,p-Xylene	16	1		µg/L	1	1/27/2000
o-Xylene	0.7	0.5		µg/L	1	1/27/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

U - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surf - Surrogate

1 of 1

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OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 31-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper - Martinez
Work Order:	0001031	Client Sample ID:	MW11 - 0127001304
Lab ID:	0001031-04A	Matrix:	AQUEOUS
Project:	Leeper - Martinez	Collection Date:	1/27/2000 1:04:00 PM
		COC Record:	10351

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	35	0.5		µg/L	1	1/27/2000
Toluene	ND	0.5		µg/L	1	1/27/2000
Ethylbenzene	1.5	0.5		µg/L	1	1/27/2000
m,p-Xylene	23	1		µg/L	1	1/27/2000
o-Xylene	8.3	0.5		µg/L	1	1/27/2000

Qualifiers:

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

R - RPD outside accepted recovery limits

J - Analyte detected below Practical Quantitation Limit

E - Value above quantitation range

B - Analyte detected in the associated Method Blank

Surr. - Surrogate

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TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 31-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper - Martinez
Work Order:	0001031	Client Sample ID:	MW12 - 0127001220
Lab ID:	0001031-05A	Matrix:	AQUEOUS
Project:	Leeper - Martinez	Collection Date:	1/27/2000 12:20:00 PM
		COC Record:	10351

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	1/27/2000
Toluene	ND	0.5		µg/L	1	1/27/2000
Ethylbenzene	ND	0.5		µg/L	1	1/27/2000
m,p-Xylene	ND	1		µg/L	1	1/27/2000
o-Xylene	ND	0.5		µg/L	1	1/27/2000

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
	B - Analyte detected in the associated Method Blank	Surr: - Surrogate

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

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LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 31-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper - Martinez
Work Order:	0001031	Client Sample ID:	MW13 - 0127001146
Lab ID:	0001031-06A	Matrix:	AQUEOUS
Project:	Leeper - Martinez	Collection Date:	1/27/2000 11:46:00 AM
		COC Record:	10351

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	1.5	0.5		µg/L	1	1/27/2000
Toluene	ND	0.5		µg/L	1	1/27/2000
Ethylbenzene	1.8	0.5		µg/L	1	1/27/2000
m,p-Xylene	9	1		µg/L	1	1/27/2000
o-Xylene	ND	0.5		µg/L	1	1/27/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr - Surrogate

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 31-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper - Martinez
Work Order:	0001031	Client Sample ID:	DUP - 012700XXXX
Lab ID:	0001031-07A	Matrix:	AQUEOUS
Project:	Leeper - Martinez	Collection Date:	1/27/2000
		COC Record:	10351

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	1/27/2000
Toluene	ND	0.5		µg/L	1	1/27/2000
Ethylbenzene	ND	0.5		µg/L	1	1/27/2000
m,p-Xylene	ND	1		µg/L	1	1/27/2000
o-Xylene	ND	0.5		µg/L	1	1/27/2000

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	I - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
	B - Analyte detected in the associated Method Blank	Surr - Surrogate

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 31-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper - Martinez
Work Order:	0001031	Client Sample ID:	Trip Blank
Lab ID:	0001031-08A	Matrix:	AQUEOUS
Project:	Leeper - Martinez	Collection Date:	1/27/2000
		COC Record:	10351

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	1/27/2000
Toluene	ND	0.5		µg/L	1	1/27/2000
Ethylbenzene	ND	0.5		µg/L	1	1/27/2000
m,p-Xylene	ND	1		µg/L	1	1/27/2000
o-Xylene	ND	0.5		µg/L	1	1/27/2000

Qualifiers:

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

R - RPD outside accepted recovery limits

J - Analyte detected below Practical Quantitation Limit

E - Value above quantitation range

B - Analyte detected in the associated Method Blank

Surr: - Surrogate

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 31-Jan-00

Client:	Blagg Engineering	Client Sample Info:	Leeper - Martinez
Work Order:	0001031	Client Sample ID:	Rinsate - 0127001335
Lab ID:	0001031-09A	Matrix:	AQUEOUS
Project:	Leeper - Martinez	Collection Date:	1/27/2000 1:35:00 PM
		COC Record:	10351

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	1/27/2000
Toluene	ND	0.5		µg/L	1	1/27/2000
Ethylbenzene	ND	0.5		µg/L	1	1/27/2000
m,p-Xylene	ND	1		µg/L	1	1/27/2000
o-Xylene	ND	0.5		µg/L	1	1/27/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

On Site Technologies, LTD.

Date: 31-Jun-00

CLIENT: Blagg Engineering
Work Order: 0001031
Project: Leeper - Martinez

QC SUMMARY REPORT

Method Blank

Sample ID: MB1		Batch ID: GC-1_000127		Test Code: SW8021B		Units: µg/L		Analysis Date: 1/27/2000			Prep Date:	
Client ID:		0001031		Run ID:		GC-1_000127A		SeqNo: 23154				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	.0957	0.5									J	
Ethylbenzene	.1201	0.5									J	
m,p-Xylene	.2381	1									J	
Methyl tert-Butyl Ether	ND	1										
o-Xylene	.0984	0.5									J	
Toluene	.1544	0.5									J	

Sample ID: MB1	Batch ID: GC-1_000128	Test Code: SW8021B	Units: µg/L	Analysis Date: 1/28/2000				Prep Date:			
Client ID:	0001031	Run ID:	GC-1_000128A	SeqNo: 23175							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.135	0.5									J
Ethylbenzene	.0915	0.5									J
m,p-Xylene	.1663	1									J
Methyl tert-Butyl Ether	ND	1									
o-Xylene	.0712	0.5									J
Toluene	.1331	0.5									J

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 31-Jan-00

CLIENT: Blagg Engineering
Work Order: 0001031
Project: Leeper - Martinez

QC SUMMARY REPORT Sample Matrix Spike

Sample ID: 0001031-01AMS		Batch ID: GC-1_000127		Test Code: SW8021B		Units: µg/L		Analysis Date: 1/27/2000		Prep Date:	
Client ID: MW8 - 012700103		0001031		Run ID: GC-1_000127A				SeqNo: 23156			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	389	5	400	0.5	97.1%	73	126				
Ethylbenzene	394.4	5	400	0.5	98.5%	88	113				
m,p-Xylene	752.5	10	800	1	93.9%	83	112				
Methyl tert-Butyl Ether	399.5	10	400	0	99.9%	81	125				
o-Xylene	395.4	5	400	0.4	98.8%	93	110				
Toluene	392.6	5	400	0.8	98.0%	76	126				

Sample ID: 0001031-01AMSD		Batch ID: GC-1_000127		Test Code: SW8021B		Units: µg/L		Analysis Date: 1/27/2000			Prep Date:	
Client ID: MW8 - 012700103		0001031		Run ID: GC-1_000127A				SeqNo: 23158				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	392.6	5	400	0.5	98.0%	73	126	389	0.9%	6		
Ethylbenzene	398.2	5	400	0.5	99.4%	88	113	394.4	1.0%	5		
m,p-Xylene	760.4	10	800	1	94.9%	83	112	752.5	1.0%	7		
Methyl tert-Butyl Ether	408	10	400	0	102.0%	81	125	399.5	2.1%	9		
o-Xylene	400.5	5	400	0.4	100.0%	93	110	395.4	1.3%	6		
Toluene	396.5	5	400	0.8	98.9%	76	126	392.6	1.0%	6		

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 0001031
Project: Leeper - Martinez

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0001032-03AMS		Batch ID: GC-1_000128	Test Code: SW8021B	Units: µg/L	Analysis Date: 1/28/2000				Prep Date:		
Client ID: 0001031		Run ID: GC-1_000128A			SeqNo: 23176						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2540	10	800	1625	114.4%	73	126				
Ethylbenzene	796.7	10	800	1.754	99.4%	88	113				
m,p-Xylene	1518	20	1600	3.076	94.7%	83	112				
Methyl tert-Butyl Ether	818.4	20	800	0	102.3%	81	125				
o-Xylene	799.3	10	800	0.666	99.8%	93	110				
Toluene	794.9	10	800	2.396	99.1%	76	126				

Sample ID: 0001032-03AMSD		Batch ID: GC-1_000128	Test Code: SW8021B	Units: µg/L	Analysis Date: 1/28/2000				Prep Date:		
Client ID: 0001031		Run ID: GC-1_000128A			SeqNo: 23177						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2523	10	800	1625	112.2%	73	126	2540	0.7%	6	
Ethylbenzene	791.9	10	800	1.754	98.8%	88	113	796.7	0.6%	5	
m,p-Xylene	1509	20	1600	3.076	94.1%	83	112	1518	0.6%	7	
Methyl tert-Butyl Ether	814.5	20	800	0	101.8%	81	125	818.4	0.5%	9	
o-Xylene	798.3	10	800	0.666	99.7%	93	110	799.3	0.1%	6	
Toluene	791.6	10	800	2.396	98.7%	76	126	794.9	0.4%	6	

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 31-Jan-00

CLIENT: Blagg Engineering
Work Order: 0001031
Project: Leeper - Martinez

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: LCS WATER		Batch ID: GC-1_000127		Test Code: SW8021B		Units: µg/L		Analysis Date: 1/27/2000		Prep Date:	
Client ID:		0001031		Run ID: GC-1_000127A				SeqNo: 23153			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	40.49	0.5	40	0.0957	101.0%	89	112				
Ethylbenzene	41.11	0.5	40	0.1201	102.5%	93	112				
m,p-Xylene	78.47	1	80	0.2381	97.8%	88	108				
Methyl tert-Butyl Ether	40.58	1	40	0	101.5%	87	115				
o-Xylene	41.19	0.5	40	0.0984	102.7%	93	112				
Toluene	40.84	0.5	40	0.1544	101.7%	92	111				

Sample ID: LCS WATER	Batch ID: GC-1_000128	Test Code: SW8021B	Units: µg/L	Analysis Date: 1/28/2000				Prep Date:			
Client ID:	0001031	Run ID:	GC-1_000128A		SeqNo:	23174					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	40.32	0.5	40	0.135	100.5%	89	112				
Ethylbenzene	41.4	0.5	40	0.0915	103.3%	93	112				
m,p-Xylene	78.96	1	80	0.1663	98.5%	88	108				
Methyl tert-Butyl Ether	40.16	1	40	0	100.4%	87	115				
o-Xylene	41.46	0.5	40	0.0712	103.5%	93	112				
Toluene	40.97	0.5	40	0.1331	102.1%	92	111				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 31-Jun-00

CLIENT: Blagg Engineering
Work Order: 0001031
Project: Leeper - Martinez

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: CCV1 BTEX_0001		Batch ID: GC-1_000127		Test Code: SW8021B		Units: µg/L		Analysis Date: 1/27/2000		Prep Date:	
Client ID:		0001031		Run ID: GC-1_000127A				SeqNo: 23150			
Analyte	Result	PQL	SPK value	SPK Ref.Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.4	0.5	20	0	102.0%	85	115				
Ethylbenzene	21.74	0.5	20	0	108.7%	85	115				
m,p-Xylene	40.96	1	40	0	102.4%	85	115				
Methyl tert-Butyl Ether	20.92	1	20	0	104.6%	85	115				
o-Xylene	21.71	0.5	20	0	108.5%	85	115				
Toluene	20.71	0.5	20	0	103.5%	85	115				
1,4-Difluorobenzene	88.81	0	100	0	88.8%	80	105				
4-Bromochlorobenzene	88.76	0	100	0	88.8%	78	108				
Fluorobenzene	88.02	0	100	0	88.0%	78	108				

Sample ID: CCV2 BTEX_0001		Batch ID: GC-1_000127		Test Code: SW8021B		Units: µg/L		Analysis Date: 1/27/2000		Prep Date:	
Client ID:		0001031		Run ID: GC-1_000127A				SeqNo: 23151			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.8	0.5	20	0	99.0%	85	115				
Ethylbenzene	21.07	0.5	20	0	105.4%	85	115				
m,p-Xylene	39.76	1	40	0	99.4%	85	115				
Methyl tert-Butyl Ether	21.12	1	20	0	105.6%	85	115				
o-Xylene	21.2	0.5	20	0	106.0%	85	115				
Toluene	20.16	0.5	20	0	100.8%	85	115				
1,4-Difluorobenzene	89.42	0	100	0	89.4%	80	105				
4-Bromochlorobenzene	88.98	0	100	0	89.0%	78	108				
Fluorobenzene	87.84	0	100	0	87.8%	78	108				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 0001031
Project: Leeper - Martinez

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV3 BTEX_0001		Batch ID: GC-1_000127	Test Code: SW8021B	Units: µg/L	Analysis Date: 1/27/2000				Prep Date:		
Client ID:	0001031	Run ID:	GC-1_000127A		SeqNo:		23152				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.65	0.5	20	0	103.2%	85	115				
Ethylbenzene	21.36	0.5	20	0	106.8%	85	115				
m,p-Xylene	40.43	1	40	0	101.1%	85	115				
Methyl tert-Butyl Ether	20.69	1	20	0	103.5%	85	115				
o-Xylene	21.26	0.5	20	0	106.3%	85	115				
Toluene	20.93	0.5	20	0	104.7%	85	115				
1,4-Difluorobenzene	89.12	0	100	0	89.1%	80	105				
4-Bromochlorobenzene	88.52	0	100	0	88.5%	78	108				
Fluorobenzene	88.09	0	100	0	88.1%	78	108				

Sample ID: CCV1 BTEX_0001		Batch ID: GC-1_000128		Test Code: SW8021B		Units: µg/L		Analysis Date: 1/28/2000			Prep Date:	
Client ID:		0001031		Run ID: GC-1_000128A				SeqNo: 23171				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	20.27	0.5	20	0	101.4%	85	115					
Ethylbenzene	21.09	0.5	20	0	105.4%	85	115					
m,p-Xylene	39.93	1	40	0	99.8%	85	115					
Methyl tert-Butyl Ether	20.41	1	20	0	102.0%	85	115					
o-Xylene	21.1	0.5	20	0	105.5%	85	115					
Toluene	20.52	0.5	20	0	102.6%	85	115					
1,4-Difluorobenzene	89.04	0	100	0	89.0%	80	105					
4-Bromochlorobenzene	89.45	0	100	0	89.4%	78	108					
Fluorobenzene	87.92	0	100	0	87.9%	78	108					

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 0001031
Project: Leeper - Martinez

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV2 BTEX_0001	Batch ID: GC-1_000128	Test Code: SW8021B	Units: µg/L		Analysis Date: 1/28/2000				Prep Date:		
Client ID:	0001031	Run ID:	GC-1_000128A		SeqNo:		23172				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.02	0.5	20	0	100.1%	85	115				
Ethylbenzene	20.7	0.5	20	0	103.5%	85	115				
m,p-Xylene	39.18	1	40	0	98.0%	85	115				
Methyl tert-Butyl Ether	20.78	1	20	0	103.9%	85	115				
o-Xylene	20.81	0.5	20	0	104.1%	85	115				
Toluene	20.25	0.5	20	0	101.2%	85	115				
1,4-Difluorobenzene	88.76	0	100	0	88.8%	80	105				
4-Bromochlorobenzene	88.51	0	100	0	88.5%	78	108				
Fluorobenzene	88.14	0	100	0	88.1%	78	108				

Sample ID: CCV3 BTEX_0001		Batch ID: GC-1_000128		Test Code: SW8021B		Units: µg/L		Analysis Date: 1/28/2000		Prep Date:	
Client ID:		0001031		Run ID: GC-1_000128A				SeqNo: 23173			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.66	0.5	20	0	98.3%	85	115				
Ethylbenzene	20.15	0.5	20	0	100.7%	85	115				
m,p-Xylene	38.14	1	40	0	95.4%	85	115				
Methyl tert-Butyl Ether	20.04	1	20	0	100.2%	85	115				
o-Xylene	20.13	0.5	20	0	100.7%	85	115				
Toluene	19.86	0.5	20	0	99.3%	85	115				
1,4-Difluorobenzene	88.86	0	100	0	88.9%	80	105				
4-Bromochlorobenzene	88.18	0	100	0	88.2%	78	108				
Fluorobenzene	87.45	0	100	0	87.5%	78	108				

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 31-Jan-00

CLIENT: Blagg Engineering
 Work Order: 0001031
 Project: Leeper - Martinez
 Test No: SW8021B

QC SUMMARY REPORT SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0001024-04A	83.7	82.5	83.1
0001028-02A	88.3	88.3	87.8
0001028-03A	89.7	88.5	88.5
0001028-04A	89.2	88.3	88.3
0001030-01A	87.5	88.4	86.6
0001030-03A	85.7	88.4	85.3
0001030-04A	87.5	88.4	86.5
0001031-01A	89.7	88.7	88.3
0001031-01AMS	88.4	88.4	87.6
0001031-01AMSD	88.8	89.3	87.5
0001031-02A	89.1	89.5	88.5
0001031-03A	85.6	83.3	89
0001031-04A	86.6	87.8	86.3
0001031-05A	89.6	88.7	88.8
0001031-06A	88.6	86.4	88.4
0001031-07A	89.8	88.9	89.2
0001031-08A	90.4	89.4	88.7
0001031-09A	87.2	88.6	87.6
0001032-01A	88.2	89.4	86.9
0001032-02A	88.9	89.2	88.1
0001032-03A	88.2	88.8	86.5
0001032-03AMS	87.5	89.1	86.6
0001032-03AMSD	88.1	89.4	86.1
0001032-04A	89.9	89.4	88.6
0001032-05A	90.8	89.1	87.1
0001032-06A	88.4	88.6	86.8
0001032-07A	88.9	90.1	87.6

Acronym	Surrogate	QC Limits
14FBZ	= 1,4-Difluorobenzene	80-105
4BCBZ	= 4-Bromochlorobenzene	78-108
FLBZ	= Fluorobenzene	78-108

* Surrogate recovery outside acceptance limits

CLIENT: Blagg Engineering
Work Order: 0001031
Project: Leeper - Martinez
Test No: SW8021B

QC SUMMARY REPORT SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0001032-08A	88.8	88.5	88.1
0001032-09A	89.3	89.1	88.8
0001032-10A	88.1	89.1	86.7
CCV1 BTEX_00010	89	89.4	87.9
CCV2 BTEX_00010	88.8	88.5	88.1
CCV3 BTEX_00010	88.9	88.2	87.4
LCS WATER	88.6	89.3	87.4
MBI	89.8	88.9	88.4

Acronym	Surrogate	QC Limits
14FBZ	= 1,4-Difluorobenzene	80-105
4BCBZ	= 4-Bromochlorobenzene	78-108
FLBZ	= Fluorobenzene	78-108

* Surrogate recovery outside acceptance limits

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	MW 4 - 012700 0930	Date Reported:	01-28-00
Laboratory Number:	G729	Date Sampled:	01-27-00
Chain of Custody:	7009	Date Received:	01-27-00
Sample Matrix:	Water	Date Analyzed:	01-28-00
Preservative:	Cool	Date Digested:	01-28-00
Condition:	Cool & Intact	Analysis Needed:	Trace Metals

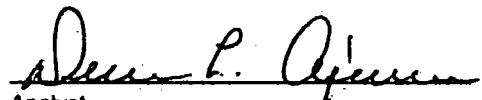
Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Arsenic	ND	0.001
Barium	0.034	0.001
Cadmium	ND	0.001
Chromium	ND	0.001
Lead	0.021	0.001
Mercury	ND	0.001
Selenium	ND	0.001
Silver	ND	0.001

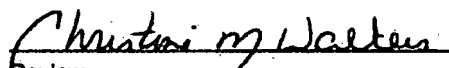
ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Comments: Leeper - Martinez.


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	MW 5 - 012700 1011	Date Reported:	01-28-00
Laboratory Number:	G730	Date Sampled:	01-27-00
Chain of Custody:	7009	Date Received:	01-27-00
Sample Matrix:	Water	Date Analyzed:	01-28-00
Preservative:	Cool	Date Digested:	01-28-00
Condition:	Cool & Intact	Analysis Needed:	Trace Metals

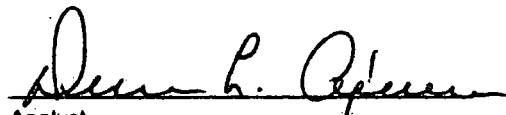
Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Arsenic	ND	0.001
Barium	0.033	0.001
Cadmium	ND	0.001
Chromium	ND	0.001
Lead	0.024	0.001
Mercury	ND	0.001
Selenium	ND	0.001
Silver	ND	0.001

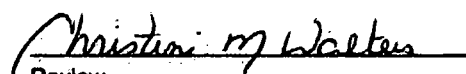
ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission
Spectroscopy, SW-846, USEPA, December 1996.

Comments: Leeper - Martinez.


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	MW 8 - 012700 1039	Date Reported:	01-28-00
Laboratory Number:	G731	Date Sampled:	01-27-00
Chain of Custody:	7009	Date Received:	01-27-00
Sample Matrix:	Water	Date Analyzed:	01-28-00
Preservative:	Cool	Date Digested:	01-28-00
Condition:	Cool & Intact	Analysis Needed:	Trace Metals

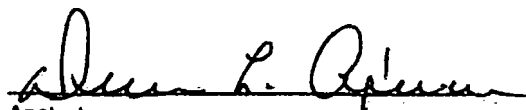
Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Arsenic	ND	0.001
Barium	0.068	0.001
Cadmium	ND	0.001
Chromium	ND	0.001
Lead	0.022	0.001
Mercury	ND	0.001
Selenium	ND	0.001
Silver	ND	0.001

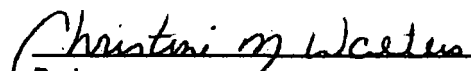
ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Comments: Leeper - Martinez.


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	MW 9 - 012700 1113	Date Reported:	01-28-00
Laboratory Number:	G732	Date Sampled:	01-27-00
Chain of Custody:	7009	Date Received:	01-27-00
Sample Matrix:	Water	Date Analyzed:	01-28-00
Preservative:	Cool	Date Digested:	01-28-00
Condition:	Cool & Intact	Analysis Needed:	Trace Metals

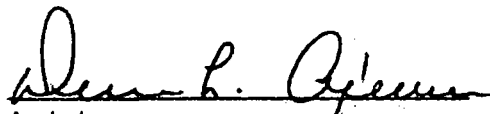
Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Arsenic	ND	0.001
Barium	0.049	0.001
Cadmium	ND	0.001
Chromium	ND	0.001
Lead	0.023	0.001
Mercury	ND	0.001
Selenium	ND	0.001
Silver	ND	0.001

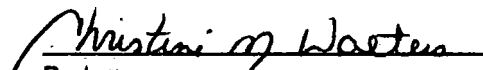
ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Comments: Leeper - Martinez.


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	MW 10 - 012700 1325	Date Reported:	01-28-00
Laboratory Number:	G733	Date Sampled:	01-27-00
Chain of Custody:	7009	Date Received:	01-27-00
Sample Matrix:	Water	Date Analyzed:	01-28-00
Preservative:	Cool	Date Digested:	01-28-00
Condition:	Cool & Intact	Analysis Needed:	Trace Metals

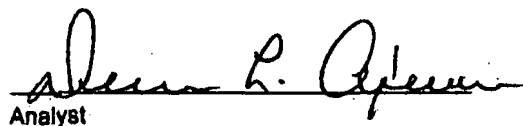
Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Arsenic	ND	0.001
Barium	0.095	0.001
Cadmium	ND	0.001
Chromium	ND	0.001
Lead	0.024	0.001
Mercury	ND	0.001
Selenium	ND	0.001
Silver	ND	0.001

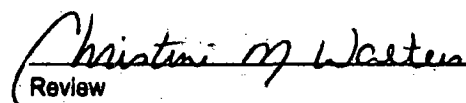
ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission
Spectroscopy, SW-846, USEPA, December 1996.

Comments: Leeper - Martinez.


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	MW 11 - 012700 1304	Date Reported:	01-28-00
Laboratory Number:	G734	Date Sampled:	01-27-00
Chain of Custody:	7009	Date Received:	01-27-00
Sample Matrix:	Water	Date Analyzed:	01-28-00
Preservative:	Cool	Date Digested:	01-28-00
Condition:	Cool & Intact	Analysis Needed:	Trace Metals

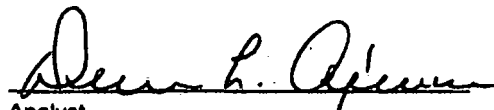
Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Arsenic	ND	0.001
Barium	0.090	0.001
Cadmium	ND	0.001
Chromium	ND	0.001
Lead	0.021	0.001
Mercury	ND	0.001
Selenium	ND	0.001
Silver	ND	0.001

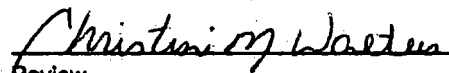
ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission
Spectroscopy, SW-846, USEPA, December 1996.

Comments: Leeper - Martinez.


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	MW 12 - 012700 1220	Date Reported:	01-28-00
Laboratory Number:	G735	Date Sampled:	01-27-00
Chain of Custody:	7009	Date Received:	01-27-00
Sample Matrix:	Water	Date Analyzed:	01-28-00
Preservative:	Cool	Date Digested:	01-28-00
Condition:	Cool & Intact	Analysis Needed:	Trace Metals

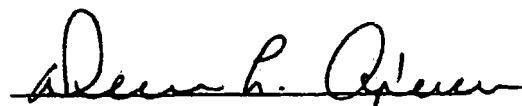
Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Arsenic	ND	0.001
Barium	0.155	0.001
Cadmium	ND	0.001
Chromium	ND	0.001
Lead	0.023	0.001
Mercury	ND	0.001
Selenium	ND	0.001
Silver	ND	0.001

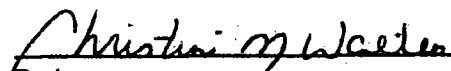
ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission
Spectroscopy, SW-846, USEPA, December 1996.

Comments: Leeper - Martinez.


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	MW 13 - 012700 1146	Date Reported:	01-28-00
Laboratory Number:	G736	Date Sampled:	01-27-00
Chain of Custody:	7009	Date Received:	01-27-00
Sample Matrix:	Water	Date Analyzed:	01-28-00
Preservative:	Cool	Date Digested:	01-28-00
Condition:	Cool & Intact	Analysis Needed:	Trace Metals

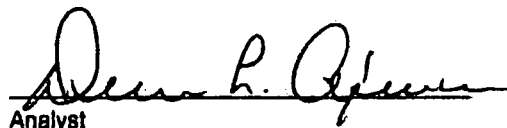
Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Arsenic	ND	0.001
Barium	0.239	0.001
Cadmium	ND	0.001
Chromium	ND	0.001
Lead	0.022	0.001
Mercury	ND	0.001
Selenium	ND	0.001
Silver	ND	0.001

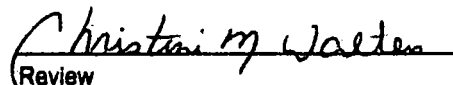
ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Comments: Leeper - Martinez.


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	DUP - 012700 xxxx	Date Reported:	01-28-00
Laboratory Number:	G737	Date Sampled:	01-27-00
Chain of Custody:	7009	Date Received:	01-27-00
Sample Matrix:	Water	Date Analyzed:	01-28-00
Preservative:	Cool	Date Digested:	01-28-00
Condition:	Cool & Intact	Analysis Needed:	Trace Metals

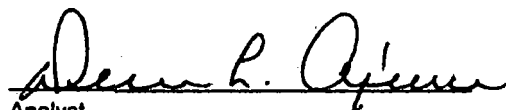
Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Arsenic	ND	0.001
Barium	0.151	0.001
Cadmium	ND	0.001
Chromium	ND	0.001
Lead	0.023	0.001
Mercury	ND	0.001
Selenium	ND	0.001
Silver	ND	0.001

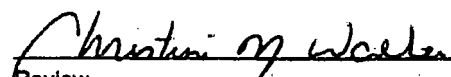
ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Comments: Leeper - Martinez.


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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	Trip Blank	Date Reported:	01-28-00
Laboratory Number:	G738	Date Sampled:	01-27-00
Chain of Custody:	7009	Date Received:	01-27-00
Sample Matrix:	Water	Date Analyzed:	01-28-00
Preservative:	Cool	Date Digested:	01-28-00
Condition:	Cool & Intact	Analysis Needed:	Trace Metals

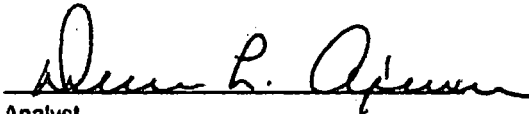
Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Arsenic	ND	0.001
Barium	ND	0.001
Cadmium	ND	0.001
Chromium	ND	0.001
Lead	ND	0.001
Mercury	ND	0.001
Selenium	ND	0.001
Silver	ND	0.001

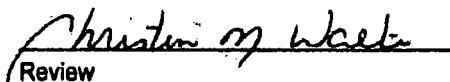
ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission
Spectroscopy, SW-846, USEPA, December 1996.

Comments: Leeper - Martinez.


Analyst


Review

CHAIN OF CUSTODY RECORD

7009

Client / Project Name BLAGG/AMOCO			Project Location LEEPER - MARTINEZ		ANALYSIS / PARAMETERS										
Sampler: J.C. Blagg			Client No. 403410		No. of Containers	B	R	C	P	A	M	E	T	R	Remarks
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix											
MW4 - 012700 0930	1/27/00	0930	G729	WATER	1	X									
MW5 - 012700 1011	"	1011	G730	"	1	X									
MW8 - 012700 1039	"	1039	G731	"	1	X									
MW9 - 012700 1113	"	1113	G732	"	1	X									
MW10 - 012700 1325	"	1325	G733	"	1	X									
MW11 - 012700 1304	"	1304	G734	"	1	X									
MW12 - 012700 1220	"	1220	G735	"	1	X									
MW13 - 012700 1146	"	1146	G736	"	1	X									
DUP - 012700 XXXX	"	XXXX	G737	"	1	X									
TRIP BLANK	"	—	G738	"	1	X									
Relinquished by: (Signature) J.C. Blagg			Date 1/27/00	Time 1516	Received by: (Signature) Julio Herrera						Date 1/27/00	Time 1516			
Relinquished by: (Signature)					Received by: (Signature)										
Relinquished by: (Signature)					Received by: (Signature)										
ENVIROTECH INC. 5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615										Sample Receipt					
											Y	N	N/A		
										Received Intact					
										Cool - Ice/Blue Ice					

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS Quality Control / Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	01-28-TM QA/QC	Date Reported:	01-28-00
Laboratory Number:	G729	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Analysis Requested:	Trace Metals	Date Analyzed:	01-28-00
Condition:	N/A	Date Digested:	01-28-00

Blank & Duplicate Conc. (mg/L)	Instrument Blank (mg/L)	Method Blank	Detection Limit	Sample	Duplicate	% Diff.	Acceptance Range
Arsenic	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Barium	ND	ND	0.001	0.034	0.034	0.0%	0% - 30%
Cadmium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Chromium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Lead	ND	ND	0.001	0.021	0.021	0.0%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Silver	ND	ND	0.001	ND	ND	0.0%	0% - 30%

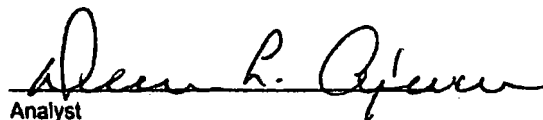
Spike Conc. (mg/L)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	1.00	ND	0.998	100%	80% - 120%
Barium	1.00	0.034	1.03	100%	80% - 120%
Cadmium	0.500	ND	0.501	100%	80% - 120%
Chromium	1.00	ND	0.997	100%	80% - 120%
Lead	1.00	0.021	1.02	100%	80% - 120%
Mercury	0.500	ND	0.499	100%	80% - 120%
Selenium	0.500	ND	0.496	99%	80% - 120%
Silver	1.00	ND	0.999	100%	80% - 120%

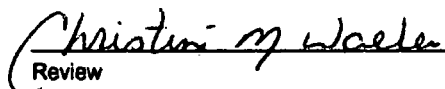
ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission
Spectroscopy, SW-846, USEPA, December 1996.

Comments: QA/QC for samples G729 - G738.


Analyst


Review

BLAGG ENGINEERING INC.

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

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

1/31/00

Leeper GC 1

Site Sampling Summary - Hydrocarbon Test Results - UPDATED 1/31/00

Table 1: Private Domestic Well Analytical Results - BTEX & Methane Summary

See Attached Figure 1 for Domestic Well Locations

Well Name	Sample Date	Sample ID	Benzene ug/L	Toluene ug/L	Ethyl-benzene ug/L	Xylenes ug/L	Methane ppm
Martinez Domestic 93 CR 2350	08/24/98	Private Well	1.2	1.4	1.0	4.7	--
	09/03/98	Private Well	ND	ND	ND	ND	--
	01/07/00	0107001110	ND	ND	ND	ND	--
	01/07/00	0107001240	ND	ND	ND	ND	--
Alafonso Domestic 102 CR 2350	06/09/99	Alafonso	0.3	0.7	ND	1.3	0.24
	06/10/99	Alafonso	ND	ND	ND	ND	--
	12/21/99	1221991035	ND	ND	ND	ND	--
McLanahan Domestic 98 CR 2335	06/09/99	McLanahan	1.3	3.4	1.0	14.0	ND
	06/10/99	McLanahan	ND	ND	ND	ND	--
	12/21/99	1221991145	ND	ND	ND	ND	--

Table 2: Monitor Well Analytical Results - BTEX Summary

Blagg Engineering, Inc.
Consulting Engineers

Leeper GC 1
Sampling Summary

See Attached Figure 2 for Monitor Well Locations

Monitor Well	Sample Date	Sample ID	Benzene ug/L	Toluene ug/L	Ethylbenzene ug/L	Xylenes ug/L
MW-1	10/14/98	MW-1	3.2	7.4	4.9	16.8
	06/25/99	MW-1	0.7	0.7	1.1	8.6
	10/05/99	MW-1	ND	ND	ND	ND
MW-2	10/14/98	MW-2	224	101	51.1	1,238
	01/29/99	MW-2	549	476	129	535
	06/25/99	MW-2	122	264	98.9	296
	10/05/99	MW-2	130	15	210	4,510
	01/18/00	0118001315	140	30	120	3,370
MW-3	10/14/98	MW-3	0.5	0.5	ND	0.9
	06/25/99	MW-3	2.3	12.3	3.3	29.6
	10/05/99	MW-3	7.7	1.7	1.1	9.0
MW-4	01/03/00	0103001430	ND	ND	ND	ND
	01/07/00	0107001435	ND	ND	ND	ND
MW-5	01/04/00	0104001039	ND	ND	ND	ND
	01/07/00	0107001515	ND	ND	ND	ND
	01/07/00	GW-1	ND	ND	ND	ND
MW-6	01/04/00	0104001305	ND	ND	ND	ND
	01/07/00	0107001605	ND	ND	ND	ND
MW-7	01/04/00	0104001518	ND	0.8	ND	ND
	01/07/00	0107001655	ND	ND	ND	ND
MW-8	01/18/00	0118001017	ND	ND	ND	ND
	01/27/00	0127001039	ND	ND	ND	ND
MW-9	01/18/00	0118001052	ND	ND	ND	ND
	01/27/00	0127001113	ND	ND	ND	ND
MW-10	01/18/00	0118001304	9.6	ND	12	77.7
	01/27/00	0127001325	2.2	ND	3.6	16.7
MW-11	01/18/00	0118001237	31	ND	3.3	63
	01/27/00	0127001304	35	ND	1.5	31.3
MW-12	01/18/00	0118001159	ND	ND	ND	ND
	01/27/00	0127001220	ND	ND	ND	ND
	01/27/00	012700xxxx	ND	ND	ND	ND
MW-13	01/18/00	0118001124	2.6	ND	2.5	19
	01/27/00	0127001146	1.5	ND	1.8	9

Table 3: Excavation & Test Pit Water Sampling Analytical Results - BTEX Summary
 See Attached Figure 3 for Sampling Locations

Sample ID	Sample Date	Chain of Custody ID	Benzene ug/L	Toluene ug/L	Ethylbenzene ug/L	Xylenes ug/L
T1 @ GW 110'W x 30'N	05/08/92	T1 @ GW	ND	ND	ND	42.9
TH #2 115' S25W	02/12/99	TH#2@8'	2.9	6.9	2.8	22.5
TH #3 105' S4E	02/12/99	TH#3@9'	1.4	1.7	0.4	2.5
Bottom West @10' (4) on Fig. 3	03/17/99	Bottom West @10'	23.6	7.7	11.7	78.0
TH #101 150' S16W	03/24/99	TH#101(GW)	8.9	19.6	16.1	69.1
TH #104 195' S62W	03/24/99	TH#104(GW)	61.7	77	73.4	333
TH #106 168' S74W	03/24/99	TH#106(GW)	4.6	12.2	4.6	9.9
TH #108 243' S54W	03/24/99	TH#108(GW)	84.7	68.7	26.7	52
Main Pit @ NE Corner (9) on Fig. 3	05/21/99	Main Pit NE Corner	29.6	78.5	27	294.3
Excavation @ NE Corner (9) on Fig. 3	06/25/99	Excavation Water @ NE Corner	1.5	6.9	2.1	18.8
Excavation @ NE Corner (9) on Fig. 3	10/5/99	NE Excav.	1.1	ND	6.7	68.1

Table 4: Soil Sampling Analytical Results - Field OVM PID and Lab TPH/BTEX
See Attached Figure 4 for Sampling Locations

Sample ID	Sample Date	Chain of Custody ID	Field Headspace ppm	Total Petroleum Hydrocarbons U.S. EPA 8015 mg/Kg	Benzene U.S. EPA 8021 mg/Kg	Total BTEX mg/Kg
West Wall @ 5' (A) on Fig. 4	08/14/98	--	2.0	--	--	--
North Wall @ 5' (B) on Fig. 4	08/14/98	--	48.5	--	--	--
East Wall @ 5' (C) on Fig. 4	08/14/99	--	74.0	--	--	--
South Wall @ 5' (D) on Fig. 4	08/14/99	--	474	--	--	--
West Wall @ 5' (E) on Fig. 4	09/11/99	--	3.5	--	--	--
North Wall @ 5' (F) on Fig. 4	09/11/99	--	5.5	--	--	--
East Wall @ 5' (G) on Fig. 4	09/11/99	--	1.4	--	--	--
South Wall @ 5' (H) on Fig. 4	09/11/99	--	322	--	--	--
TH #1 @ 6'-7'	02/12/99	--	412	--	--	--
TH #2 @ 8'-9'	02/12/99	--	173	--	--	--
TH #3 @ 11'-13'	02/12/99	--	0.0	--	--	--
TH #4 @ 9'	02/12/99	--	0.0	--	--	--

Table 4: (continued)

Sample ID	Sample Date	Chain of Custody ID	Field Headspace ppm	Total Petroleum Hydrocarbons U.S.EPA 8015 mg/Kg	Benzene U.S. EPA 8021 mg/Kg	Total BTEX mg/Kg
TH #5 @ 7'-9'	02/12/99	--	89	--	--	--
TH #6 @ 4'-6'	02/12/99	--	196	--	--	--
TH #7 @ 4'-8'	02/12/99	--	94	--	--	--
Center N. Wall @ 8' (P) on Fig. 4	03/11/99	Center of N. Wall @ 8'	--	3.7	0.409	2.17
West Wall @ 8' (Q) on Fig. 4	03/17/99	W @ 8'	--	3.5	0.0	0.294
South Wall @ 9' (R) on Fig. 4	03/17/99	S @ 9'	--	0.5	--	--
TH 101 @ 11'	03/24/99	--	1,004	--	--	--
TH 102 @ 11'	03/24/99	--	0.0	--	--	--
TH 103 @ 9'	03/24/99	TH#103(9')	1,017	36.3	0.625	7.40
TH 104 @ 11'	03/24/99	TH#104(11')	1,017	210	1.940	13.62
TH 105 @ 9'	03/24/99	--	0.0	--	--	--
TH 106 @ 9'	03/24/99	TH#106(9')	0.0	0.3	--	--
TH 107 @ 9'	03/24/99	TH#107(9')	0.0	0.0	--	--
TH 108 @ 10'	03/24/99	TH#108(10')	99.3	1.5	0.139	1.34

Table 4: (continued)

Sample ID	Sample Date	Chain of Custody ID	Field Headspace ppm	Total Petroleum Hydrocarbons U.S.EPA 8015 mg/Kg	Benzene U.S. EPA 8021 mg/Kg	Total BTEX mg/Kg
MW-4 @8'	12/30/99	--	0.0	--	--	--
MW-4 @12'	12/30/99	--	0.0	--	--	--
MW-5 @8'	12/30/99	--	0.0	--	--	--
MW-5 @12'	12/30/99	--	0.0	--	--	--
MW-6 @8'	12/31/99	--	0.0	--	--	--
MW-6 @12'	12/31/99	--	0.0	--	--	--
MW-7 @8'	12/31/99	--	0.0	--	--	--
MW-7 @12'	12/31/99	--	0.0	--	--	--
MW-8 @2'	01/11/00	--	0.0	--	--	--
MW-8 @4'	01/11/00	--	0.0	--	--	--
MW-8 @6'	01/11/00	--	0.7	--	--	--
MW-8 @8'	01/11/00	--	0.0	--	--	--
MW-8 @10'	01/11/00	--	0.0	--	--	--
MW-9 @2'	01/12/00	--	0.0	--	--	--
MW-9 @4'	01/12/00	--	0.0	--	--	--
MW-9 @6'	01/12/00	--	0.0	--	--	--
MW-9 @8'	01/12/00	--	0.0	--	--	--
MW-10 @2'	01/10/00	--	0.0	--	--	--
MW-10 @4'	01/10/00	--	0.0	--	--	--
MW-10 @6'	01/10/00	--	0.0	--	--	--
MW-10 @9'	01/10/00	--	1.2	--	--	--
MW-11 @2'	01/11/00	--	0.0	--	--	--
MW-11 @4'	01/11/00	--	0.0	--	--	--
MW-11 @6'	01/11/00	--	0.0	--	--	--
MW-11 @8'	01/11/00	0111001018	402	38.1	--	--
MW-12 @2'	01/10/00	--	0.0	--	--	--
MW-12 @4'	01/10/00	--	0.8	--	--	--
MW-12 @6'	01/10/00	--	1.6	--	--	--
MW-12 @8'	01/10/00	--	0.8	--	--	--
MW-13 @2'	01/12/00	--	0.0	--	--	--
MW-13 @4'	01/12/00	--	0.0	--	--	--
MW-13 @6'	01/12/00	--	18.0	--	--	--
MW-13 @8'	01/12/00	--	88.0	--	--	--

BLAGG ENGINEERING, INC.**MONITOR WELL SAMPLING DATA**CLIENT : **BP AMOCO**CHAIN-OF-CUSTODY # : **10584**LOCATION : **LEEPER GC # 1**LABORATORY (S) USED : **ON - SITE TECH.**Date : **May 16, 2000**SAMPLER : **N J V**Filename : **05-16-00.WK4**PROJECT MANAGER : **J C B**

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	VOLUME PURGED (gal.)	FREE PRODUCT (ft)
8	104.55	95.72	8.83	21.90	-	-	-	-	-
9	101.92	95.32	6.60	22.00	-	-	-	-	-
10	103.50	95.91	7.59	19.90	1105	7.3	800	6.00	-
11	102.44	95.63	6.81	20.40	1155	6.9	800	6.75	-
12	101.68	93.47	8.21	19.70	0950	7.1	800	5.75	-
13	100.31	93.44	6.87	20.40	0920	7.2	900	6.75	-

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 "

Collected BTEX from MW #'s 10, 11, 12, & 13. Excellent recovery in all MW's
sampled. MW elevations conducted by Vann Survey on 1 / 17 / 00.

OFF: (505) 325-5667
FAX: (505) 327-1496



LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: 22-May-00

Client:	Blagg Engineering	Client Sample Info:	Leeper GC #1
Work Order:	0005036	Client Sample ID:	MW-6
Lab ID:	0005036-01A	Matrix:	AQUEOUS
Project:	BP Amoco - Leeper GC #1	Collection Date:	5/16/2000 10:35:00 AM
		COC Record:	10584

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	5/20/2000
Toluene	ND	0.5		µg/L	1	5/20/2000
Ethylbenzene	ND	0.5		µg/L	1	5/20/2000
m,p-Xylene	ND	1		µg/L	1	5/20/2000
o-Xylene	ND	0.5		µg/L	1	5/20/2000

Qualifiers:
PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
Surr - Surrogate

1 of 1

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FAX: (505) 327-1496



LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: 22-May-00

Client:	Blagg Engineering	Client Sample Info:	Leeper GC #1
Work Order:	0005036	Client Sample ID:	MW-10
Lab ID:	0005036-02A	Matrix:	AQUEOUS
Project:	BP Amoco - Leeper GC #1	Collection Date:	5/16/2000 11:05:00 AM
		COC Record:	10584

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	5/20/2000
Toluene	ND	0.5		µg/L	1	5/20/2000
Ethylbenzene	ND	0.5		µg/L	1	5/20/2000
m,p-Xylene	ND	1		µg/L	1	5/20/2000
o-Xylene	ND	0.5		µg/L	1	5/20/2000

Qualifiers:

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

R - RPD outside accepted recovery limits

J - Analyte detected below Practical Quantitation Limit

E - Value above quantitation range

B - Analyte detected in the associated Method Blank

Surr - Surrogate

1 of 1

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LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: 22-May-00

Client:	Blagg Engineering	Client Sample Info:	Leeper GC #1
Work Order:	0005036	Client Sample ID:	MW-11
Lab ID:	0005036-03A	Matrix:	AQUEOUS
Project:	BP Amoco - Leeper GC #1	Collection Date:	5/16/2000 11:55:00 AM
		COC Record:	10584

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	26	0.5		µg/L	1	5/20/2000
Toluene	0.6	0.5		µg/L	1	5/20/2000
Ethylbenzene	8	0.5		µg/L	1	5/20/2000
m,p-Xylene	73	1		µg/L	1	5/20/2000
o-Xylene	1.9	0.5		µg/L	1	5/20/2000

Qualifiers:
PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
I - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
Surr - Surrogate

1 of 1

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TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT

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LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: 22-May-00

Client:	Blagg Engineering	Client Sample Info:	Leeper GC #1
Work Order:	0005036	Client Sample ID:	MW-12
Lab ID:	0005036-04A	Matrix:	AQUEOUS
Project:	BP Amoco - Leeper GC #1	Collection Date:	5/16/2000 9:50:00 AM
		COC Record:	10584

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	5/20/2000
Toluene	ND	0.5		µg/L	1	5/20/2000
Ethylbenzene	ND	0.5		µg/L	1	5/20/2000
m,p-Xylene	ND	1		µg/L	1	5/20/2000
o-Xylene	ND	0.5		µg/L	1	5/20/2000

Qualifiers:
PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
Surr: - Surrogate

1 of 1

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FAX: (505) 327-1496



LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: 22-May-00

Client:	Blagg Engineering	Client Sample Info:	Leeper GC #1
Work Order:	0005036	Client Sample ID:	MW-13
Lab ID:	0005036-05A	Matrix:	AQUEOUS
Project:	BP Amoco - Leeper GC #1	Collection Date:	5/16/2000 9:20:00 AM
		COC Record:	10584

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	14	0.5		µg/L	1	5/20/2000
Toluene	0.8	0.5		µg/L	1	5/20/2000
Ethylbenzene	9	0.5		µg/L	1	5/20/2000
m,p-Xylene	75	1		µg/L	1	5/20/2000
o-Xylene	0.6	0.5		µg/L	1	5/20/2000

Qualifiers:

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

R - RPD outside accepted recovery limits

I - Analyte detected below Practical Quantitation Limit

E - Value above quantitation range

Bl - Analyte detected in the associated Method Blank

Sur - Surrogate

1 of 1

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Date: _____

Page: _____ of _____

Purchase Order No.:		Project No.:		REPORT RESULTS TO		Name				Title			
SEND INVOICE TO		Name				Company							
		Company				Dept.		Mailing Address					
		Address				City, State, Zip							
		City, State, Zip				Telephone No.				Telefax No.			
PROJECT LOCATION:				Number of Containers		ANALYSIS REQUESTED							
SAMPLER'S SIGNATURE:						LAB ID							
SAMPLE IDENTIFICATION		SAMPLE											
DATE	TIME	MATRIX	PRES										
Relinquished by: _____				Date/Time: _____		Received by: _____				Date/Time: _____			
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	By Date				
Authorized by: _____ Date: _____ (Client Signature Must Accompany Request)						Special Instructions / Remarks:							

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

On Site Technologies, LTD.

Date: 22-May-00

CLIENT: Blagg Engineering
Work Order: 0005036
Project: BP Amoco - Leeper GC #1

QC SUMMARY REPORT
Method Blank

Sample ID: MB1	Batch ID: GC-1_000520	Test Code: SW8021B	Units: µg/L	Analysis Date: 5/20/2000	Prep Date:						
Client ID:	0005036	Run ID: GC-1_000520A	SeqNo: 27838								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Ethylbenzene	ND	0.5									
m,p-Xylene	ND	1									
Methyl tert-Butyl Ether	ND	1									
o-Xylene	ND	0.5									
Toluene	.0893	0.5									J

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 22-May-00

CLIENT: Blagg Engineering
Work Order: 0005036
Project: BP Amoco - Leeper GC #1

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0005022-03AMS	Batch ID: GC-1_000520	Test Code: SW8021B	Units: µg/L	Analysis Date 5/20/2000				Prep Date:			
Client ID:	0005036	Run ID:	GC-1_000520A	SeqNo: 27839							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	6560	25	2000	4300	113.0%	73	126				
Ethylbenzene	2252	25	2000	120	106.6%	88	113				
m,p-Xylene	4980	50	4000	1000	99.5%	83	112				
Methyl tert-Butyl Ether	2174	50	2000	0	108.7%	81	125				
o-Xylene	2250	25	2000	170	104.0%	93	110				
Toluene	4377	25	2000	2300	103.8%	76	126				

Sample ID: 0005022-03AMSD	Batch ID: GC-1_000520	Test Code: SW8021B	Units: µg/L	Analysis Date 5/20/2000					Prep Date:		
Client ID:	0005036	Run ID:	GC-1_000520A		SeqNo:		27840				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	6404	25	2000	4300	105.2%	73	126	6560	2.4%	6	
Ethylbenzene	2201	25	2000	120	104.1%	88	113	2252	2.3%	5	
m,p-Xylene	4874	50	4000	1000	96.8%	83	112	4980	2.2%	7	
Methyl tert-Butyl Ether	2155	50	2000	0	107.8%	81	125	2174	0.9%	9	
o-Xylene	2207	25	2000	170	101.9%	93	110	2250	1.9%	6	
Toluene	4271	25	2000	2300	98.5%	76	126	4377	2.5%	8	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 22-May-00

CLIENT: Blagg Engineering
Work Order: 0005036
Project: BP Amoco - Leeper GC #1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 BTEX_0004		Batch ID: GC-1_000520		Test Code: SW8021B		Units: µg/L		Analysis Date 5/20/2000		Prep Date:	
Client ID:		0005036		Run ID: GC-1_000520A				SeqNo: 27834			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	22.59	0.5	20	0	112.9%	85	115				
Ethylbenzene	22.45	0.5	20	0	112.3%	85	115				
m,p-Xylene	41.89	1	40	0	104.7%	85	115				
Methyl tert-Butyl Ether	22.37	1	20	0	111.8%	85	115				
o-Xylene	22.1	0.5	20	0	110.5%	85	115				
Toluene	21.9	0.5	20	0	109.5%	85	115				
1,4-Difluorobenzene	88.27	0	100	0	88.3%	80	105				
4-Bromochlorobenzene	94.25	0	100	0	94.3%	78	108				
Fluorobenzene	84.19	0	100	0	84.2%	78	108				

Sample ID: CCV2 BTEX_0004		Batch ID: GC-1_000520		Test Code: SW8021B		Units: µg/L		Analysis Date 5/20/2000		Prep Date:	
Client ID:		0005036		Run ID: GC-1_000520A				SeqNo: 27835			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.55	0.5	20	0	107.7%	85	115				
Ethylbenzene	21.85	0.5	20	0	109.2%	85	115				
m,p-Xylene	40.65	1	40	0	101.6%	85	115				
Methyl tert-Butyl Ether	22.5	1	20	0	112.5%	85	115				
o-Xylene	21.57	0.5	20	0	107.8%	85	115				
Toluene	21.37	0.5	20	0	106.9%	85	115				
1,4-Difluorobenzene	87.86	0	100	0	87.9%	80	105				
4-Bromochlorobenzene	95.32	0	100	0	95.3%	78	108				
Fluorobenzene	83.48	0	100	0	83.5%	78	108				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 22-May-00

CLIENT: Blagg Engineering
Work Order: 0005036
Project: BP Amoco - Leeper GC #1

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: LCS WATER	Batch ID: GC-1_000520	Test Code: SW8021B	Units: µg/L	Analysis Date 5/20/2000				Prep Date:			
Client ID:	0005036	Run ID:	GC-1_000520A	SeqNo: 27837							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	42.46	0.5	40	0	108.1%	89	112				
Ethylbenzene	42.76	0.5	40	0	108.9%	93	112				
m,p-Xylene	79.8	1	80	0	99.7%	88	108				
Methyl tert-Butyl Ether	43.17	1	40	0	107.9%	87	115				
o-Xylene	42.04	0.5	40	0	105.1%	93	112				
Toluene	42.16	0.5	40	0.0893	105.2%	92	111				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 22-May-00

CLIENT: Blagg Engineering
Work Order: 0005036
Project: BP Amoco - Leeper GC #1
Test No: SW8021B

QC SUMMARY REPORT SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0005018-01A	86.2	96.2	81.3
0005020-04A	88.4	93.9	84.4
0005022-01A	88.8	94.4	84.4
0005022-03A	86.6	95.1	82.1
0005022-03AMS	86.4	95.4	82.3
0005022-03AMSD	86.3	95.4	82.2
0005022-06A	83.2	93.4	79.3
0005022-08A	87.5	92.8	83.1
0005023-01A	86.5	94.1	82.6
0005031-01A	87	94.3	83.8
0005031-02A	87.8	94.7	83.9
0005031-03A	87.9	95.1	83.8
0005031-04A	87.6	94.6	83.7
0005032-01A	88	95	83.5
0005032-02A	88	94.6	84
0005036-01A	88.3	94.9	84.6
0005036-02A	88.3	95.1	84.1
0005036-03A	85.1	93.1	81.6
0005036-04A	88.3	95.1	84.2
0005036-05A	87.7	94.9	83.5
0005049-03A	87.6	92.9	83.3
0005049-05A	88.5	95	84.5
CCV1 BTEX_00040	88.3	94.2	84.2
CCV2 BTEX_00040	87.8	95.3	83.5
CCV3 BTEX_00040	87.7	94.9	83.1
LCS WATER	87.7	95	83
MBI	88.5	92.1	83.8

Acronym	Surrogate	QC Limits
14FBZ	= 1,4-Difluorobenzene	80-105
4BCBZ	= 4-Bromochlorobenzene	78-108
FLBZ	= Fluorobenzene	78-108

* Surrogate recovery outside acceptance limits

CLIENT: Blagg Engineering
Work Order: 0005036
Project: BP Amoco - Leeper GC #1

QC SUMMARY REPORT
Continuing Calibration Verification Standard

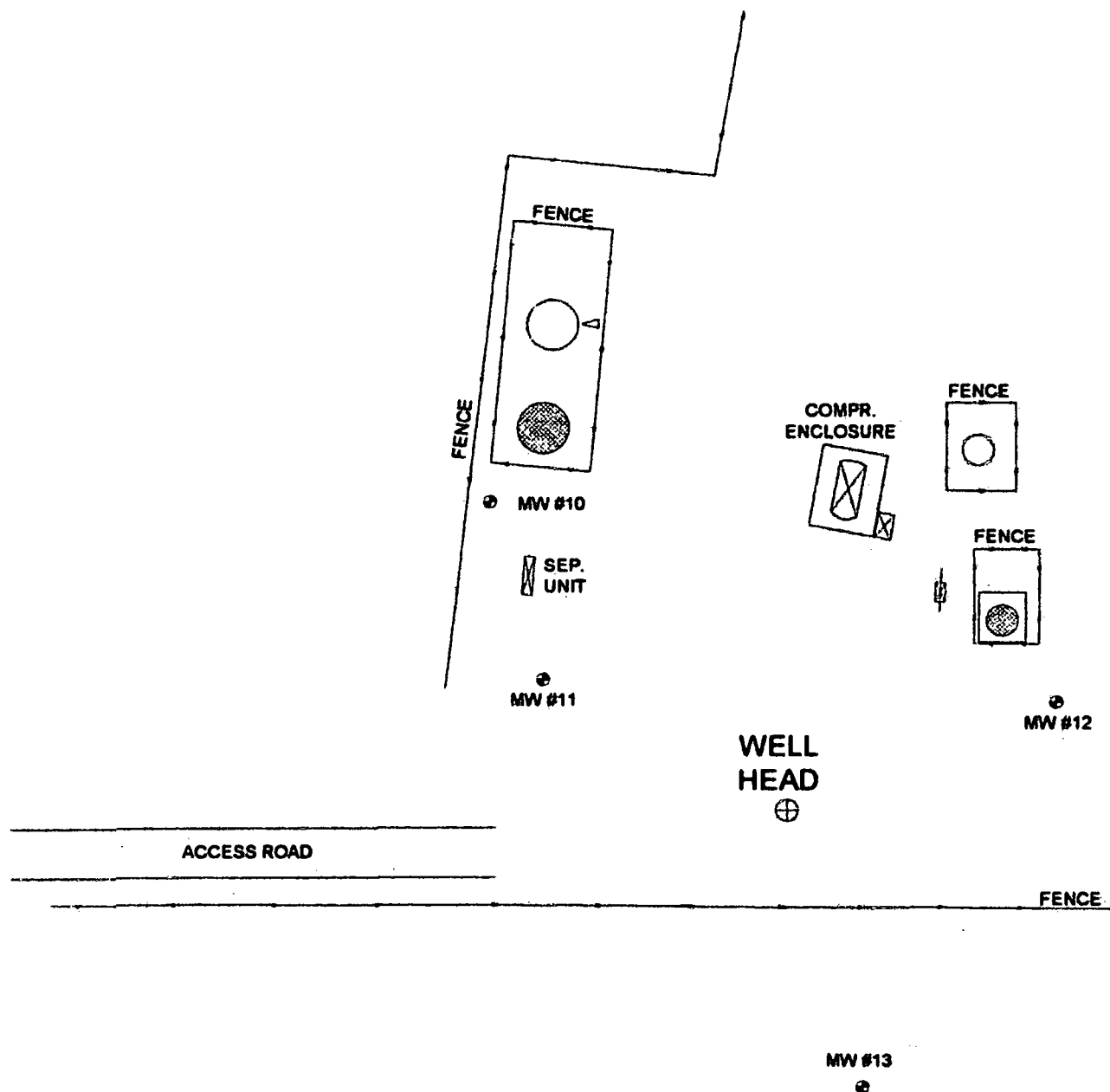
Sample ID: CCV3 BTEX_0004		Batch ID: GC-1_000520	Test Code: SW8021B		Units: µg/L	Analysis Date 5/20/2000			Prep Date:		
Client ID:		0005036	Run ID: GC-1_000520A			SeqNo: 27836					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	41.16	0.5	40	0	102.9%	85	115				
Ethylbenzene	41.2	0.5	40	0	103.0%	85	115				
m,p-Xylene	76.73	1	80	0	95.9%	85	115				
Methyl tert-Butyl Ether	43.95	1	40	0	109.9%	85	115				
o-Xylene	40.74	0.5	40	0	101.9%	85	115				
Toluene	40.75	0.5	40	0	101.9%	85	115				
1,4-Difluorobenzene	87.67	0	100	0	87.7%	80	105				
4-Bromochlorobenzene	94.93	0	100	0	94.9%	78	108				
Fluorobenzene	83.13	0	100	0	83.1%	78	108				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

FIGURE 1



MW #13

1 INCH = 50 FT.

0 50 100 FT.

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

BP AMERICA PRODUCTION COMPANY

LEEPER GAS COM # 1

NW/4 SW/4 SEC. 34, T32N, R10W

SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.

CONSULTING PETROLEUM / RECLAMATION SERVICES

P.O. BOX 87

BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 832-1189

PROJECT: MW SAMPLING

DRAWN BY: NJV

FILENAME: 05-21-01-SM.SKF

REVISED: 08/28/02 NJV

**SITE
MAP**

05/01

BLAGG ENGINEERING, INC.
MONITOR WELL SAMPLING DATA

CLIENT : BP AMOCO

CHAIN-OF-CUSTODY # : 11145

LOCATION : LEEPER GC #1

LABORATORY (S) USED : ON - SITE TECH.

Date : May 22, 2001

SAMPLER : N J V

Filename : 05-22-01.WK4

PROJECT MANAGER : J C B

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	VOLUME PURGED (gal.)	FREE PRODUCT (ft)
10	103.50	96.33	7.17	19.90	1030	7.44	700	6.25	-
11	102.44	96.11	6.33	20.40	1120	7.15	900	7.00	-
12	101.68	94.40	7.28	19.70	0830	7.34	700	6.25	-
13	100.31	94.40	5.91	20.40	0930	7.27	800	7.25	-

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 balls per foot - small teflon bailer.

3 balls 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".

Excellent recovery in all MW 's listed above . Collected BTEX from all MW 's listed above .

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FAX: (505) 327-1496

ANALYTICAL REPORT

Date: 31-May-01

Client:	Blagg Engineering	Client Sample Info:	Leeper GC #1
Work Order:	0105047	Client Sample ID:	MW #10
Lab ID:	0105047-01A	Matrix:	AQUEOUS
Project:	BP Amoco; Leeper GC #1	Collection Date:	5/22/2001 10:30:00 AM
		COC Record:	11145

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: HR
Benzene	ND	0.5		µg/L	1	5/28/2001
Toluene	ND	0.5		µg/L	1	5/28/2001
Ethylbenzene	ND	0.5		µg/L	1	5/28/2001
m,p-Xylene	ND	1		µg/L	1	5/28/2001
o-Xylene	ND	0.5		µg/L	1	5/28/2001

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Sur - Surrogate

1 of 4

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TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT

OFF: (505) 325-5667
FAX: (505) 327-1496



LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: 31-May-01

Client:	Blagg Engineering	Client Sample Info:	Leeper GC #1
Work Order:	0105047	Client Sample ID:	MW #11
Lab ID:	0105047-02A	Matrix:	AQUEOUS
Project:	BP Amoco: Leeper GC #1	Collection Date:	5/22/2001 11:20:00 AM
		COC Record:	11145

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: HR		
Benzene	16	0.5		µg/L	1	5/28/2001
Toluene	0.8	0.5		µg/L	1	5/28/2001
Ethylbenzene	3	0.5		µg/L	1	5/28/2001
m,p-Xylene	21	1		µg/L	1	5/28/2001
o-Xylene	ND	0.5		µg/L	1	5/28/2001

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	C - Value above quantitation range
	B - Analyte detected in the associated Method Blank	Surr - Surrogate

2 of 4

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• TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT

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LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: 31-May-01

Client:	Blagg Engineering	Client Sample Info:	Leeper GC #1
Work Order:	0105047	Client Sample ID:	MW #12
Lab ID:	0105047-03A	Matrix:	AQUEOUS
Project:	BP Amoco; Leeper GC #1	Collection Date:	5/22/2001 8:30:00 AM
		COC Record:	11145

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: HR		
Benzene	ND	0.5		µg/L	1	5/28/2001
Toluene	ND	0.5		µg/L	1	5/28/2001
Ethylbenzene	ND	0.5		µg/L	1	5/28/2001
m,p-Xylene	ND	1		µg/L	1	5/28/2001
o-Xylene	ND	0.5		µg/L	1	5/28/2001

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surrogate - Surrogate

3 of 4

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OFF: (505) 325-5667
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LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: 31-May-01

Client:	Blagg Engineering	Client Sample Info:	Leeper GC #1
Work Order:	0105047	Client Sample ID:	MW #13
Lab ID:	0105047-04A	Matrix:	AQUEOUS
Project:	BP Amoco; Leeper GC #1	Collection Date:	5/22/2001 9:30:00 AM
		COC Record:	11145

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: HR		
Benzene	0.5	0.5		µg/L	1	5/28/2001
Toluene	ND	0.5		µg/L	1	5/28/2001
Ethylbenzene	0.7	0.5		µg/L	1	5/28/2001
m,p-Xylene	3.1	1		µg/L	1	5/28/2001
o-Xylene	ND	0.5		µg/L	1	5/28/2001

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Sum: - Surrogate

4 of 4

P.O. BOX 2606 • FARMINGTON, NM 87499

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



CHAIN OF CUSTODY RECORD

612 E Murray Dr. • P.O. Box 2606 • Farmington, NM 87499
LAB: (505) 325-5667 • FAX: (505) 327-1496

Date: _____

Page: _____ of _____

Purchase Order No.:		Project No.:		REPORT RESULTS TO	Name _____		Title _____					
SEND INVOICE TO	Name _____				Company _____							
	Company _____		Dept. _____		Mailing Address _____							
	Address _____				City, State, Zip _____		Telephone No. _____			Telefax No. _____		
PROJECT LOCATION:				Number of Containers	ANALYSIS REQUESTED							
SAMPLER'S SIGNATURE:					LAB ID							
SAMPLE IDENTIFICATION		SAMPLE										
DATE	TIME	MATRIX	PRES									
Relinquished by: _____		Date/Time _____		Received by: _____		Date/Time _____						
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	By Date					
Authorized by: _____ Date _____ (Client Signature <u>Must</u> Accompany Request)				Special Instructions / Remarks:								

On Site Technologies, LTD.

Date: 31-May-01

CLIENT: Blagg Engineering
Work Order: 0105047
Project: BP Amoco; Leeper GC #1

QC SUMMARY REPORT
Method Blank

Sample ID: MB1	Batch ID: GC-1_010528	Test Code: SW8021B	Units: µg/L	Analysis Date: 5/28/2001	Prep Date:						
Client ID:	0105047	Run ID: GC-1_010528A		SeqNo: 38468							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Ethylbenzene	ND	0.5									
m,p-Xylene	ND	1									
Methyl tert-Butyl Ether	ND	1									
o-Xylene	ND	0.5									
Toluene	.1045	0.5									J

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 31-May-01

CLIENT: Blagg Engineering
Work Order: 0105047
Project: BP Amoco; Leeper GC #1

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0105046-05AMS		Batch ID: GC-1_010528		Test Code: SW8021B		Units: µg/L		Analysis Date 5/28/2001			Prep Date:	
Client ID:		0105047		Run ID: GC-1_010528A				SeqNo: 38469				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	2164	25	2000	260	95.2%	70	130					
Ethylbenzene	1972	25	2000	40	96.6%	70	130					
m,p-Xylene	3720	50	4000	20	92.5%	70	130					
Methyl tert-Butyl Ether	6369	50	2000	4600	88.5%	70	130					
o-Xylene	1913	25	2000	0	95.7%	70	130					
Toluene	1905	25	2000	8	94.8%	70	130					

Sample ID: 0105046-05AMSD		Batch ID: GC-1_010528		Test Code: SW8021B		Units: µg/L		Analysis Date: 5/28/2001		Prep Date:	
Client ID:		0105047		Run ID: GC-1_010528A				SeqNo: 38470			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2243	25	2000	260	99.1%	70	130	2164	3.6%	8	
Ethylbenzene	2059	25	2000	40	101.0%	70	130	1972	4.3%	7	
m,p-Xylene	3879	50	4000	20	96.5%	70	130	3720	4.2%	7	
Methyl tert-Butyl Ether	6499	50	2000	4600	95.0%	70	130	6369	2.0%	6	
o-Xylene	1985	25	2000	0	99.2%	70	130	1913	3.7%	6	
Toluene	1977	25	2000	8	98.4%	70	130	1905	3.7%	6	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 31-May-01

CLIENT: Blagg Engineering
Work Order: 0105047
Project: BP Amoco; Leeper GC #1

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: LCS WATER	Batch ID: GC-1_010528	Test Code: SW8021B	Units: µg/L	Analysis Date 5/28/2001				Prep Date:			
Client ID:	0105047	Run ID:	GC-1_010528A	SeqNo: 38467							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	39.85	0.5	40	0	99.6%	80	120				
Ethylbenzene	40.16	0.5	40	0	100.4%	80	120				
m,p-Xylene	76.97	1	80	0	96.2%	80	120				
Methyl tert-Butyl Ether	40.72	1	40	0	101.8%	80	120				
o-Xylene	39.65	0.5	40	0	99.1%	80	120				
Toluene	39.52	0.5	40	0.1045	98.5%	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 31-May-01

CLIENT: Blagg Engineering
Work Order: 0105047
Project: BP Amoco; Leeper GC #1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 BTEX_0105		Batch ID: GC-1_010528		Test Code: SW8021B		Units: µg/L		Analysis Date 5/28/2001		Prep Date:	
Client ID: 0105047		Run ID: GC-1_010528A				SeqNo: 38464					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.2	0.5	20	0	96.0%	85	115				
Ethylbenzene	19.4	0.5	20	0	97.0%	85	115				
m,p-Xylene	37.34	1	40	0	93.3%	85	115				
Methyl tert-Butyl Ether	20.15	1	20	0	100.7%	85	115				
o-Xylene	19.13	0.5	20	0	95.6%	85	115				
Toluene	19.1	0.5	20	0	95.5%	85	115				
1,4-Difluorobenzene	74.82	0	80	0	93.5%	70	130				
4-Bromochlorobenzene	83.66	0	80	0	104.6%	70	130				
Fluorobenzene	75.7	0	80	0	94.6%	70	130				

Sample ID: CCV2 BTEX_0105		Batch ID: GC-1_010528		Test Code: SW8021B		Units: µg/L		Analysis Date 5/28/2001		Prep Date:	
Client ID: 0105047		Run ID: GC-1_010528A				SeqNo: 38465					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	39.14	0.5	40	0	97.8%	85	115				
Ethylbenzene	39.38	0.5	40	0	98.4%	85	115				
m,p-Xylene	75.5	1	80	0	94.4%	85	115				
Methyl tert-Butyl Ether	41.01	1	40	0	102.5%	85	115				
o-Xylene	38.85	0.5	40	0	97.1%	85	115				
Toluene	38.83	0.5	40	0	97.1%	85	115				
1,4-Difluorobenzene	74.6	0	80	0	93.2%	70	130				
4-Bromochlorobenzene	80.22	0	80	0	100.3%	70	130				
Fluorobenzene	74.83	0	80	0	93.5%	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

CLIENT: Blagg Engineering
Work Order: 0105047
Project: BP Amoco; Leeper GC #1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV3 BTEX_0105		Batch ID: GC-1_010528		Test Code: SW8021B		Units: µg/L		Analysis Date 5/28/2001		Prep Date:	
Client ID:		0105047		Run ID:		GC-1_010528A		SeqNo:		38466	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.66	0.5	20	0	98.3%	85	115				
Ethylbenzene	19.63	0.5	20	0	98.2%	85	115				
m,p-Xylene	37.82	1	40	0	94.6%	85	115				
Methyl tert-Butyl Ether	20.48	1	20	0	102.4%	85	115				
o-Xylene	19.31	0.5	20	0	96.5%	85	115				
Toluene	19.4	0.5	20	0	97.0%	85	115				
1,4-Difluorobenzene	74.61	0	80	0	93.3%	70	130				
4-Bromochlorobenzene	83.44	0	80	0	104.3%	70	130				
Fluorobenzene	75.53	0	80	0	94.4%	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 31-May-01

CLIENT: Blagg Engineering
Work Order: 0105047
Project: BP Amoco; Leeper GC #1
Test No: SW8021B

**QC SUMMARY REPORT
SURROGATE RECOVERIES**

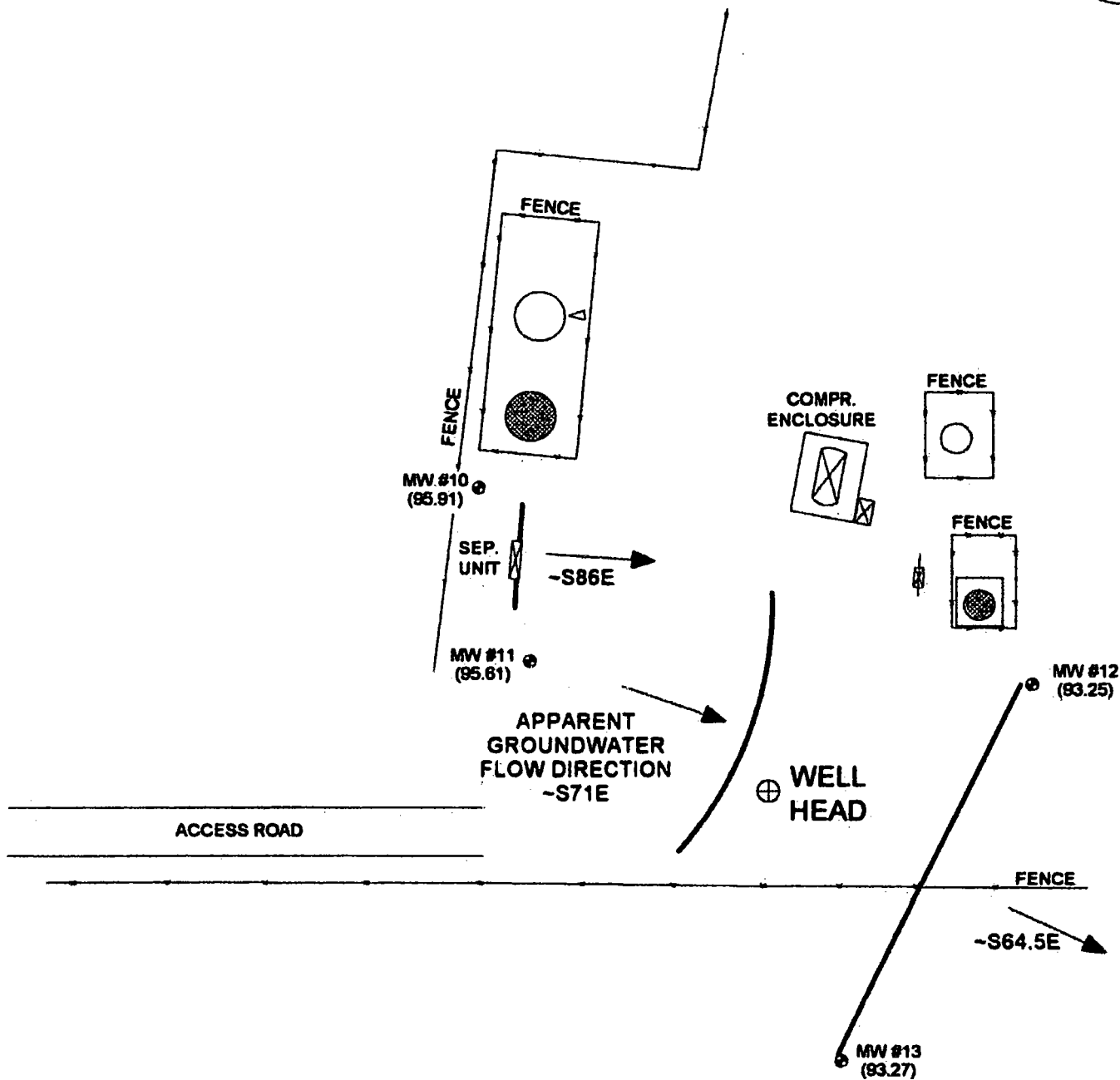
Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0105045-05A	114	98.3	105
0105046-05A	93.6	101	95.5
0105046-05AMS	93.7	104	94
0105046-05AMSD	92.5	103	94
0105046-19A	93.6	98.3	95.7
0105047-01A	94.6	102	96.4
0105047-02A	92.9	98.4	94.3
0105047-03A	95	102	96.1
0105047-04A	94	101	95.8
0105049-01A	93.3	102	94
0105049-02A	95.3	101	96.8
0105049-03A	88.2	96.6	89.8
0105049-04A	91.9	102	92.7
0105049-05A	94.1	103	95.3
0105051-02A	94.8	99.3	96.2
0105051-03A	94.5	102	96.4
0105052-01A	94.9	102	96.4
0105052-02A	93.4	104	94.5
0105053-01A	93.2	107	94.4
CCV1 BTEX_01052	93.5	104	94.6
CCV2 BTEX_01052	93.2	100	93.5
CCV3 BTEX_01052	93.3	104	94.4
LCS WATER	93.5	105	93.9
MBI	93.5	104	95

Acronym	Surrogate	QC Limits
14FBZ	= 1,4-Difluorobenzene	70-130
4BCBZ	= 4-Bromochlorobenzene	70-130
FLBZ	= Fluorobenzene	70-130

* Surrogate recovery outside acceptance limits

FIGURE 2
(2nd 1/4, 2002)



ACCESS ROAD

APPARENT
GROUNDWATER
FLOW DIRECTION
~S71E

WELL
HEAD

FENCE

~S64.5E

Top of Well Elevation

MW #10	(103.50)
MW #11	(102.44)
MW #12	(101.68)
MW #13	(100.31)

MW #10 (95.91)	Groundwater Elevation as of 05/28/02
-------------------	---

1 INCH = 50 FT.

0 50 100 FT.

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

BP AMERICA PRODUCTION COMPANY
LEEPER GAS COM # 1
NW/4 SW/4 SEC. 34, T32N, R10W
SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.
CONSULTING PETROLEUM / RECLAMATION SERVICES
P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413
PHONE: (505) 632-1189

PROJECT: MW SAMPLING
DRAWN BY: NJV
FILENAME: 05-29-02-GW.SKF
REVISED: 08/28/02 NJV

**GROUNDWATER
CONTOUR
MAP**
05/02

BLAGG ENGINEERING, INC.
MONITOR WELL SAMPLING DATA

CLIENT : BP AMOCO

CHAIN-OF-CUSTODY # : 11771

LOCATION : LEEPER GC # 1

LABORATORY (S) USED : ON - SITE TECH.

Date : May 29, 2002

SAMPLER : N J V

Filename : 05-29-02.WK4

PROJECT MANAGER : J C B

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	VOLUME PURGED (gal.)	FREE PRODUCT (ft)
10	103.50	95.91	7.59	19.90	1120	7.15	1,100	6.00	-
11	102.44	95.61	6.83	20.40	1155	7.00	1,000	6.75	-
12	101.68	93.25	8.43	19.70	-	-	-	-	-
13	100.31	93.27	7.04	20.40	1035	7.25	1,100	6.50	-

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".

Excellent recovery in all MW's sampled. Collected BTEX from all MW's listed above

except MW # 12.

OFF: (505) 325-5667
FAX: (505) 327-1496



LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: 18-Jun-02

Client:	Blagg Engineering	Client Sample Info:	BP - Leeper GC#1
Work Order:	0205047	Client Sample ID:	MW-10
Lab ID:	0205047-02A	Matrix:	AQUEOUS
Project:	BP - Leeper GC #1	Collection Date:	05/29/2002 11:20:00 AM
		COC Record:	11771

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DWC		
Benzene	14	0.5		µg/L	1	06/11/2002
Toluene	0.9	0.5		µg/L	1	06/11/2002
Ethylbenzene	7.2	0.5		µg/L	1	06/11/2002
m,p-Xylene	41	1		µg/L	1	06/11/2002
o-Xylene	ND	0.5		µg/L	1	06/11/2002

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted precision limits

E - Value above quantitation range

Sur - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

EMAIL: ONSITE@ONSITELTD.COM

~ TECHNOLOGY BECOMES INDISPENSIBLE WITH THE ENVIRONMENT ~

OFF: (505) 325-5667
FAX: (505) 327-1496



LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: 18-Jun-02

Client:	Blagg Engineering	Client Sample Info:	BP - Leeper GC#1
Work Order:	0205047	Client Sample ID:	MW-11
Lab ID:	0205047-03A	Matrix:	AQUEOUS
Project:	BP - Leeper GC #1	Collection Date:	05/29/2002 11:55:00 AM
		COC Record:	11771

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DWC		
Benzene	2.8	0.5		µg/L	1	06/11/2002
Toluene	ND	0.5		µg/L	1	06/11/2002
Ethylbenzene	ND	0.5		µg/L	1	06/11/2002
m,p-Xylene	ND	1		µg/L	1	06/11/2002
o-Xylene	ND	0.5		µg/L	1	06/11/2002

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted precision limits

E - Value above quantitation range

Surf. - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

EMAIL: ONSITE@ONSITELTD.COM

- TECHNOLOGY BEING USED: EXAMINER WITH THE EXAMINER -

OFF: (505) 325-5667
FAX: (505) 327-1496



LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: 18-Jun-02

Client:	Blagg Engineering	Client Sample Info:	BP - Lecper GC#1
Work Order:	0205047	Client Sample ID:	MW-13
Lab ID:	0205047-01A	Matrix:	AQUEOUS
Project:	BP - Lecper GC #1	Collection Date:	05/29/2002 10:35:00 AM
		COC Record:	11771

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DWC		
Benzene	ND	0.5		µg/L	1	06/11/2002
Toluene	ND	0.5		µg/L	1	06/11/2002
Ethylbenzene	ND	0.5		µg/L	1	06/11/2002
m,p-Xylene	2.7	1		µg/L	1	06/11/2002
o-Xylene	ND	0.5		µg/L	1	06/11/2002

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

L - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted precision limits

F - Value above quantitation range

Surr. - Surrogate

1 of 1

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EMAIL: ONSITE@ONSITELTD.COM

Do not use this report for any other purpose than intended.



CHAIN OF CUSTODY RECORD

612 E Murray Dr • P.O. Box 2606 • Farmington, NM 87499
LAB. (505) 325-5667 • FAX: (505) 327-1496

Date: _____

Page: _____ of _____

Purchase Order No.:		Project No.		REPORT RESULTS TO	Name		Title							
SEND INVOICE TO	Name				Company									
	Company				Mailing Address									
	Address				City, State, Zip									
	City, State, Zip				Telephone No.			Telefax No.						
PROJECT LOCATION:				Number of Containers	ANALYSIS REQUESTED									
SAMPLER'S SIGNATURE:														
SAMPLE IDENTIFICATION		SAMPLE												
		DATE	TIME		MATRIX									PRES.
Relinquished by: _____				Date/Time: _____	Received by: _____				Date/Time: _____					
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	By Date							
Authorized by: _____ Date: _____ (Client Signature Must Accompany Request)				Special Instructions / Remarks:										

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

ON SITE TECHNOLOGIES, LTD. • P.O. Box 2606 • Farmington, NM 87499 • (505) 325-5667 • FAX: (505) 327-1496

On Site Technologies, LTD.

Date: 18-Jun-02

CLIENT: Blagg Engineering
Work Order: 0205047
Project: BP - Leeper GC #1

QC SUMMARY REPORT
Method Blank

Sample ID: MB_020611	Batch ID: GC-1_020610	Test Code: SW8021B	Units: µg/L	Analysis Date: 06/11/2002	Prep Date: 06/11/2002						
Client ID:	0205047	Run ID: GC-1_020610A	SeqNo: 51629								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual						
Benzene	ND	0.5									
Ethylbenzene	ND	0.5									
m,p-Xylene	.1219	1									J
o-Xylene	.0438	0.5									J
Toluene	.1198	0.5									J

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

1 of 1

On Site Technologies, LTD.

Date: 18-Jun-02

CLIENT: Blagg Engineering
Work Order: 0205047
Project: BP - Leeper GC #1

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: 0206002-01AMS		Batch ID: GC-1_020610		Test Code: SW8021B		Units: µg/L		Analysis Date: 06/11/2002			Prep Date: 06/11/2002	
Client ID:		0205047		Run ID: GC-1_020610A		SeqNo: 51630						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	224.3	2.5	200	32.2	96.1%	70	130					
Ethylbenzene	198.9	2.5	200	2.346	98.3%	70	130					
m,p-Xylene	413.5	5	400	24	97.4%	70	130					
o-Xylene	197.2	2.5	200	5.974	95.6%	70	130					
Toluene	209.4	2.5	200	18.41	95.5%	70	130					

Sample ID: 0206002-01AMSD		Batch ID: GC-1_020610		Test Code: SW8021B		Units: µg/L		Analysis Date: 06/11/2002			Prep Date: 06/11/2002	
Client ID:		0205047		Run ID: GC-1_020610A		SeqNo: 51631						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	221.4	2.5	200	32.2	94.6%	70	130	224.3	1.3%	15		
Ethylbenzene	196	2.5	200	2.346	96.8%	70	130	198.9	1.5%	15		
m,p-Xylene	407.2	5	400	24	95.8%	70	130	413.5	1.5%	15		
o-Xylene	194.9	2.5	200	5.974	94.5%	70	130	197.2	1.2%	15		
Toluene	206.3	2.5	200	18.41	93.9%	70	130	209.4	1.5%	15		

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 18-Jun-02

CLIENT: Blagg Engineering

Work Order: 0205047

Project: BP - Leeper GC #1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS_020611	Batch ID: GC-1_020610	Test Code: SW8021B	Units: µg/L	Analysis Date: 06/11/2002				Prep Date: 06/11/2002			
Client ID:	0205047	Run ID:	GC-1_020610A	SeqNo: 51627							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	37.31	0.5	40	0	93.3%	80	120				
Ethylbenzene	38.48	0.5	40	0	96.2%	80	120				
m,p-Xylene	76.48	1	80	0.1219	95.4%	80	120				
o-Xylene	37.39	0.5	40	0.0438	93.4%	80	120				
Toluene	37.02	0.5	40	0.1198	92.2%	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 18-Jun-02

CLIENT: Blagg Engineering
Work Order: 0205047
Project: BP - Leeper GC #1

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: CCV1_020611	Batch ID: GC-1_020610	Test Code: SW8021B	Units: µg/L		Analysis Date: 06/11/2002				Prep Date: 06/11/2002		
Client ID:	0205047	Run ID:	GC-1_020610A		SeqNo:		51622				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.82	0.5	20	0	94.1%	85	115				
Ethylbenzene	19.6	0.5	20	0	98.0%	85	115				
m,p-Xylene	38.8	1	40	0	97.0%	85	115				
o-Xylene	18.88	0.5	20	0	94.4%	85	115				
Toluene	18.74	0.5	20	0	93.7%	85	115				
1,4-Difluorobenzene	106.6	0	110	0	96.9%	70	130				
4-Bromochlorobenzene	108.7	0	110	0	98.9%	70	130				
Fluorobenzene	108	0	110	0	98.2%	70	130				

Sample ID: CCV2_020611	Batch ID: GC-1_020610	Test Code: SW8021B	Units: µg/L	Analysis Date: 06/11/2002				Prep Date: 06/11/2002			
Client ID:	0205047	Run ID:	GC-1_020610A	SeqNo: 51623							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.1	0.5	20	0	95.5%	85	115				
Ethylbenzene	19.58	0.5	20	0	97.9%	85	115				
m,p-Xylene	39.22	1	40	0	98.1%	85	115				
o-Xylene	19.06	0.5	20	0	95.3%	85	115				
Toluene	18.9	0.5	20	0	94.5%	85	115				
1,4-Difluorobenzene	107.1	0	110	0	97.4%	70	130				
4-Bromochlorobenzene	122.2	0	110	0	111.1%	70	130				
Fluorobenzene	108.6	0	110	0	98.8%	70	130				

Qualifiers: NID - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
 Work Order: 0205047
 Project: BP - Leeper GC #1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV3_020611		Batch ID: GC-1_020610		Test Code: SW8021B		Units: µg/L		Analysis Date: 06/11/2002		Prep Date: 06/11/2002	
Client ID: 0205047		Run ID: GC-1_020610A				SeqNo: 51624					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.56	0.5	40	0	96.4%	85	115				
Ethylbenzene	39.34	0.5	40	0	98.3%	85	115				
m,p-Xylene	77.76	1	80	0	97.2%	85	115				
o-Xylene	38.17	0.5	40	0	95.4%	85	115				
Toluene	38.04	0.5	40	0	95.1%	85	115				
1,4-Difluorobenzene	106.2	0	110	0	96.6%	70	130				
4-Bromochlorobenzene	117.2	0	110	0	106.6%	70	130				
Fluorobenzene	107.8	0	110	0	98.0%	70	130				

Sample ID: CCV4_020611		Batch ID: GC-1_020610		Test Code: SW8021B		Units: µg/L		Analysis Date: 06/12/2002			Prep Date: 06/12/2002	
Client ID: 0205047		Run ID: GC-1_020610A				SeqNo: 51625						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	18.76	0.5	20	0	93.8%	85	115					
Ethylbenzene	19.45	0.5	20	0	97.3%	85	115					
m,p-Xylene	38.91	1	40	0	97.3%	85	115					
o-Xylene	18.83	0.5	20	0	94.2%	85	115					
Toluene	18.61	0.5	20	0	93.0%	85	115					
1,4-Difluorobenzene	107.8	0	110	0	98.0%	70	130					
4-Bromochlorobenzene	108.9	0	110	0	99.0%	70	130					
Fluorobenzene	109.3	0	110	0	99.4%	70	130					

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 0205047
Project: BP - Leeper GC #1

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID: CCV5_020611		Batch ID: GC-1_020610		Test Code: SW8021B		Units: µg/L		Analysis Date: 06/12/2002			Prep Date: 06/12/2002	
Client ID:		0205047		Run ID:		GC-1_020610A		SeqNo:		51626		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	18.63	0.5	20	0	93.2%	85	115					
Ethylbenzene	18.96	0.5	20	0	94.8%	85	115					
m,p-Xylene	37.88	1	40	0	94.7%	85	115					
o-Xylene	18.32	0.5	20	0	91.6%	85	115					
Toluene	18.22	0.5	20	0	91.1%	85	115					
1,4-Difluorobenzene	107.4	0	110	0	97.7%	70	130					
4-Bromochlorobenzene	119.1	0	110	0	108.3%	70	130					
Fluorobenzene	109.6	0	110	0	99.6%	70	130					

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 18-Jun-02

CLIENT: Blagg Engineering
Work Order: 0205047
Project: BP - Leeper GC #1
Test No: SW8021B

QC SUMMARY REPORT SURROGATE RECOVERIES

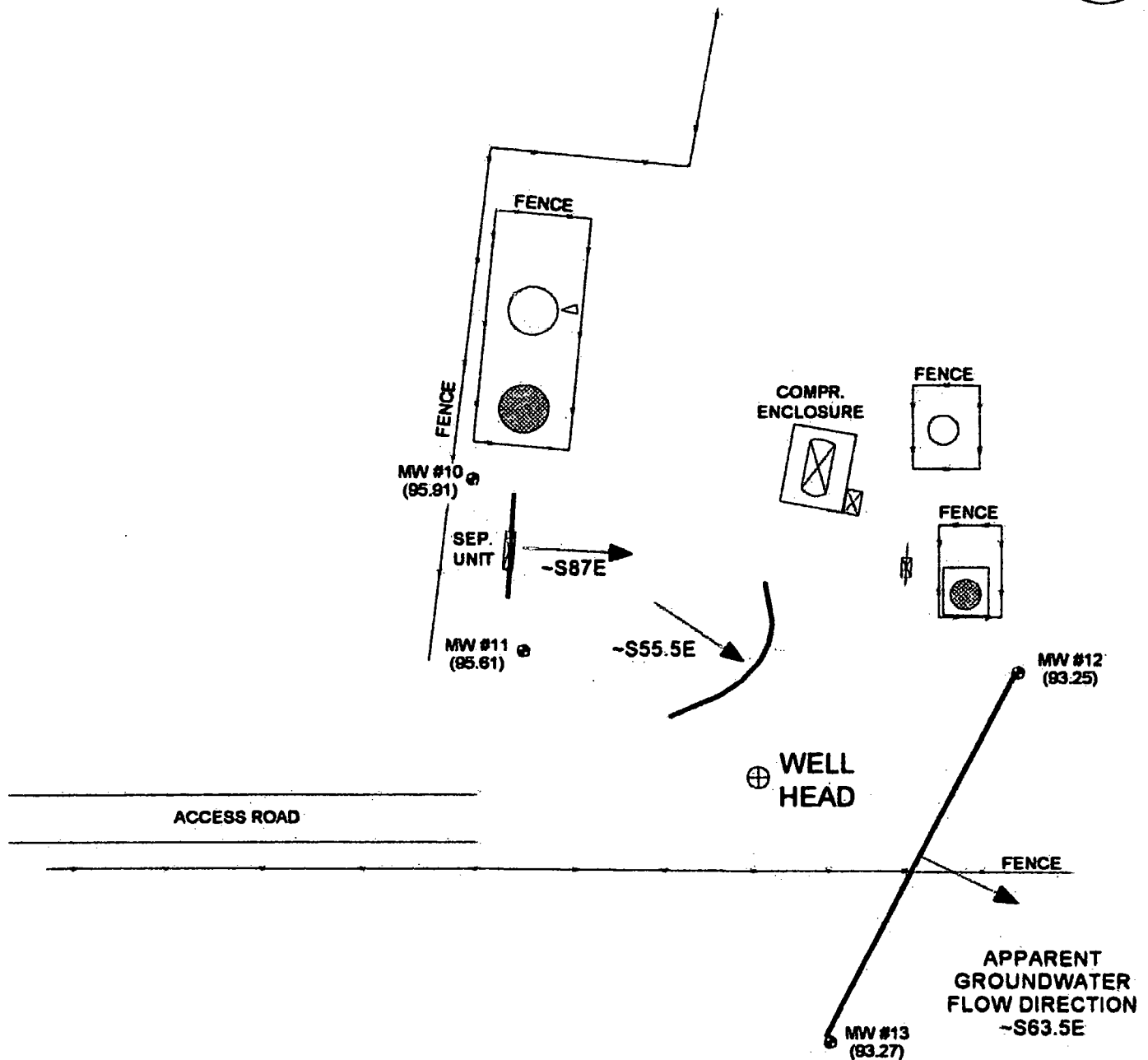
Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0205047-01A	97.8	108	99.6
0205047-02A	95.9	111	98
0205047-03A	97.2	110	99
0205049-01A	98	117	99.7
0205049-02A	96.9	105	99.1
0206001-01A	95.7	105	97.5
0206002-01A	96.4	105	98.4
0206002-01AMS	95.8	115	97.7
0206002-01AMSD	95.9	112	97.4
0206012-01A	96	103	98.4
0206012-02A	97.8	102	99.7
0206012-03A	97.8	107	100
0206013-01A	97.8	106	99
0206014-01A	96.7	106	98.6
0206014-02A	97.1	106	99.9
0206014-03A	98.2	107	101
CCV1_020611	96.9	98.8	98.2
CCV2_020611	97.4	111	98.8
CCV3_020611	96.6	106	98
CCV4_020611	98	99	99.4
CCV5_020611	97.6	108	99.6
LCS_020611	96.9	103	98.1
MB_020611	98.4	105	99.5

Acronym	Surrogate	QC Limits
14FBZ	= 1,4-Difluorobenzene	70-130
4BCBZ	= 4-Bromochlorobenzene	70-130
FLBZ	= Fluorobenzene	70-130

* Surrogate recovery outside acceptance limits

FIGURE 3
(3rd 1/4, 2002)



Top of Well Elevation	
MW #10	(103.50)
MW #11	(102.44)
MW #12	(101.68)
MW #13	(100.31)
Groundwater Elevation as of 08/23/02.	
MW #10 (94.98)	

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

BP AMERICA PRODUCTION COMPANY
LEEPER GAS COM # 1
NW/4 SW/4 SEC. 34, T32N, R10W
SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.
CONSULTING PETROLEUM / RECLAMATION SERVICES
P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413
PHONE: (505) 632-1189

PROJECT: MW SAMPLING
DRAWN BY: NJV
FILENAME: 08-23-02-GW.SKF
REVISED: 08/28/02 NJV

**GROUNDWATER
CONTOUR
MAP
08/02**

BLAGG ENGINEERING, INC.
MONITOR WELL SAMPLING DATA

CLIENT : BP AMOCO

CHAIN-OF-CUSTODY # : 11997

LOCATION : LEEPER GC # 1

LABORATORY (S) USED : ON - SITE TECH.

Date : August 23, 2002

SAMPLER : N J V

Filename : 08-23-02.WK4

PROJECT MANAGER : J C B

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	VOLUME PURGED (gal.)	FREE PRODUCT (ft)
10	103.50	94.98	8.52	19.90	0935	6.90	900	5.50	-
11	102.44	94.72	7.72	20.40	6.85	6.85	800	6.25	-
12	101.68	92.59	9.09	19.70	-	-	-	-	-
13	100.31	92.57	7.74	20.40	0820	7.20	900	6.25	-

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".

Excellent recovery in all MW 's sampled . Collected BTEX from all MW 's listed above
except MW # 12 .

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ANALYTICAL REPORT

Date: 30-Aug-02

Client:	Blagg Engineering	Client Sample Info:	BP - Leeper GC #1
Work Order:	0208016	Client Sample ID:	MW #10
Lab ID:	0208016-01A	Matrix:	AQUEOUS
Project:	BP - Leeper GC #1	Collection Date:	08/23/2002 9:35:00 AM
		COC Record:	11997

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: HNR		
Benzene	ND	0.5		µg/L	1	08/28/2002
Toluene	0.6	0.5		µg/L	1	08/28/2002
Ethylbenzene	ND	0.5		µg/L	1	08/28/2002
m,p-Xylene	ND	1		µg/L	1	08/28/2002
o-Xylene	0.6	0.5		µg/L	1	08/28/2002

Qualifiers:
PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted precision limits
E - Value above quantitation range
Surr - Surrogate

1 of 1

MAINTAINING HARMONY BETWEEN MAN AND HIS ENVIRONMENT

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ANALYTICAL REPORT

Date: 30-Aug-02

Client:	Blagg Engineering	Client Sample Info:	BP - Leeper GC #1
Work Order:	0208016	Client Sample ID:	MW #11
Lab ID:	0208016-02A	Matrix:	AQUEOUS
Project:	BP - Leeper GC #1	Collection Date:	08/23/2002 9:05:00 AM
		COC Record:	11997

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: HNR		
Benzene	1.6	0.5		µg/L	1	08/28/2002
Toluene	ND	0.5		µg/L	1	08/28/2002
Ethylbenzene	ND	0.5		µg/L	1	08/28/2002
m,p-Xylene	ND	1		µg/L	1	08/28/2002
o-Xylene	ND	0.5		µg/L	1	08/28/2002

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted precision limits

E - Value above quantitation range

Surrogate - Surrogate

1 of 1

MAINTAINING HARMONY BETWEEN MAN AND HIS ENVIRONMENT

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ANALYTICAL REPORT

Date: 30-Aug-02

Client:	Blagg Engineering	Client Sample Info:	BP - Leeper GC #1
Work Order:	0208016	Client Sample ID:	MW #13
Lab ID:	0208016-03A	Matrix:	AQUEOUS
Project:	BP - Leeper GC #1	Collection Date:	08/23/2002 8:20:00 AM
		COC Record:	11997

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: HNR		
Benzene	ND	0.5		µg/L	1	08/28/2002
Toluene	ND	0.5		µg/L	1	08/28/2002
Ethylbenzene	ND	0.5		µg/L	1	08/28/2002
m,p-Xylene	ND	1		µg/L	1	08/28/2002
o-Xylene	ND	0.5		µg/L	1	08/28/2002

Qualifiers:

- PQL - Practical Quantitation Limit
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1 of 1

MAINTAINING HARMONY BETWEEN MAN AND HIS ENVIRONMENT