3R - 84

REPORTS

DATE:

1/14/1999

ON SITE
TECHNOLOGIES, LTD.

January 14, 1999

Conoco, Inc., Mid-Continent Region
Attn.: Ms. Shirley Ebert, Field SHEAR Specialist
3314 Bloomfield Hwy.
Farmington, NM 87401

RE: 1998 Annual Ground Water Report
Conoco Location: Farmington B Com #1E
Unit 0, Sec. 15, T29N, R13W, NMPM, San Juan Co., NM
Project: 4-1374

Dear Ms. Ebert:

The following report summarizes the ground water remediation and monitoring activities conducted by On Site Technologies Limited Partnership and/or others on behalf of Conoco, Inc. at the referenced oil and gas location. This report covers the 1998 ground water monitoring activities for three (3) monitoring well, and includes the installation, development and initial sampling of three (3) additional monitoring wells. All activities follows the prescribed procedures defined in the *Comprehensive Ground Water Remediation and Long-Term Monitoring Plan for Conoco Locations in the San Juan Basin, New Mexico*, submitted to the New Mexico Oil Conservation Division on October 15, 1997.

SUMMARY OF 1998 ACTIVITIES:

Ground water sampling events were conducted during June, September and December.

June 12, 1998, approximately three (3) inches of free product was discovered in MW#1. A passive skimmer was installed in MW#1 to date approximately 3.8 gallons of free product has been removed.

August 1998, three more monitoring wells were installed using a cable tool rig in the vacant lot west of the location. Wells were installed to delineate extent of the plume. The wells were developed and sampled during the September sampling event.

September 1998, NMOCD authorized Conoco to use Regenesis® Oxygen Release Compound (ORC) in MW#1.

December 3, 1998, the passive skimmer was removed from MW#1and seven (7) ORC socks were installed. MW#1 was sampled to establish a baseline to monitor the effect of the ORC socks.

Results of excavation, ground water monitoring activity and monitoring well installation were previously documented in the following documentation.

On Site Technologies, Ltd., April 16, 1997. Letter to Mr. W. L. Brignon, Senior Council Conoco, Inc. Midland Division, regarding: Remediation Summary, Conoco Location, Farmington B Com #1E, Unit 0, Sec. 15, T29N, R13W, NMPM, San Juan Co., NM.

On Site Technologies, Ltd., February 1, 1998. Report to Ms. Shirley Ebert, Field SHEAR Specialist, Conoco, Inc. Mid-Continent Region, regarding: Annual Ground Water Report for 1997, Conoco Location, Farmington B Com #1E, Unit 0, Sec. 15, T29N, R13W, NMPM, San Juan Co., NM

PO Box 2606
Farmington, NM
505-325-5667
FAX: 505-327-1496

SAMPLING:

In accordance with the monitoring plan, water levels were measured on the monitoring well prior to purging and sampling. Samples were collected, preserved and transported in accordance with Environmental Protection Agency (EPA) prescribed procedures, and proper chain-of-custody protocol followed. The laboratory analyses ordered, followed the Conoco Ground Water Plan.

Table 1, summarizes the monitoring well data and water levels measured during previous and current sampling event. Table 2, summarizes the laboratory results for BTEX compounds from all water sampling completed at the referenced site. Table 3, summarizes the laboratory result for RCRA metals and API water quality testing, required by NMOCD.

Copies of all laboratory reports for the calendar year 1998, along with all laboratory QA/QC documentation and chains-of-custody, are attached with this report.

SUMMARY AND CONCLUSIONS:

The following conclusions are based on the 1998 ground water monitoring results and trends associated with Farmington B Com 1E well location:

1. BTEX contamination continues to remain above the New Mexico Water Quality Control Commission (NMWQCC) standards in the area of MW#1.
2. All other monitoring wells (MW#2 through MW#6) exhibit BTEX contamination levels below NMWQCC standards.
3. API water analysis for MW#4 and MW#5 exhibit chloride and Total Dissolved Solids (TDS) levels above NMWQCC standard. The TDS levels may be due to heavy sediment in the well locations caused by using the cable tool drill rig to advance the boreholes for installation of the wells.
4. The groundwater flow appears to be to the west to northwest with an average gradient of 0.0101 foot/feet.
5. The ground water direction seems to be influenced by an unlined irrigation ditch south of the location, which is a seasonally variable recharge point.

RECOMMENDATIONS

Continued monitoring of groundwater quality until NMWQCC abatement standards and requirements are met.

LIMITATIONS AND CLOSURE:

This 1998 groundwater report documents the results of ground water monitoring for the referenced Conoco well location. This report following the Comprehensive Ground Water Remediation and Long-Term Monitoring Plan for Conoco Locations in the San Juan Basin, New Mexico, dated October 15, 1997, and approved by NMOCD on February 16,1998.

The scope of On Site Technologies' services consisted of project management, periodic water sampling and measurement of water levels, laboratory testing for ground water quality, and preparation of this initial report. All work has been performed in accordance with generally accepted professional practices in geotechnical, petroleum and environmental engineering, and hydrogeology.

This document has been prepared by On Site Technologies for the exclusive use of Conoco Inc. as it pertains to the referenced well location operated by Conoco.

If there are any questions regarding this status report, please contact either Myke Lane or Larry Trujillo at On Site Technologies, (505) 325-5667. Thank you for your consideration.

Respectfully submitted,

Larry Trujillo, C.H.M.M.
Project Manager

Reviewed by:

Michael K. Lane, P.E.
Senior Engineer

On Site Technologies, Limited Partnership

Attachments:
Table 1: Monitoring Well Details and Ground Water Levels Summary
Table 2: Ground Water BTEX Analytical Summary
Table 3: Other Constituents Analytical Summary
Figure 1: Site Sketch
Figure 2: Ground Water Potentiometric Map (March 1998)
Figure 2: Ground Water Potentiometric Map (June 1998)
Figure 2: Ground Water Potentiometric Map (July 1998)
Figure 2: Ground Water Potentiometric Map (August 1998)
Figure 2: Ground Water Potentiometric Map (September 1998)
Figure 2: Ground Water Potentiometric Map (December 1998)
Laboratory Result, Chain of Custody, QA/QC
Passive Skimmer Log
Boring Logs and Monitoring Well Diagrams

Acknowledgment:
CONOCO, Inc.

Shirley Ebert Steam Specialist
(Name/Title)

2/17/99
(Date)

LET/let: 41374-98.doc

On Site Technologies
Ground Water Level Summary
Farmington B Com 1E
Unit O, Sec.15, T29N, R13W

Well Number	Top of Casing Elevation* (ft)	Total Depth of Well (ft)*	Well Type	Screen Interval (ft) (BGS) *	Sample Date	Depth to Groundwater (ft) (BTOC)*	Relative Groundwater Elevation (ft)
MW #1	101.37	34.09	2" PVC	19.09 to 34.09	3/18/98	28.51	78.86
					6/12/98	27.07*	74.30
					7/13/98	25.75	75.62
					8/25/98	24.92	76.45
					9/15/98	25.06	76.32
					12/29/98	28.89	72.48
MW #2	101.57	33.72	2" PVC	18.72 to 33.72	3/18/98	27.81	72.76
					6/12/98	25.84	75.73
					7/13/98	24.49	77.08
					8/25/98	24.03	77.54
					9/15/98	24.18	77.39
					12/29/98	26.82	74.75
MW #3	102.1	32.44	2" PVC	17.44 to 32.44	3/19/98	28.84	73.26
					6/12/98	26.27	75.83
					7/13/98	25.09	77.01
					8/25/98	24.56	77.54
					9/15/98	24.85	77.25
					12/29/98	28.02	74.08
MW #4	101.4	32.72	2" PVC	17.72 to 32.72	8/25/98	24.99	76.41
					9/15/98	25.28	76.12
					12/29/98	29.01	72.39

* Water Level adjusted to compensate for 3"of free product
BGS - approximate measurements taken as Below Ground Surface
BTOC - Below Top of Casing
NM - Not Measured

February 8, 1999

On Site Technologies
Ground Water Level Summary
Farmington B Com 1E
Unit O, Sec.15, T29N, R13W

Well Number	Top of Casing Elevation* (ft)	Total Depth of Well (ft)*	Well Type	Screen Interval (ft) (BGS) *	Sample Date	Depth to Groundwater (ft) (BTOC)*	Relative Groundwater Elevation (ft)
MW #5	100.52	34.09	2" PVC	19.09 to 34.09	8/25/98	24.49	76.03
					9/15/98	24.83	75.96
					12/29/98	28.27	72.25
MW #6	102.14	34.02	2" PVC	19.02 to 34.02	8/25/98	26.00	76.14
					9/15/98	26.19	75.95
					12/29/98	28.98	73.16

*
BGS - approximate measurements taken as Below Ground Surface
BTOC - Below Top of Casing
NM - Not Measured

On Site Technologies

February 8, 1999

BTEX Ground Water Analytical Summary
Farmington B Com 1E
Unit O, Sec. 15 T29N, R13W

Sample Date	Sample ID#	Monitor Well	Remarks	BTEX per EPA 8020 (ppb)			
				Benzene	Toluene	Ethylbenzene	Total-Xylene
2/19/98	9802020-01A	MW#1	On Site Lab.	210.0	34.0	370.0	2044.0
6/12/98	3" of free product	in the bailer					
9/15/98	Not Sampled	free product	in well				
12/29/98	9812053-04A			350.0	BDL	420	2800.0
2/19/98	9802020-02A	MW#2	On Site Lab.	2.4	5.3	16.0	470.0
6/12/98	9806055-02A			0.8	2.7	32.0	171.0
9/15/98	9809035-01A			1.3	2.5	39.0	33.3
12/29/98	9812053-05A			BDL	0.6	2.1	35.0
2/19/98	9802020-03A	MW#3	On Site Lab.	0.9	1.2	1.6	5.3
06/12/98	9806055-01A			BDL	BDL	0.5	2.0
9/15/98	9809035-02A			BDL	BDL	BDL	BDL
12/29/98	9812053-06A			BDL	BDL	BDL	BDL
9/15/98	9809035-03A	MW#4	On Site Lab.	BDL	BDL	BDL	BDL
12/29/98	9812053-03A			BDL	BDL	0.6	BDL
9/15/98	9809035-04A	MW#5	On Site Lab.	BDL	BDL	BDL	BDL
12/29/98	9812053-02A			BDL	BDL	BDL	BDL
9/15/98	9809035-05A	MW#6	On Site Lab.	BDL	BDL	BDL	BDL
12/29/98	9812053-01A			BDL	BDL	BDL	BDL
				10.0	750.0	750.0	620.0

On Site Technologies

February 8, 1999

Ground Water Analytical Summary
Farmington B Com 1E
Unit O, Sec. 15 T29N, R13W

API Results

Monitoring Well #4

CATIONs						ANIONs				
PARAMETER		RESULTS	UNITOF MEASURE	WQCC Standards	UNITOF MEASURE	PARAMETER		RESULTS	UNITOF MEASURE	WQCC Standards	UNITOF MEASURE
Sodium	Na	230.0	mg/L			Chloride	Cl	280.0	mg/L	250.0	mg/L
Calcium	Ca	81.0	mg/L			Sulfate	SO_4	95.0	mg/L	600.0	mg/L
Magnesium	Mg	24.0	mg/L			Carbonate	CO_3	BDL	mg/L		
Potassium	K	8.6	mg/L			Bicarbonate	HCO_3	370.0	mg/L		
						Hydroxide	HO		mg/L		
						Conductivity					
						Total Dissolved Solids		1100.0	mg/L	1000.0	mg/L
						Fe		BDL	mg/L		
						pH		7.33		between 6 and 9	
						Resistively		7.794		ohm-m	

Sample Date: September 15,1998

RCRA Metals
Test Method SW-846

PARAMETER	RESULTS	UNITS	WQCC	UNITS
Mercury by CVAA	<0.00050	mg/L	0.002	mg/L
Arsenic by ICP	<0.180	mg/L	0.1	mg/L
Barium by ICP	0.330	mg/L	1.0	mg/L
Cadmium by ICP	<0.020	mg/L	0.01	mg/L
Chromium by ICP	<0.050	mg/L	0.05	mg/L
Lead by ICP	<0.250	mg/L	0.05	mg/L
Selenium by ICP	<0.300	mg/L	0.05	mg/L
Silver by ICP	<0.020	mg/L	0.05	mg/L

On Site Technologies

February 8, 1999

Ground Water Analytical Summary
Farmington B Com 1E
Unit O, Sec. 15 T29N, R13W

API Results

Monitoring Well #5

CATIONs						ANIONs					
PARAMETER		RESULTS	UNITOF MEASURE	WQCC Standards	UNITOF MEASURE	PARAMETER		RESULTS	UNITOF MEASURE	WQCC Standards	UNITOF MEASURE
Sodium	Na	230.0	mg/L			Chloride	Cl	340.0	mg/L	250.0	mg/L
Calcium	Ca	110.0	mg/L			Sulfate	SO_4	100.0	mg/L	600.0	mg/L
Magnesium	Mg	32.0	mg/L			Carbonate	CO_3	BDL	mg/L		
Potassium	K	12.0	mg/L			Bicarbonate	HCO_3	380.0	mg/L		
						Hydroxide	HO		mg/L		
						Conductivity					
						Total Dissolved Solids		1200.0	mg/L	1000.0	mg/L
						Fe		BDL	mg/L		
						pH		7.25		between 6 and 9	
						Resistively		6.7070		ohm-m	

Sample Date: September 15,1998

RCRA Metals
Test Method SW-846

PARAMETER	RESULTS	UNITS	WQCC	UNITS
Mercury by CVAA	<0.00050	mg/L	0.002	mg/L
Arsenic by ICP	<0.180	mg/L	0.1	mg/L
Barium by ICP	0.175	mg/L	1.0	mg/L
Cadmium by ICP	<0.020	mg/L	0.01	mg/L
Chromium by ICP	<0.050	mg/L	0.05	mg/L
Lead by ICP	<0.250	mg/L	0.05	mg/L
Selenium by ICP	<0.300	mg/L	0.05	mg/L
Silver by ICP	<0.020	mg/L	0.05	mg/L

On Site Technologies

February 8, 1999

Ground Water Analytical Summary
Farmington B Com 1E
Unit O, Sec. 15 T29N, R13W

API Results

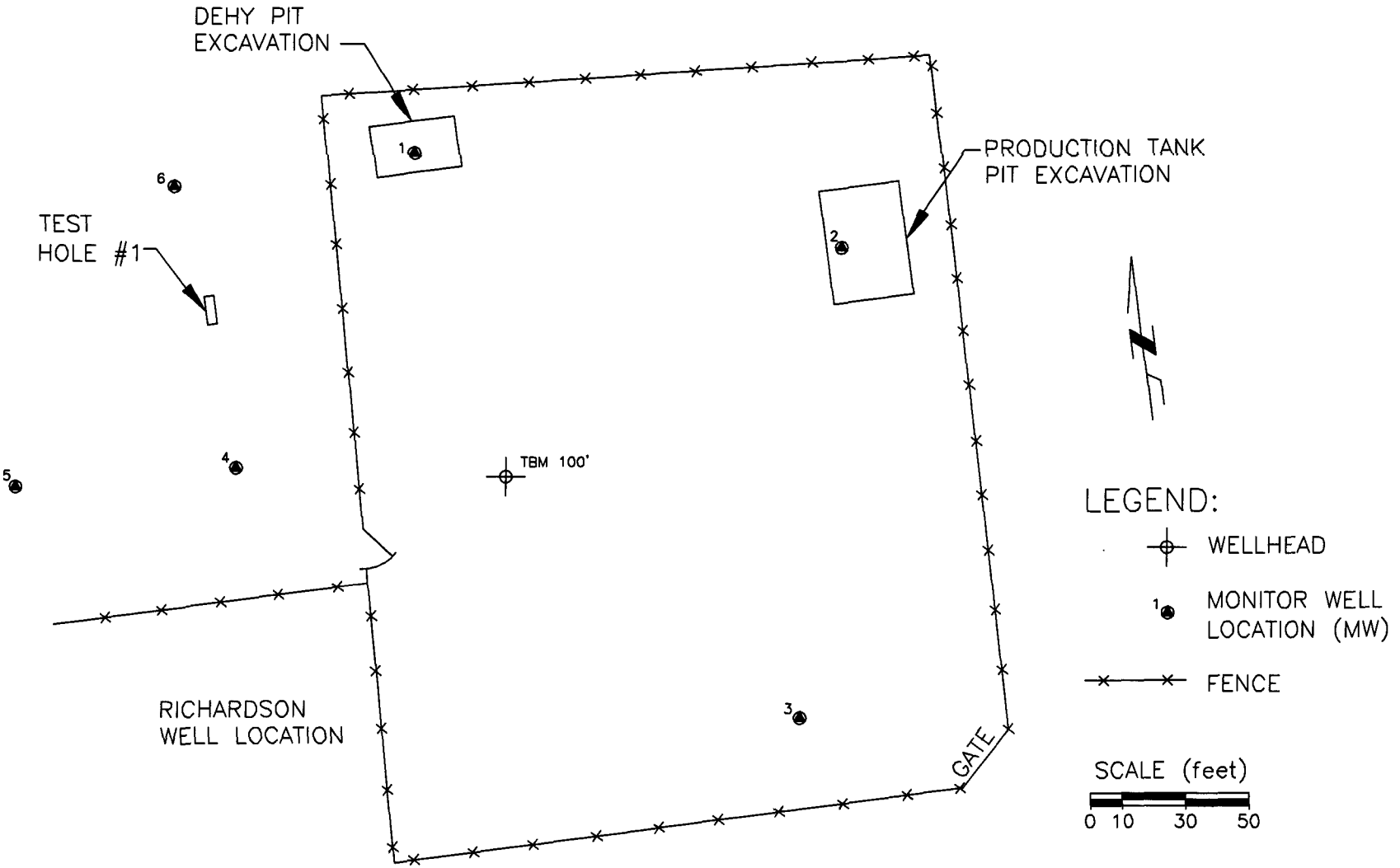
Monitoring Well #6

CATIONs						ANIONs				
PARAMETER		RESULTS	UNITOF MEASURE	WQCC Standards	UNITOF MEASURE	PARAMETER		RESULTS	UNITOF MEASURE	WQCC Standards	UNITOF MEASURE
Sodium	Na	98.0	mg/L			Chloride	Cl	130.0	mg/L	250.0	mg/L
Calcium	Ca	120.0	mg/L			Sulfate	SO_4	20.0	mg/L	600.0	mg/L
Magnesium	Mg	36.0	mg/L			Carbonate	CO_3	BDL	mg/L		
Potassium	K	8.6	mg/L			Bicarbonate	HCO_3	500.0	mg/L		
						Hydroxide	HO		mg/L		
						Conductivity					
						Total Dissolved Solids		910.0	mg/L	1000.0	mg/L
						Fe		BDL	mg/L		mg/L
						pH		7.11		between 6 and 9	
						Resistively		9.6060		ohm-m	

Sample Date: September 15, 1998

RCRA Metals
Test Method SW-846

PARAMETER	RESULTS	UNITS	WQCC	UNITS
Mercury by CVAA	<0.00050	mg/L	0.002	mg/L
Arsenic by ICP	<0.180	mg/L	0.1	mg/L
Barium by ICP	0.588	mg/L	1.0	mg/L
Cadmium by ICP	<0.020	mg/L	0.01	mg/L
Chromium by ICP	<0.050	mg/L	0.05	mg/L
Lead by ICP	<0.250	mg/L	0.05	mg/L
Selenium by ICP	<0.300	mg/L	0.05	mg/L
Silver by ICP	<0.020	mg/L	0.05	mg/L



NOTES:
MW #4,5,6 INSTALLED 8/98.

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APPROVED:	DATE:
DRWN BY: MED	DATE: 8/26/98
CHK'D BY:	DATE:

ON SITE
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Limited Partnership
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PH. (505) 325-5667
FAX (505) 327-1496

SITE PLAN

CONOCO B COM #1E

Farmington, NM

PROJECT NO: 4-1374 | SHEET: 1 OF 7

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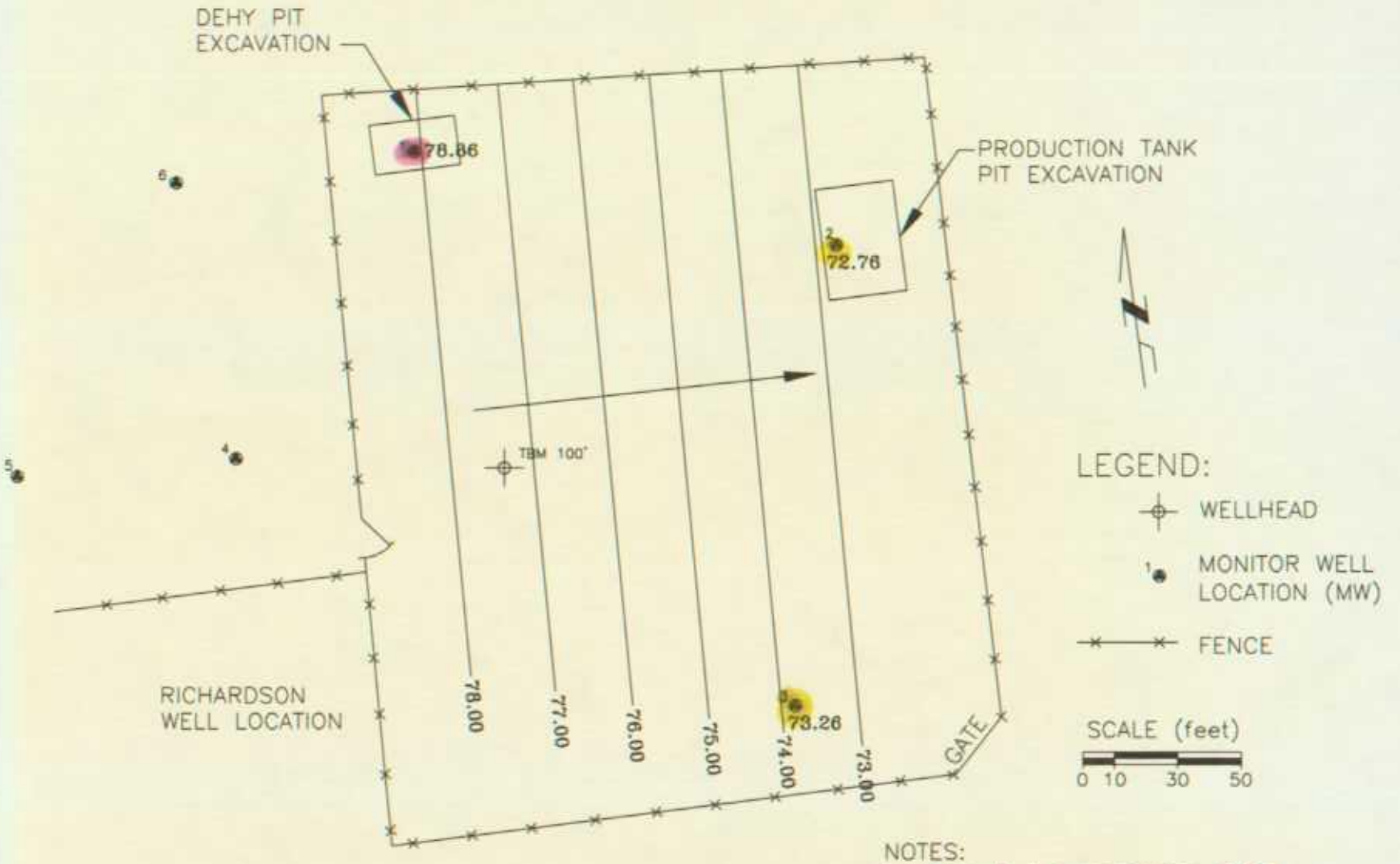

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1. MW #4,5,6 INSTALLED 8/98.

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DRWN BY: MED	DATE: 2/8/99
CHK'D BY:	DATE:

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SITE PLAN
3/18/98

CONOCO B COM #1E
Farmington, NM

PROJECT NO: 4-1374 | SHEET: 2 OF 7

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1. MW #4,5,6 INSTALLED 8/98.

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CHK'D BY:	DATE:

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SITE PLAN
6/12/98

CONOCO B COM #1E
Farmington, NM

PROJECT NO: 4-1374 | SHEET: 3 OF 7

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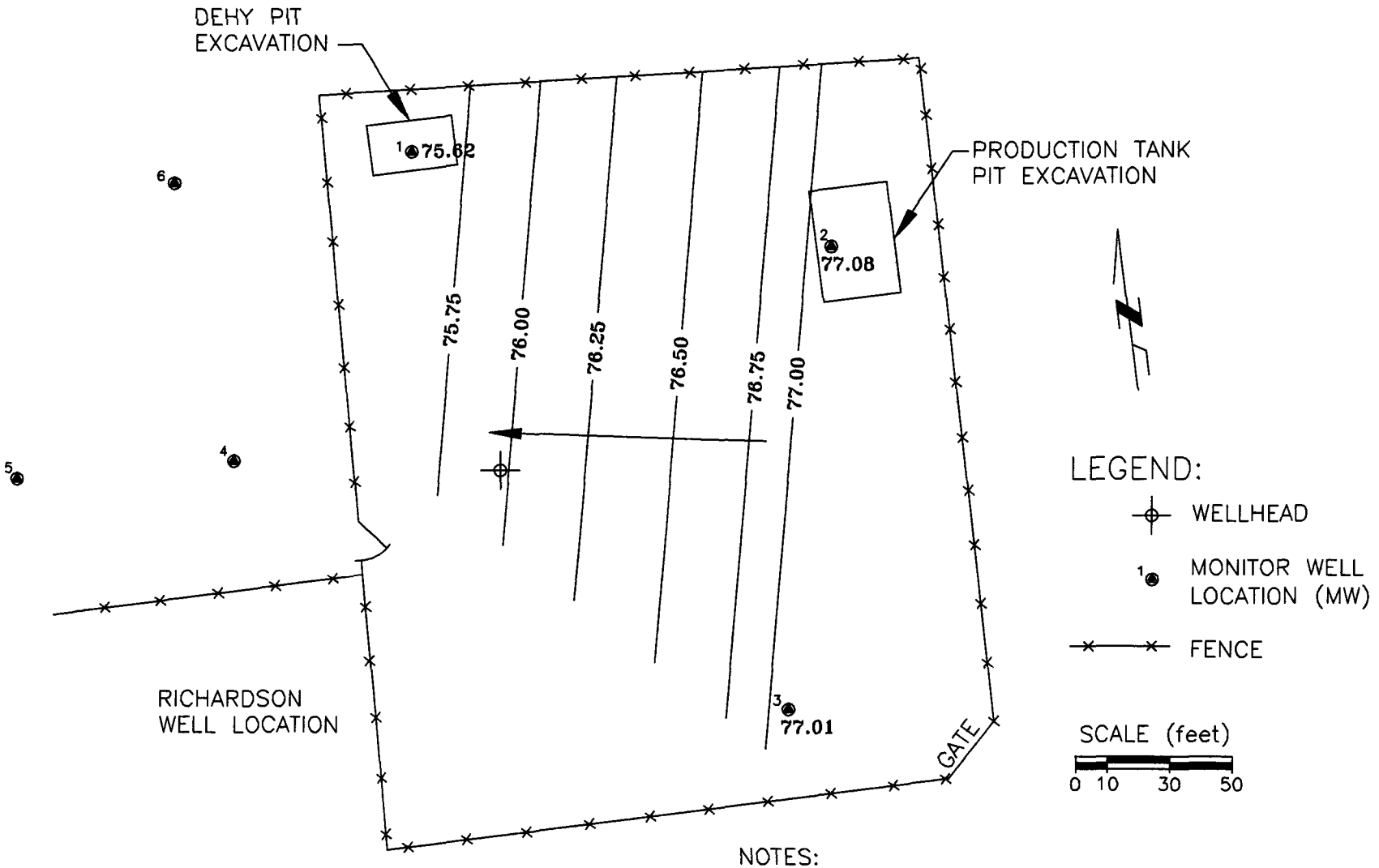

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7/13/98

CONOCO B COM #1E
Farmington, NM

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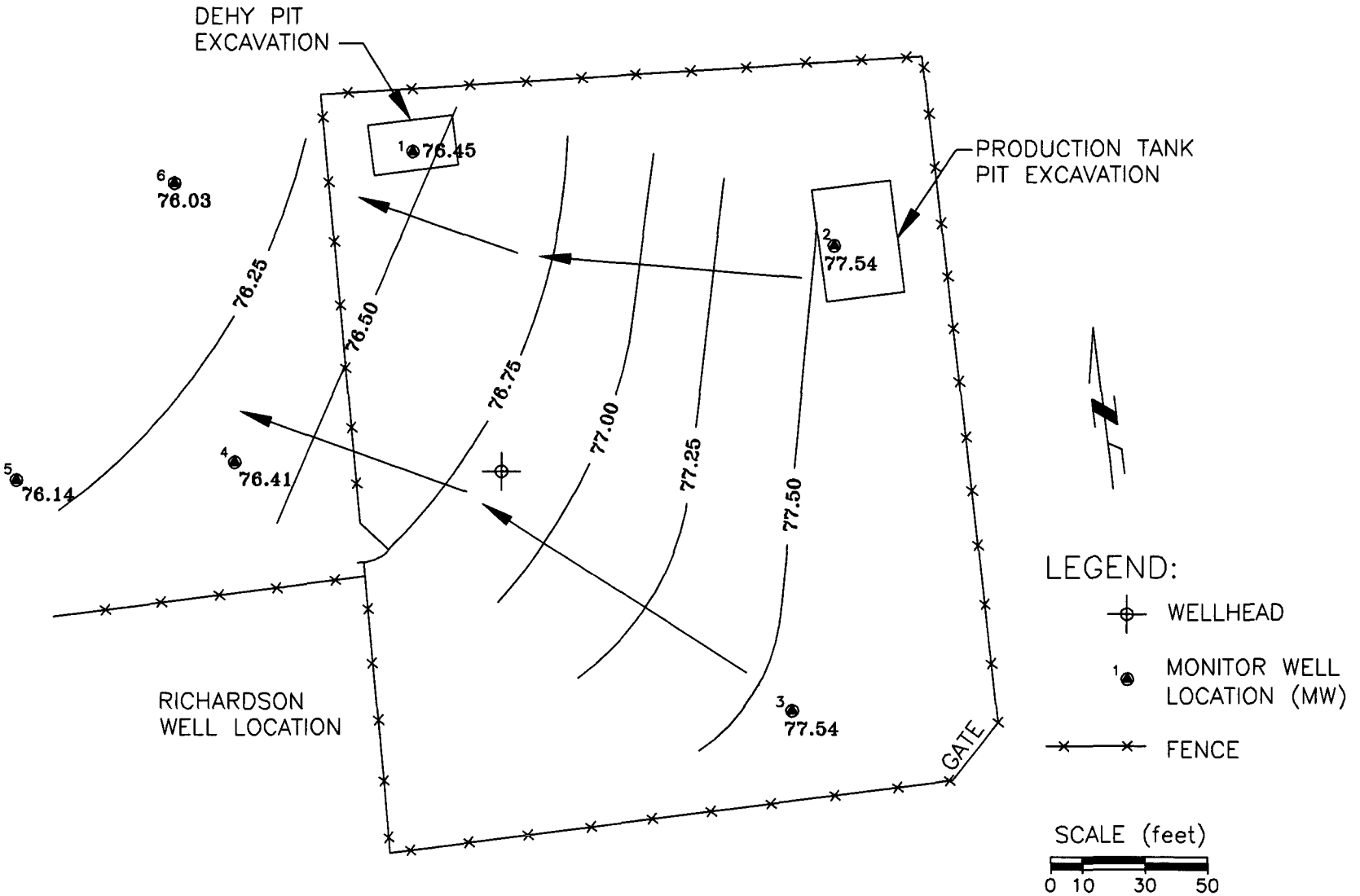

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SITE PLAN

8/25/98

CONOCO B COM #1E

Farmington, NM

PROJECT NO: 4-1374 | SHEET: 5 OF 7

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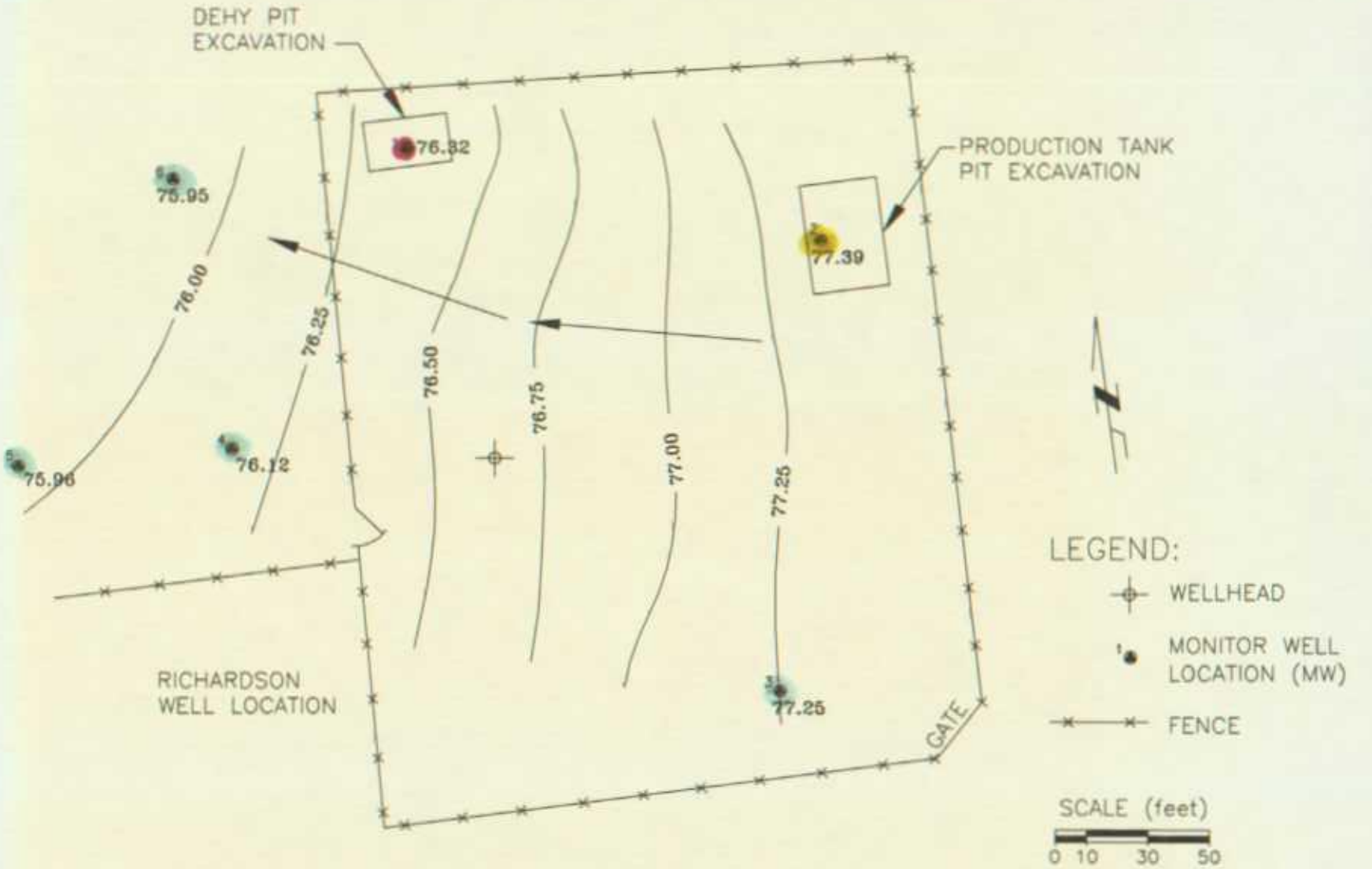

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SITE PLAN
9/15/98

CONOCO B COM #1E
Farmington, NM

PROJECT NO: 4-1374 | SHEET: 6 OF 7

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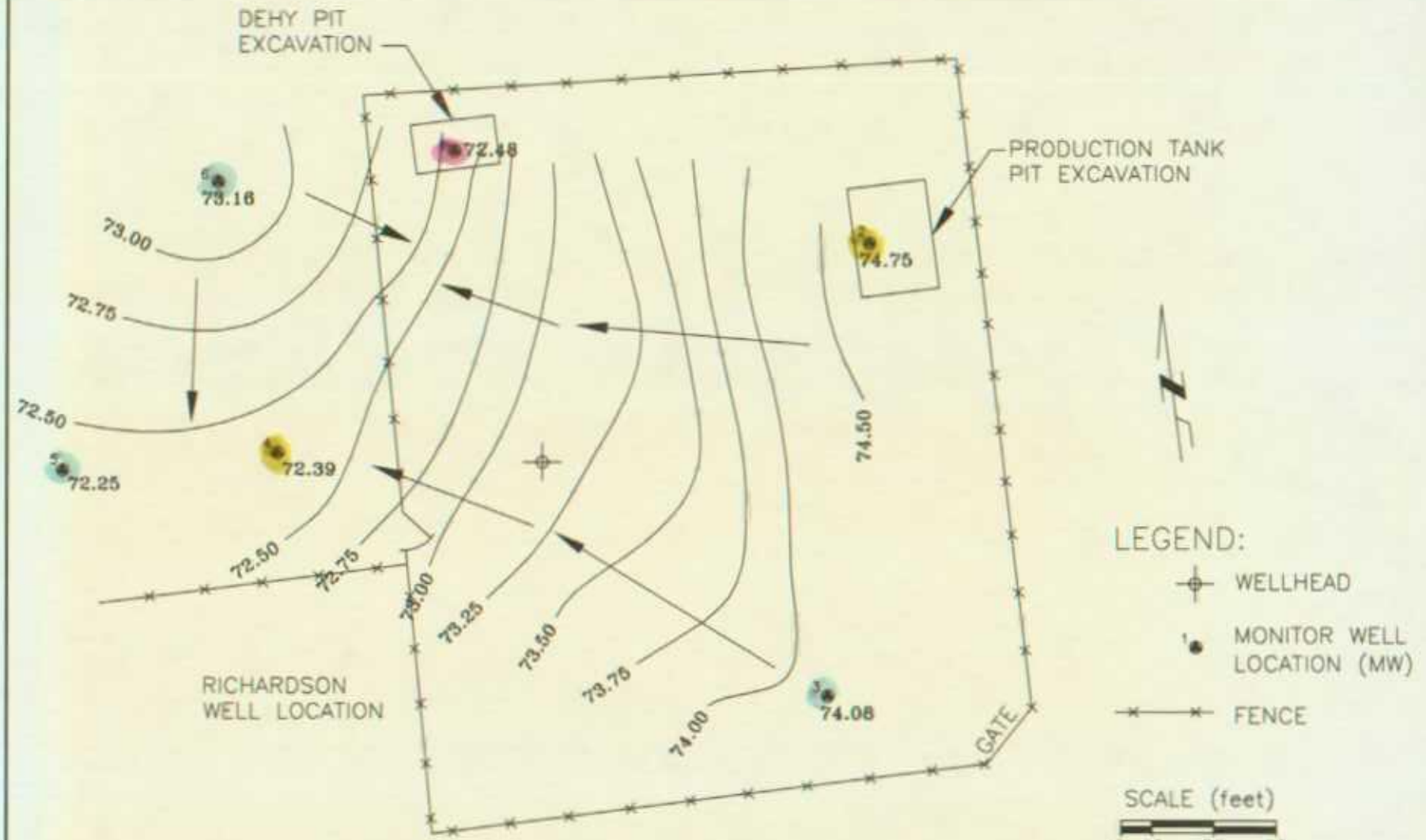

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612 E. MURRAY DR.
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SITE PLAN

12/29/98

CONOCO B COM #1E

Farmington, NM

PROJECT NO: 4-1374 | SHEET: 7 OF 7

41374COA7

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

June 22, 1998

Larry Trujillo
On Site Technologies, Limited Partnership
612 E. Murray Drive
P.O. Box 2606
Farmington, NM 87499
TEL: (505) 325-5667
FAX (505) 327-1496

RE: 4-1374; Conoco Order No.: 9806055

Dear Larry Trujillo,

On Site Technologies, LTD. received 2 samples on 6/12/98 for the analyses presented in the following report.

The Samples were analyzed for the following tests:
BTEX (SW8020A)

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

David Cox

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

On Site Technologies, LTD.

Date: *22-Jun-98*

CLIENT: On Site Technologies, Limited Partnership
Project: 4-1374; Conoco
Lab Order: 9806055

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: *22-Jun-98*

Client:	On Site Technologies, Limited Partnership	**Client Sample Info:**	Farmington B-Com-1E
Work Order:	9806055	**Client Sample ID:**	MW #3
Lab ID:	9806055-01A **Matrix:** AQUEOUS	**Collection Date:**	6/12/98 10:12:00 AM
Project:	4-1374; Conoco	**COC Record:**	5148

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		**SW8020A**				Analyst: **DC**
Benzene	ND	0.5		µg/L	1	6/16/98
Toluene	ND	0.5		µg/L	1	6/16/98
Ethylbenzene	0.5	0.5		µg/L	1	6/16/98
m,p-Xylene	1.4	1		µg/L	1	6/16/98
o-Xylene	0.6	0.5		µg/L	1	6/16/98

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

P.O. BOX 2606 • FARMINGTON, NM 87499

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: *22-Jun-98*

Client:	On Site Technologies, Limited Partnership	**Client Sample Info:**	Farmington B-Com-1E
Work Order:	9806055	**Client Sample ID:**	MW #2
Lab ID:	9806055-02A **Matrix:** AQUEOUS	**Collection Date:**	6/12/98 10:39:00 AM
Project:	4-1374; Conoco	**COC Record:**	5148

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		**SW8020A**				Analyst: **DC**
Benzene	0.8	0.5		µg/L	1	6/16/98
Toluene	2.7	0.5		µg/L	1	6/16/98
Ethylbenzene	32	0.5		µg/L	1	6/16/98
m,p-Xylene	150	1		µg/L	1	6/16/98
o-Xylene	21	0.5		µg/L	1	6/16/98

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

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

On Site Technologies, LTD.

Date: *22-Jun-98*

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9806055
Project: 4-1374; Conoco

QC SUMMARY REPORT

Method Blank

Sample ID: **MB1** Batch ID: **GC-1_980616** Test Code: **SW8020A** Units: **µg/L** Analysis Date: **6/16/98** Prep Date:

Client ID: **9806055** Run ID: **GC-1_980616A** SeqNo: **3136**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.0478	0.5									J
Ethylbenzene	ND	0.5									
m,p-Xylene	.1193	1									J
Methyl tert-Butyl Ether	ND	1									
o-Xylene	ND	0.5									
Toluene	.0988	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-Jun-98*

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9806055
Project: 4-1374; Conoco

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **9806052-02AMS** Batch ID: **GC-1_980616** Test Code: **SW8020A** Units: **µg/L** Analysis Date: **6/16/98** Prep Date:
Client ID: **9806055** Run ID: **GC-1_980616A** SeqNo: **3137**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1823	10	800	1021	100.3%	56	128				
Ethylbenzene	1178	10	800	404.6	96.7%	78	107				
m,p-Xylene	2263	20	1600	739.2	95.2%	67	118				
Methyl tert-Butyl Ether	776.8	20	800	22.28	94.3%	70	130				
o-Xylene	1042	10	800	243.9	99.8%	78	107				
Toluene	1298	10	800	507.9	98.8%	74	116				

Sample ID: **9806052-02AMSD** Batch ID: **GC-1_980616** Test Code: **SW8020A** Units: **µg/L** Analysis Date: **6/16/98** Prep Date:
Client ID: **9806055** Run ID: **GC-1_980616A** SeqNo: **3138**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1771	10	800	1021	93.8%	56	128	1823	2.9%	12	
Ethylbenzene	1146	10	800	404.6	92.7%	78	107	1178	2.7%	11	
m,p-Xylene	2188	20	1600	739.2	90.6%	67	118	2263	3.3%	10	
Methyl tert-Butyl Ether	760.7	20	800	22.28	92.3%	70	130	776.8	2.1%	15	
o-Xylene	1026	10	800	243.9	97.8%	78	107	1042	1.5%	14	
Toluene	1264	10	800	507.9	94.5%	74	116	1298	2.7%	14	

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-Jun-98*

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9806055
Project: 4-1374; Conoco

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS WATER** Batch ID: **GC-1_980616** Test Code: **SW8020A** Units: **µg/L** Analysis Date: **6/16/98** Prep Date:

Client ID: **9806055** Run ID: **GC-1_980616A** SeqNo: **3135**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	41.01	0.5	40	0.0478	102.4%	56	128				
Ethylbenzene	41.79	0.5	40	0	104.5%	78	107				
m,p-Xylene	79.51	1	80	0.1193	99.2%	67	118				
Methyl tert-Butyl Ether	44.96	1	40	0	112.4%	70	130				
o-Xylene	40.79	0.5	40	0	102.0%	78	107				
Toluene	40.42	0.5	40	0.0988	100.8%	74	116				

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-Jun-98*

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9806055
Project: 4-1374; Conoco

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: **CCV1 QC0529/30** Batch ID: **GC-1_980616** Test Code: **SW8020A** Units: **µg/L** Analysis Date: **6/16/98** Prep Date:

Client ID: **9806055** Run ID: **GC-1_980616A** SeqNo: **3132**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.71	0.5	20	0	108.5%	85	115				
Ethylbenzene	22.4	0.5	20	0	112.0%	85	115				
m,p-Xylene	42.29	1	40	0	105.7%	85	115				
Methyl tert-Butyl Ether	23.12	1	20	0	115.6%	85	115				S
o-Xylene	21.74	0.5	20	0	108.7%	85	115				
Toluene	21.52	0.5	20	0	107.6%	85	115				
1,4-Difluorobenzene	93.47	0	100	0	93.5%	70	130				
4-Bromochlorobenzene	85.45	0	100	0	85.4%	70	130				
Fluorobenzene	93.66	0	100	0	93.7%	70	130				

Sample ID: **CCV2 QC0529/30** Batch ID: **GC-1_980616** Test Code: **SW8020A** Units: **µg/L** Analysis Date: **6/16/98** Prep Date:

Client ID: **9806055** Run ID: **GC-1_980616A** SeqNo: **3133**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.55	0.5	20	0	102.8%	85	115				
Ethylbenzene	21.3	0.5	20	0	106.5%	85	115				
m,p-Xylene	39.94	1	40	0	99.9%	85	115				
Methyl tert-Butyl Ether	21.29	1	20	0	106.5%	85	115				
o-Xylene	21.45	0.5	20	0	107.2%	85	115				
Toluene	20.47	0.5	20	0	102.3%	85	115				
1,4-Difluorobenzene	93.62	0	100	0	93.6%	70	130				
4-Bromochlorobenzene	83.56	0	100	0	83.6%	70	130				
Fluorobenzene	93.34	0	100	0	93.3%	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: On Site Technologies, Limited Partnership
Work Order: 9806055
Project: 4-1374; Conoco

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV3 QC0529/30** Batch ID: **GC-1_980616** Test Code: **SW8020A** Units: **µg/L** Analysis Date: **6/16/98** Prep Date:

Client ID: **9806055** Run ID: **GC-1_980616A** SeqNo: **3134**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	40.28	0.5	40	0	100.7%	85	115				
Ethylbenzene	40.18	0.5	40	0	100.5%	85	115				
m,p-Xylene	77.38	1	80	0	96.7%	85	115				
Methyl tert-Butyl Ether	37.36	1	40	0	93.4%	85	115				
o-Xylene	40.35	0.5	40	0	100.9%	85	115				
Toluene	40.24	0.5	40	0	100.6%	85	115				
1,4-Difluorobenzene	92.6	0	100	0	92.6%	70	130				
4-Bromochlorobenzene	80.3	0	100	0	80.3%	70	130				
Fluorobenzene	93.09	0	100	0	93.1%	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: 22-Jun-98

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9806055
Project: 4-1374; Conoco
Test No: SW8020A

QC SUMMARY REPORT
SURROGATE RECOVERIES

BTEX

Sample ID	14FBZ	4BCBZ	FLBZ					
9806014-03A	92.3	86.2	93					
9806014-04A	91.9	86.7	92.8					
9806014-05A	92	86.3	93.2					
9806043-03A	93.3	84	94.6					
9806043-04A	93.2	82.9	94.6					
9806044-03A	93.8	86.5	94					
9806044-04A	92.3	85.8	95.6					
9806044-05A	93.3	86.1	94.2					
9806045-01A	90.2	84.9	91.2					
9806052-01A	90.4	83.2	90.4					
9806052-02A	92.4	75.5	93.2					
9806052-02AMS	91.9	86.3	92.5					
9806052-02AMSD	92.4	85.4	92.6					
9806052-03A	93.5	85.8	94.6					
9806053-01A	99.2	103	125					
9806053-02A	93.4	82.8	94.1					
9806053-03A	93.5	82.4	94.1					
9806054-01A	93.3	82.3	94.3					
9806054-02A	93.6	81.9	94					
9806055-01A	94	81.1	93.8					
9806055-02A	91.8	81.8	93.8					
9806058-01A	93.8	85.9	94.1					
9806058-02A	97.8	82.9	93.9					
9806063-01A	94.8	84	94.4					
9806063-02A	93.6	87.3	94.6					
CCV1 QC0529/30	93.5	85.4	93.7					
CCV2 QC0529/30	93.6	83.6	93.3					

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

*** Surrogate recovery outside acceptance limits**

1

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9806055
Project: 4-1374; Conoco
Test No: SW8020A

QC SUMMARY REPORT
SURROGATE RECOVERIES

BTEX

Sample ID	14FBZ	4BCBZ	FLBZ					
CCV3 QC0529/30	92.6	80.3	93.1					
LCS WATER	93.8	85.4	93.7					
MB1	93.6	84.4	94.4					

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

*** Surrogate recovery outside acceptance limits**

CHAIN OF CUSTODY RECORD

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

Date: _____ Page 1 of 1

Purchase Order No.:	Job No.		
SEND INVOICE TO: Name		REPORT RESULTS TO: Name	Title
Company	Dept.	Company	
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No.	Telefax No.
Sampling Location:			
Sampler:			

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	ANALYSIS REQUESTED	LAB ID

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	Special Instructions:
Authorized by: _____ Date _____ (Client Signature Must Accompany Request)				

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

CHAIN OF CUSTODY RECORD

ON SITE

TECHNOLOGIES, LTD.

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

Date: _____ Page _____ of _____

Purchase Order No.:	Job No.		
SEND INVOICE TO: Name		REPORT RESULTS TO: Name	Title
Company	Dept.	Company	
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No.	Telefax No.

Sampling Location:

Sampler:

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	ANALYSIS REQUESTED	LAB ID

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:

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Rush	24-48 Hours	10 Working Days	Special Instructions:

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

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

October 13, 1998

Larry Trujillo
On Site Technologies, Limited Partnership
612 E. Murray Drive
P.O. Box 2606
Farmington, NM 87499
TEL: (505) 325-5667
FAX (505) 327-1496

RE: 4-1374; Conoco

Order No.: 9809035

Dear Larry Trujillo,

On Site Technologies, LTD. received 5 samples on 9/15/98 for the analyses presented in the following report.

The Samples were analyzed for the following tests:

- Alkalinity, Total (M2320 B)
- AQPREP TOTAL METALS: ICP (SW3010A)
- BTEX (SW8020A)
- Calcium by AA (SW7140)
- Chloride (M4500-Cl C.)
- Hardness, Total (E130.1)
- ICP METALS-RCRA, Total (SW6010A)
- Iron, Dissolved (SW7380)
- Magnesium by AA (SW7450)
- pH (E150.1)
- Potassium by AA (SW7610)
- Resistivity (M2510 C)
- Sodium by AA (SW7770)
- Specific Gravity (M2710 F)
- Sulfate (M4500-SO4 D)
- Total Dissolved Solids (M2540 C.)

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

On Site Technologies, LTD. **Date:** *13-Oct-98*

CLIENT: On Site Technologies, Limited Partnership
Project: 4-1374; Conoco
Lab Order: 9809035

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

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OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: *13-Oct-98*

Client:	On Site Technologies, Limited Partnership	**Client Sample Info:**	B-Com-1E
Work Order:	9809035	**Client Sample ID:**	MW-2
Lab ID:	9809035-01A **Matrix:** AQUEOUS	**Collection Date:**	9/15/98 2:48:00 PM
Project:	4-1374; Conoco	**COC Record:**	5557

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		**SW8020A**				Analyst: **DC**
Benzene	1.3	1		µg/L	1	9/21/98
Toluene	2.5	1		µg/L	1	9/21/98
Ethylbenzene	39	1		µg/L	1	9/21/98
m,p-Xylene	30	2		µg/L	1	9/21/98
o-Xylene	3.3	1		µg/L	1	9/21/98

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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ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: *13-Oct-98*

Client:	On Site Technologies, Limited Partnership	**Client Sample Info:**	B-Com-1E
Work Order:	9809035	**Client Sample ID:**	MW-#3
Lab ID:	9809035-02A **Matrix:** AQUEOUS	**Collection Date:**	9/15/98 2:44:00 PM
Project:	4-1374; Conoco	**COC Record:**	5557

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		**SW8020A**				Analyst: **DC**
Benzene	ND	1		µg/L	1	9/21/98
Toluene	ND	1		µg/L	1	9/21/98
Ethylbenzene	ND	1		µg/L	1	9/21/98
m,p-Xylene	ND	2		µg/L	1	9/21/98
o-Xylene	ND	1		µg/L	1	9/21/98

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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OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: *13-Oct-98*

Client:	On Site Technologies, Limited Partnership	**Client Sample Info:**	B-Com-1E
Work Order:	9809035	**Client Sample ID:**	MW #4
Lab ID:	9809035-03A **Matrix:** AQUEOUS	**Collection Date:**	9/15/98 2:30:00 PM
Project:	4-1374; Conoco	**COC Record:**	5557

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		**SW8020A**				Analyst: **DC**
Benzene	ND	1		µg/L	1	9/22/98
Toluene	ND	1		µg/L	1	9/22/98
Ethylbenzene	ND	1		µg/L	1	9/22/98
m,p-Xylene	ND	2		µg/L	1	9/22/98
o-Xylene	ND	1		µg/L	1	9/22/98

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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OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: *13-Oct-98*

Client:	On Site Technologies, Limited Partnership	**Client Sample Info:**	B-Com-1E
Work Order:	9809035	**Client Sample ID:**	MW #4
Lab ID:	9809035-03C **Matrix:** AQUEOUS	**Collection Date:**	9/15/98 2:30:00 PM
Project:	4-1374; Conoco	**COC Record:**	5557

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
CALCIUM BY AA		**SW7140**				Analyst: **HR**
Calcium	81	10		mg/L	40	10/2/98
IRON, DISSOLVED		**SW7380**				Analyst: **HR**
Iron	ND	0.25		mg/L	1	10/5/98
POTASSIUM BY AA		**SW7610**				Analyst: **HR**
Potassium	8.6	1.2		mg/L	5	10/2/98
MAGNESIUM BY AA		**SW7450**				Analyst: **HR**
Magnesium	24	2.5		mg/L	10	10/2/98
SODIUM BY AA		**SW7770**				Analyst: **HR**
Sodium	230	25		mg/L	100	10/2/98
ALKALINITY, TOTAL		**M2320 B**				Analyst: **HR**
Alkalinity, Bicarbonate (As CaCO3)	370	5		mg/L CaCO3	1	9/21/98
Alkalinity, Carbonate (As CaCO3)	ND	5		mg/L CaCO3	1	9/21/98
Alkalinity, Total (As CaCO3)	370	5		mg/L CaCO3	1	9/21/98
CHLORIDE		**M4500-CL C.**				Analyst: **HR**
Chloride	280	10		mg/L	1	9/25/98
HARDNESS, TOTAL		**E130.1**				Analyst: **HR**
Hardness (As CaCO3)	300	1		mg/L	1	10/5/98
PH		**E150.1**				Analyst: **HR**
pH	7.33	2		pH units	1	9/21/98
RESISTIVITY		**M2510 C**				Analyst: **HR**
Resistivity	7.7940	0.001		ohm-m	1	9/21/98
SPECIFIC GRAVITY		**M2710 F**				Analyst: **HR**
Specific Gravity	1.001	1			1	10/5/98
SULFATE		**M4500-SO4 D**				Analyst: **HR**
Sulfate	95	5		mg/L	1	9/30/98
TOTAL DISSOLVED SOLIDS		**M2540 C.**				Analyst: **HR**
Total Dissolved Solids (Residue, Filterable)	1100	40		mg/L	1	10/5/98

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

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OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: *13-Oct-98*

Client:	On Site Technologies, Limited Partnership	**Client Sample Info:**	B-Com-1E
Work Order:	9809035	**Client Sample ID:**	MW #5
Lab ID:	9809035-04A **Matrix:** AQUEOUS	**Collection Date:**	9/15/98 2:35:00 PM
Project:	4-1374; Conoco	**COC Record:**	5557

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		**SW8020A**				Analyst: **DC**
Benzene	ND	1		µg/L	1	9/22/98
Toluene	ND	1		µg/L	1	9/22/98
Ethylbenzene	ND	1		µg/L	1	9/22/98
m,p-Xylene	ND	2		µg/L	1	9/22/98
o-Xylene	ND	1		µg/L	1	9/22/98

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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OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: *13-Oct-98*

Client:	On Site Technologies, Limited Partnership	**Client Sample Info:**	B-Com-1E
Work Order:	9809035	**Client Sample ID:**	MW #5
Lab ID:	9809035-04C **Matrix:** AQUEOUS	**Collection Date:**	9/15/98 2:35:00 PM
Project:	4-1374; Conoco	**COC Record:**	5557

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
CALCIUM BY AA		**SW7140**				Analyst: **HR**
Calcium	110	12		mg/L	50	10/2/98
IRON, DISSOLVED		**SW7380**				Analyst: **HR**
Iron	ND	0.25		mg/L	1	10/5/98
POTASSIUM BY AA		**SW7610**				Analyst: **HR**
Potassium	12	1.2		mg/L	5	10/2/98
MAGNESIUM BY AA		**SW7450**				Analyst: **HR**
Magnesium	32	5		mg/L	20	10/2/98
SODIUM BY AA		**SW7770**				Analyst: **HR**
Sodium	230	25		mg/L	100	10/2/98
ALKALINITY, TOTAL		**M2320 B**				Analyst: **HR**
Alkalinity, Bicarbonate (As CaCO3)	380	5		mg/L CaCO3	1	9/21/98
Alkalinity, Carbonate (As CaCO3)	ND	5		mg/L CaCO3	1	9/21/98
Alkalinity, Total (As CaCO3)	380	5		mg/L CaCO3	1	9/21/98
CHLORIDE		**M4500-CL C.**				Analyst: **HR**
Chloride	340	10		mg/L	1	9/25/98
HARDNESS, TOTAL		**E130.1**				Analyst: **HR**
Hardness (As CaCO3)	412	1		mg/L	1	10/5/98
PH		**E150.1**				Analyst: **HR**
pH	7.25	2		pH units	1	9/21/98
RESISTIVITY		**M2510 C**				Analyst: **HR**
Resistivity	6.7070	0.001		ohm-m	1	9/21/98
SPECIFIC GRAVITY		**M2710 F**				Analyst: **HR**
Specific Gravity	1.001	1			1	10/5/98
SULFATE		**M4500-SO4 D**				Analyst: **HR**
Sulfate	100	5		mg/L	1	9/30/98
TOTAL DISSOLVED SOLIDS		**M2540 C.**				Analyst: **HR**
Total Dissolved Solids (Residue, Filterable)	1200	40		mg/L	1	10/5/98

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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OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: *13-Oct-98*

Client:	On Site Technologies, Limited Partnership	**Client Sample Info:**	B-Com-1E
Work Order:	9809035	**Client Sample ID:**	MW #6
Lab ID:	9809035-05A **Matrix:** AQUEOUS	**Collection Date:**	9/15/98 2:26:00 PM
Project:	4-1374; Conoco	**COC Record:**	5557

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		**SW8020A**				Analyst: **DC**
Benzene	ND	1		µg/L	1	9/22/98
Toluene	ND	1		µg/L	1	9/22/98
Ethylbenzene	ND	1		µg/L	1	9/22/98
m,p-Xylene	ND	2		µg/L	1	9/22/98
o-Xylene	ND	1		µg/L	1	9/22/98

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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OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: *13-Oct-98*

Client:	On Site Technologies, Limited Partnership	**Client Sample Info:**	B-Com-1E
Work Order:	9809035	**Client Sample ID:**	MW #6
Lab ID:	9809035-05C **Matrix:** AQUEOUS	**Collection Date:**	9/15/98 2:26:00 PM
Project:	4-1374; Conoco	**COC Record:**	5557

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
CALCIUM BY AA		**SW7140**				Analyst: **HR**
Calcium	120	12		mg/L	50	10/2/98
IRON, DISSOLVED		**SW7380**				Analyst: **HR**
Iron	ND	0.25		mg/L	1	10/5/98
POTASSIUM BY AA		**SW7610**				Analyst: **HR**
Potassium	8.6	1.2		mg/L	5	10/2/98
MAGNESIUM BY AA		**SW7450**				Analyst: **HR**
Magnesium	36	5		mg/L	20	10/2/98
SODIUM BY AA		**SW7770**				Analyst: **HR**
Sodium	98	12		mg/L	50	10/2/98
ALKALINITY, TOTAL		**M2320 B**				Analyst: **HR**
Alkalinity, Bicarbonate (As CaCO3)	500	5		mg/L CaCO3	1	9/21/98
Alkalinity, Carbonate (As CaCO3)	ND	5		mg/L CaCO3	1	9/21/98
Alkalinity, Total (As CaCO3)	500	5		mg/L CaCO3	1	9/21/98
CHLORIDE		**M4500-CL C.**				Analyst: **HR**
Chloride	130	10		mg/L	1	9/25/98
HARDNESS, TOTAL		**E130.1**				Analyst: **HR**
Hardness (As CaCO3)	436	1		mg/L	1	10/5/98
PH		**E150.1**				Analyst: **HR**
pH	7.11	2		pH units	1	9/21/98
RESISTIVITY		**M2510 C**				Analyst: **HR**
Resistivity	9.6060	0.001		ohm-m	1	9/21/98
SPECIFIC GRAVITY		**M2710 F**				Analyst: **HR**
Specific Gravity	1.002	1			1	10/5/98
SULFATE		**M4500-SO4 D**				Analyst: **HR**
Sulfate	20	5		mg/L	1	9/30/98
TOTAL DISSOLVED SOLIDS		**M2540 C.**				Analyst: **HR**
Total Dissolved Solids (Residue, Filterable)	910	40		mg/L	1	10/5/98

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 -

On Site Technologies, LTD.

Date: *13-Oct-98*

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9809035
Project: 4-1374; Conoco

QC SUMMARY REPORT

Method Blank

Sample ID: **MB1** Batch ID: **GC-1_980921** Test Code: **SW8020A** Units: **µg/L** Analysis Date: **9/21/98** Prep Date:
Client ID: **9809035** Run ID: **GC-1_980921A** SeqNo: **6730**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.0421	1									J
Ethylbenzene	.0623	1									J
m,p-Xylene	.1705	2									J
o-Xylene	.1247	1									J
Toluene	.1509	1									J

Sample ID: **MB1** Batch ID: **GC-1_980922** Test Code: **SW8020A** Units: **µg/L** Analysis Date: **9/22/98** Prep Date:
Client ID: **9809035** Run ID: **GC-1_980922A** SeqNo: **6744**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.0445	1									J
Ethylbenzene	ND	1									
m,p-Xylene	ND	2									
o-Xylene	.0627	1									J
Toluene	.1011	1									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: *13-Oct-98*

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9809035
Project: 4-1374; Conoco

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **9809031-02AMS** Batch ID: **GC-1_980921** Test Code: **SW8020A** Units: **µg/L** Analysis Date: **9/21/98** Prep Date:
Client ID: **9809035** Run ID: **GC-1_980921A** SeqNo: **6731**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	191.1	5	200	0.4255	95.3%	56	128				
Ethylbenzene	211.5	5	200	0.4985	105.5%	78	107				
m,p-Xylene	414.5	10	400	2.556	103.0%	67	118				
o-Xylene	201.8	5	200	0.3315	100.8%	78	107				
Toluene	204.9	5	200	1.194	101.8%	74	116				

Sample ID: **9809031-02AMSD** Batch ID: **GC-1_980921** Test Code: **SW8020A** Units: **µg/L** Analysis Date: **9/21/98** Prep Date:
Client ID: **9809035** Run ID: **GC-1_980921A** SeqNo: **6732**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	184.1	5	200	0.4255	91.8%	56	128	191.1	3.7%	12	
Ethylbenzene	206.4	5	200	0.4985	103.0%	78	107	211.5	2.4%	11	
m,p-Xylene	404.8	10	400	2.556	100.6%	67	118	414.5	2.4%	10	
o-Xylene	196.7	5	200	0.3315	98.2%	78	107	201.8	2.6%	14	
Toluene	199.3	5	200	1.194	99.1%	74	116	204.9	2.7%	14	

Sample ID: **9809055-03AMS** Batch ID: **GC-1_980922** Test Code: **SW8020A** Units: **µg/L** Analysis Date: **9/22/98** Prep Date:
Client ID: **9809035** Run ID: **GC-1_980922A** SeqNo: **6745**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	185.3	5	200	1.291	92.0%	56	128				
Ethylbenzene	201.4	5	200	3.72	98.9%	78	107				
m,p-Xylene	416.4	10	400	23.92	98.1%	67	118				
o-Xylene	205.7	5	200	10.49	97.6%	78	107				
Toluene	200.6	5	200	9.649	95.5%	74	116				

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: On Site Technologies, Limited Partnership
Work Order: 9809035
Project: 4-1374; Conoco

QC SUMMARY REPORT
Sample Matrix Spike Duplicate

Sample ID: **9809055-03AMSD** Batch ID: **GC-1_980922** Test Code: **SW8020A** Units: **µg/L** Analysis Date: **9/22/98** Prep Date:
Client ID: **9809035** Run ID: **GC-1_980922A** SeqNo: **6746**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	180.8	5	200	1.291	89.8%	56	128	185.3	2.5%	12	
Ethylbenzene	193.3	5	200	3.72	94.8%	78	107	201.4	4.1%	11	
m,p-Xylene	406.1	10	400	23.92	95.6%	67	118	416.4	2.5%	10	
o-Xylene	204.2	5	200	10.49	96.9%	78	107	205.7	0.7%	14	
Toluene	197.3	5	200	9.649	93.8%	74	116	200.6	1.7%	14	

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: *13-Oct-98*

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9809035
Project: 4-1374; Conoco

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS WATER** Batch ID: **GC-1_980921** Test Code: **SW8020A** Units: **µg/L** Analysis Date: **9/21/98** Prep Date:
Client ID: **9809035** Run ID: **GC-1_980921A** SeqNo: **6729**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	39.51	1	40	0.0421	98.7%	56	128				
Ethylbenzene	43.12	1	40	0.0623	107.6%	78	107				S
m,p-Xylene	85.18	2	80	0.1705	106.3%	67	118				
o-Xylene	42.33	1	40	0.1247	105.5%	78	107				
Toluene	41.78	1	40	0.1509	104.1%	74	116				

Sample ID: **LCS WATER** Batch ID: **GC-1_980922** Test Code: **SW8020A** Units: **µg/L** Analysis Date: **9/22/98** Prep Date:
Client ID: **9809035** Run ID: **GC-1_980922A** SeqNo: **6743**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	39.03	1	40	0.0445	97.5%	56	128				
Ethylbenzene	41.56	1	40	0	103.9%	78	107				
m,p-Xylene	82.54	2	80	0	103.2%	67	118				
o-Xylene	40.95	1	40	0.0627	102.2%	78	107				
Toluene	40.15	1	40	0.1011	100.1%	74	116				

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: *13-Oct-98*

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9809035
Project: 4-1374; Conoco

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: **CCV1 QC0606/07** Batch ID: **GC-1_980921** Test Code: **SW8020A** Units: **µg/L** Analysis Date: **9/21/98** Prep Date:
Client ID: **9809035** Run ID: **GC-1_980921A** SeqNo: **6726**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.22	1	20	0	101.1%	85	115				
Ethylbenzene	22.23	1	20	0	111.2%	85	115				
m,p-Xylene	43.6	2	40	0	109.0%	85	115				
o-Xylene	21.64	1	20	0	108.2%	85	115				
Toluene	21.52	1	20	0	107.6%	85	115				
1,4-Difluorobenzene	88.91	0	100	0	88.9%	70	130				
4-Bromochlorobenzene	79.55	0	100	0	79.5%	70	130				
Fluorobenzene	85.36	0	100	0	85.4%	70	130				

Sample ID: **CCV2 QC0606/07** Batch ID: **GC-1_980921** Test Code: **SW8020A** Units: **µg/L** Analysis Date: **9/21/98** Prep Date:
Client ID: **9809035** Run ID: **GC-1_980921A** SeqNo: **6727**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.84	1	20	0	99.2%	85	115				
Ethylbenzene	21.74	1	20	0	108.7%	85	115				
m,p-Xylene	42.67	2	40	0	106.7%	85	115				
o-Xylene	20.81	1	20	0	104.1%	85	115				
Toluene	20.98	1	20	0	104.9%	85	115				
1,4-Difluorobenzene	88.7	0	100	0	88.7%	70	130				
4-Bromochlorobenzene	69.55	0	100	0	69.6%	70	130				S
Fluorobenzene	85.39	0	100	0	85.4%	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: On Site Technologies, Limited Partnership
Work Order: 9809035
Project: 4-1374; Conoco

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV3 QC0606/07** Batch ID: **GC-1_980921** Test Code: **SW8020A** Units: **µg/L** Analysis Date: **9/21/98** Prep Date:
Client ID: **9809035** Run ID: **GC-1_980921A** SeqNo: **6728**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	37.58	1	40	0	93.9%	85	115				
Ethylbenzene	41.94	1	40	0	104.8%	85	115				
m,p-Xylene	82.28	2	80	0	102.9%	85	115				
o-Xylene	40.08	1	40	0	100.2%	85	115				
Toluene	40.64	1	40	0	101.6%	85	115				
1,4-Difluorobenzene	87.81	0	100	0	87.8%	70	130				
4-Bromochlorobenzene	63.38	0	100	0	63.4%	70	130				S
Fluorobenzene	84.05	0	100	0	84.0%	70	130				

Sample ID: **CCV1 QC0606/07** Batch ID: **GC-1_980922** Test Code: **SW8020A** Units: **µg/L** Analysis Date: **9/22/98** Prep Date:
Client ID: **9809035** Run ID: **GC-1_980922A** SeqNo: **6741**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.18	1	20	0	100.9%	85	115				
Ethylbenzene	21.48	1	20	0	107.4%	85	115				
m,p-Xylene	42.26	2	40	0	105.6%	85	115				
o-Xylene	20.9	1	20	0	104.5%	85	115				
Toluene	20.74	1	20	0	103.7%	85	115				
1,4-Difluorobenzene	91.14	0	100	0	91.1%	70	130				
4-Bromochlorobenzene	80.67	0	100	0	80.7%	70	130				
Fluorobenzene	91.16	0	100	0	91.2%	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: On Site Technologies, Limited Partnership
Work Order: 9809035
Project: 4-1374; Conoco

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV2 QC0606/07** Batch ID: **GC-1_980922** Test Code: **SW8020A** Units: **µg/L** Analysis Date: **9/22/98** Prep Date:

Client ID: **9809035** Run ID: **GC-1_980922A** SeqNo: **6742**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.67	1	20	0	98.3%	85	115				
Ethylbenzene	20.87	1	20	0	104.3%	85	115				
m,p-Xylene	41.74	2	40	0	104.3%	85	115				
o-Xylene	20.89	1	20	0	104.5%	85	115				
Toluene	20.77	1	20	0	103.9%	85	115				
1,4-Difluorobenzene	91.19	0	100	0	91.2%	70	130				
4-Bromochlorobenzene	64.62	0	100	0	64.6%	70	130				S
Fluorobenzene	89.76	0	100	0	89.8%	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: 13-Oct-98

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9809035
Project: 4-1374; Conoco
Test No: SW8020A

QC SUMMARY REPORT
SURROGATE RECOVERIES

BTEX

Sample ID	14FBZ	4BCBZ	FLBZ					
9809027-01A	88.5	71	85					
9809027-02A	86	58.3 *	82.6					
9809027-03A	87.8	58.5 *	84.3					
9809027-04A	88.6	78.6	88.4					
9809027-05A	87.2	67.7 *	84.1					
9809028-01A	79	39.9 *	75.7					
9809029-01A	86.3	58 *	83.2					
9809030-01A	88.8	64 *	84.6					
9809031-01A	86.8	55.5 *	80					
9809031-02A	89.3	70.7	85.1					
9809031-02AMS	88.3	66.9 *	84.2					
9809031-02AMSD	87.7	63.8 *	83.8					
9809031-03A	82.7	40.8 *	78					
9809033-01A	83.4	44.6 *	79.4					
9809034-01A	89.9	71	85.8					
9809034-02A	83.8	61.4 *	82.2					
9809034-03A	89.3	76	85.4					
9809034-04A	89.3	69.8 *	85.3					
9809034-05A	87.6	55.7 *	83.1					
9809035-01A	78.8	36.9 *	74.3					
9809035-02A	87.3	53.2 *	82.7					
9809035-03A	91.2	62.8 *	90.1					
9809035-04A	91	66.5 *	90.6					
9809035-05A	90.9	65.2 *	90					
9809051-01A	86.7	45.2 *	85.4					
9809051-02A	88.3	56.2 *	87.9					
9809051-03A	91	60.9 *	89.9					

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

*** Surrogate recovery outside acceptance limits**

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9809035
Project: 4-1374; Conoco
Test No: SW8020A

QC SUMMARY REPORT
SURROGATE RECOVERIES

BTEX

Sample ID	14FBZ	4BCBZ	FLBZ					
9809055-03A	90.4	56.8 *	89.4					
9809055-03AMS	90.7	76.5	90.3					
9809055-03AMSD	90.2	75.4	90.3					
CCV1 QC0606/07	91.1	80.7	91.2					
CCV2 QC0606/07	91.2	64.6 *	89.8					
CCV3 QC0606/07	87.8	63.4 *	84					
LCS WATER	91.3	83.3	90.7					
MB1	92.4	80	91.3					

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

*** Surrogate recovery outside acceptance limits**

On Site Technologies, LTD.

Date: *14-Oct-98*

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9809035
Project: 4-1374; Conoco

QC SUMMARY REPORT

Method Blank

Sample ID: **MBlank** Batch ID: **API H2O_981** Test Code: **SW7140** Units: **mg/L** Analysis Date: **10/2/98** Prep Date:
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7027**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	.02	0.25									J

Sample ID: **MBlank** Batch ID: **API H2O_981** Test Code: **SW7610** Units: **mg/L** Analysis Date: **10/2/98** Prep Date:
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7041**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Potassium	ND	0.25									

Sample ID: **MBlank** Batch ID: **API H2O_981** Test Code: **SW7450** Units: **mg/L** Analysis Date: **10/2/98** Prep Date:
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7084**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Magnesium	ND	0.25									

Sample ID: **MBlank** Batch ID: **API H2O_981** Test Code: **SW7770** Units: **mg/L** Analysis Date: **10/2/98** Prep Date:
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7098**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium	ND	0.25									

Sample ID: **MBlank** Batch ID: **API H2O_981** Test Code: **M2320 B** Units: **mg/L CaCO3** Analysis Date: **9/21/98** Prep Date:
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7112**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	3	5									J
Alkalinity, Carbonate (As CaCO3)	ND	5									
Alkalinity, Total (As CaCO3)	3	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

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9809035
Project: 4-1374; Conoco

QC SUMMARY REPORT
Method Blank

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sample ID: **MBlank** Batch ID: **API H2O_981** Test Code: **M4500-Cl C.** Units: **mg/L** Analysis Date: **9/25/98** Prep Date:											
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7120**											
Chloride	1.4	10									J
Sample ID: **MBlank** Batch ID: **API H2O_981** Test Code: **M4500-Cl C.** Units: **mg/L** Analysis Date: **9/25/98** Prep Date:											
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7125**											
Chloride	3.5	10									J
Sample ID: **MBlank** Batch ID: **API H2O_981** Test Code: **E120.1** Units: **uS/cm** Analysis Date: **9/21/98** Prep Date:											
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7131**											
Specific Conductance	ND	2									
Sample ID: **MBlank** Batch ID: **API H2O_981** Test Code: **M4500-SO4 D** Units: **mg/L** Analysis Date: **9/30/98** Prep Date:											
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7153**											
Sulfate	ND	5									
Sample ID: **MBlank** Batch ID: **API H2O_981** Test Code: **SW7380** Units: **mg/L** Analysis Date: **10/5/98** Prep Date:											
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7380**											
Iron	ND	0.25									

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-Oct-98*

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9809035
Project: 4-1374; Conoco

QC SUMMARY REPORT
Sample Duplicate

Sample ID: **9809027-01BD** Batch ID: **API H2O_981** Test Code: **M2320 B** Units: **mg/L CaCO3** Analysis Date: **9/21/98** Prep Date:
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7115**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	362	5	0	0	0.0%	0	0	351	3.1%	5	
Alkalinity, Carbonate (As CaCO3)	ND	5	0	0	0.0%	0	0	0	0.0%	5	
Alkalinity, Total (As CaCO3)	362	5	0	0	0.0%	0	0	351	3.1%	5	

Sample ID: **9809027-01BD** Batch ID: **API H2O_981** Test Code: **M4500-Cl C.** Units: **mg/L** Analysis Date: **9/25/98** Prep Date:
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7123**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	19	10	0	0	0.0%	0	0	20.5	7.6%	10	

Sample ID: **9809027-02BD** Batch ID: **API H2O_981** Test Code: **M4500-SO4 D** Units: **mg/L** Analysis Date: **9/30/98** Prep Date:
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7157**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	299	5	0	0	0.0%	0	0	307	2.6%	6	

Sample ID: **9809035-04CD** Batch ID: **API H2O_981** Test Code: **M4500-Cl C.** Units: **mg/L** Analysis Date: **9/25/98** Prep Date:
Client ID: **MW #5** **9809035** Run ID: **API H2O_981005A** SeqNo: **7129**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	336	10	0	0	0.0%	0	0	341	1.5%	7	

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-Oct-98*

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9809035
Project: 4-1374; Conoco

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **9809035-05CMS** Batch ID: **API H2O_981** Test Code: **SW7380** Units: **mg/L** Analysis Date: **10/5/98** Prep Date:
Client ID: **MW #6** **9809035** Run ID: **API H2O_981005A** SeqNo: **7385**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	2.24	0.25	2	0.05	109.5%	66	126				

Sample ID: **9809073-01BMS** Batch ID: **API H2O_981** Test Code: **SW7610** Units: **mg/L** Analysis Date: **10/2/98** Prep Date:
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7053**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Potassium	12.6	0.25	5	7.4	104.0%	67	157				

Sample ID: **9809074-02BMS** Batch ID: **API H2O_981** Test Code: **SW7140** Units: **mg/L** Analysis Date: **10/2/98** Prep Date:
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7039**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	298	0.25	100	182	116.0%	69	159				

Sample ID: **9809074-02BMS** Batch ID: **API H2O_981** Test Code: **SW7450** Units: **mg/L** Analysis Date: **10/2/98** Prep Date:
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7096**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Magnesium	66.4	0.25	20	44	112.0%	78	126				

Sample ID: **9809075-02BMS** Batch ID: **API H2O_981** Test Code: **SW7770** Units: **mg/L** Analysis Date: **10/2/98** Prep Date:
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7110**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium	1360	0.25	400	990	92.5%	81	135				

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-Oct-98*

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9809035
Project: 4-1374; Conoco

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS**	Batch ID: **API H2O_981**	Test Code: **M2320 B**	Units: **mg/L CaCO3**	Analysis Date: **9/21/98**	Prep Date:
Client ID: **9809035**	Run ID: **API H2O_981005A**			SeqNo: **7113**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	211	5	201	3	103.5%	91	116				

Sample ID: **LCS**	Batch ID: **API H2O_981**	Test Code: **M4500-Cl C.**	Units: **mg/L**	Analysis Date: **9/25/98**	Prep Date:
Client ID: **9809035**	Run ID: **API H2O_981005A**			SeqNo: **7121**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	113	10	108	1	103.7%	90	114				

Sample ID: **LCS**	Batch ID: **API H2O_981**	Test Code: **M4500-Cl C.**	Units: **mg/L**	Analysis Date: **9/25/98**	Prep Date:
Client ID: **9809035**	Run ID: **API H2O_981005A**			SeqNo: **7126**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	103	10	108	4	91.7%	90	114				

Sample ID: **LCS**	Batch ID: **API H2O_981**	Test Code: **E120.1**	Units: **uS/cm**	Analysis Date: **9/21/98**	Prep Date:
Client ID: **9809035**	Run ID: **API H2O_981005A**			SeqNo: **7132**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Specific Conductance	1121	2	1100	0	101.9%	97	103				

Sample ID: **LCS**	Batch ID: **API H2O_981**	Test Code: **M2510 C**	Units: **ohm-m**	Analysis Date: **9/21/98**	Prep Date:
Client ID: **9809035**	Run ID: **API H2O_981005A**			SeqNo: **7138**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Resistivity	8.921	0.001	9.091	0	98.1%	97	103				

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: On Site Technologies, Limited Partnership
Work Order: 9809035
Project: 4-1374; Conoco

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: **LCS**	Batch ID: **API H2O_981**	Test Code: **E150.1**	Units: **pH units**	Analysis Date: **9/21/98**	Prep Date:
Client ID:	**9809035**	Run ID: **API H2O_981005A**		SeqNo: **7147**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH	9.029	2	9.11	0	99.1%	98	102				

Sample ID: **LCS**	Batch ID: **API H2O_981**	Test Code: **M4500-SO4 D**	Units: **mg/L**	Analysis Date: **9/30/98**	Prep Date:
Client ID:	**9809035**	Run ID: **API H2O_981005A**		SeqNo: **7154**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	143	5	139	0	102.9%	83	113				

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-Oct-98*

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9809035
Project: 4-1374; Conoco

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: **CCV1** Batch ID: **API H2O_981** Test Code: **SW7140** Units: **mg/L** Analysis Date: **10/2/98** Prep Date:
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7028**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	1.98	0.25	1.95	0	101.5%	89	107				

Sample ID: **CCV1** Batch ID: **API H2O_981** Test Code: **SW7610** Units: **mg/L** Analysis Date: **10/2/98** Prep Date:
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7042**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Potassium	2.65	0.25	2.68	0	98.9%	84	114				

Sample ID: **CCV1** Batch ID: **API H2O_981** Test Code: **SW7450** Units: **mg/L** Analysis Date: **10/2/98** Prep Date:
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7085**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Magnesium	1.61	0.25	1.58	0	101.9%	96	114				

Sample ID: **CCV1** Batch ID: **API H2O_981** Test Code: **SW7770** Units: **mg/L** Analysis Date: **10/2/98** Prep Date:
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7099**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium	2.84	0.25	2.64	0	107.6%	87	111				

Sample ID: **CCV1** Batch ID: **API H2O_981** Test Code: **SW7380** Units: **mg/L** Analysis Date: **10/5/98** Prep Date:
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7381**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	2.17	0.25	2	0	108.5%	87	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

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9809035
Project: 4-1374; Conoco

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sample ID: **CCV2** Batch ID: **API H2O_981** Test Code: **SW7140** Units: **mg/L** Analysis Date: **10/2/98** Prep Date:											
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7040**											
Calcium	1.98	0.25	1.95	0	101.5%	89	107				
Sample ID: **CCV2** Batch ID: **API H2O_981** Test Code: **SW7610** Units: **mg/L** Analysis Date: **10/2/98** Prep Date:											
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7054**											
Potassium	2.66	0.25	2.68	0	99.3%	84	114				
Sample ID: **CCV2** Batch ID: **API H2O_981** Test Code: **SW7450** Units: **mg/L** Analysis Date: **10/2/98** Prep Date:											
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7097**											
Magnesium	1.62	0.25	1.58	0	102.5%	96	114				
Sample ID: **CCV2** Batch ID: **API H2O_981** Test Code: **SW7770** Units: **mg/L** Analysis Date: **10/2/98** Prep Date:											
Client ID: **9809035** Run ID: **API H2O_981005A** SeqNo: **7111**											
Sodium	2.8	0.25	2.64	0	106.1%	87	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

Mountain States Analytical, Inc.

The Quality Solution

September 30, 1998

Mr. David Cox
On Site Technologies, Ltd.
612 E Murray Drive
Farmington, NM 87401

Reference:
Project: Water Analysis
MSAI Group: 24100

Dear Mr. Cox:

Enclosed are the analytical results for your project referenced above. The following samples are included in the report.

9809035-03B 9809035-04B 9809035-05B

All holding times were met for the tests performed on these samples.

If the report is acceptable, please approve the associated invoice and forward it for payment.

Thank you for selecting Mountain States Analytical, Inc. to serve as your analytical laboratory on this project. If you have any questions concerning these results, please feel free to contact me at any time.

We look forward to working with you on future projects.

With Regards,

Rolf E. Larsen
Project Manager

Analytical Report

Mountain States Analytical, Inc.
The Quality Solution

On Site Technologies, Ltd.
612 E Murray Drive
Farmington, NM 87401

Attn: Mr. David Cox
Project: Water Analysis

MSAI Sample: 86643
MSAI Group: 24100
Date Reported: 09/30/98
Discard Date: 10/30/98
Date Submitted: 09/17/98
Date Sampled: 09/15/98
Collected by:
Purchase Order:
Project No.:

Sample ID: 9809035-03B B-Com-1E MW-4
Matrix: Water

Test	Analysis	Results as Received	Units	Dilution Factor	Limit of Quantitation
03921	Flame/ICP Prep, w/ww, 3005A Method: SW-846 3005A	Batch. w614		1	
0407	Mercury Prep CVAA, ww, 7470A Method: SW-846 7470A	Batch. w222		1	
13001	Metals by ICP, 6010A, w/ww Method: SW-846 6010A				
	Arsenic	ND	mg/l	1	0.180
	Barium	0.330	mg/l	1	0.015
	Cadmium	ND	mg/l	1	0.020
	Chromium	ND	mg/l	1	0.050
	Lead	ND	mg/l	1	0.250
	Selenium	ND	mg/l	1	0.300
	Silver	ND	mg/l	1	0.020
1521	Mercury by CVAA, w/ww, 7470A Method: SW-846 7470A	ND	mg/l	1	0.00050

Corporate Office
1645 West 2200 South, Salt Lake City, Utah 84119
801-973-0050 • 1-800-973-6724(MSAI) • FAX 801-972-6278
e-mail: service@msailabs.com

Southwest States Region
6223 Bayonne, Spring, Texas 77389
281-320-2842 • FAX 281-320-0989
e-mail: gbrewer@msailabs.com

Mountain States Analytical, Inc.
The Quality Solution

On Site Technologies, Ltd.

MSAI Sample: 86643
MSAI Group: 24100

Sample ID: 9809035-03B

ND - Not detected at the Limit of Quantitation.

This report consists of the following items: A cover letter, a signed analytical report for each sample specified on the cover letter, and if applicable, an inorganic quality control summary. Organic sample reports contain footnotes which describe any quality control anomalies which may have occurred.

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

Analytical Report

Mountain States Analytical, Inc.
The Quality Solution

On Site Technologies, Ltd.
612 E Murray Drive
Farmington, NM 87401

Attn: Mr. David Cox
Project: Water Analysis

MSAI Sample: 86644
MSAI Group: 24100
Date Reported: 09/30/98
Discard Date: 10/30/98
Date Submitted: 09/17/98
Date Sampled: 09/15/98
Collected by:
Purchase Order:
Project No.:

Sample ID: 9809035-04B B-Com-1E MW-5
Matrix: Water

Test	Analysis	Results as Received	Units	Dilution Factor	Limit of Quantitation
03921	Flame/ICP Prep, w/ww, 3005A Method: SW-846 3005A	Batch. w614		1	
0407	Mercury Prep CVAA, ww, 7470A Method: SW-846 7470A	Batch. w222		1	
13001	Metals by ICP, 6010A, w/ww Method: SW-846 6010A				
	Arsenic	ND	mg/l	1	0.180
	Barium	0.175	mg/l	1	0.015
	Cadmium	ND	mg/l	1	0.020
	Chromium	ND	mg/l	1	0.050
	Lead	ND	mg/l	1	0.250
	Selenium	ND	mg/l	1	0.300
	Silver	ND	mg/l	1	0.020
1521	Mercury by CVAA, w/ww, 7470A Method: SW-846 7470A	ND	mg/l	1	0.00050

Mountain States Analytical, Inc.
The Quality Solution

On Site Technologies, Ltd.

MSAI Sample: 86644
MSAI Group: 24100

Sample ID: 9809035-04B

ND - Not detected at the Limit of Quantitation.

This report consists of the following items: A cover letter, a signed analytical report for each sample specified on the cover letter, and if applicable, an inorganic quality control summary. Organic sample reports contain footnotes which describe any quality control anomalies which may have occurred.

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

Analytical Report

Mountain States Analytical, Inc.
The Quality Solution

On Site Technologies, Ltd.
612 E Murray Drive
Farmington, NM 87401

Attn: Mr. David Cox
Project: Water Analysis

MSAI Sample: 86645
MSAI Group: 24100
Date Reported: 09/30/98
Discard Date: 10/30/98
Date Submitted: 09/17/98
Date Sampled: 09/15/98
Collected by:
Purchase Order:
Project No.:

Sample ID: 9809035-05B B-Com-1E MW-6
Matrix: Water

Test	Analysis	Results as Received	Units	Dilution Factor	Limit of Quantitation
03921	Flame/ICP Prep, w/ww, 3005A Method: SW-846 3005A	Batch. w614		1	
0407	Mercury Prep CVAA, ww, 7470A Method: SW-846 7470A	Batch. w222		1	
13001	Metals by ICP, 6010A, w/ww Method: SW-846 6010A				
	Arsenic	ND	mg/l	1	0.180
	Barium	0.588	mg/l	1	0.015
	Cadmium	ND	mg/l	1	0.020
	Chromium	ND	mg/l	1	0.050
	Lead	ND	mg/l	1	0.250
	Selenium	ND	mg/l	1	0.300
	Silver	ND	mg/l	1	0.020
1521	Mercury by CVAA, w/ww, 7470A Method: SW-846 7470A	ND	mg/l	1	0.00050

Mountain States Analytical, Inc.
The Quality Solution

On Site Technologies, Ltd.

MSAI Sample: 86645
MSAI Group: 24100

Sample ID: 9809035-05B

ND - Not detected at the Limit of Quantitation.

This report consists of the following items: A cover letter, a signed analytical report for each sample specified on the cover letter, and if applicable, an inorganic quality control summary. Organic sample reports contain footnotes which describe any quality control anomalies which may have occurred.

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

Mountain States Analytical, Inc.
Daily QC Batching Data
Data Released for Reporting

09/30/98
13:22:33
Group: 24100

Analysis Batch Number: 1521 -09/25/98-147 -1
Test Identification : 1521 -Mercury by CVAA, w/ww, 7470A Sequence : 1521 -1
Number of Samples : 11
Batch Data-Date/Time : 09/28/98 / 15:39:54

BLANK#	ANALYTE	CONC FOUND #	CONC LIMIT
PBW1-222	Mercury	0.0200	0.1000
PBW2-222-2	Mercury	0.0080	0.1000

SPIKE

						QC LIMITS	
SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	CONC SPIKE	% REC #	LOWER	UPPER
23877-85711	Mercury	2.5000	0.0340	2.4680	97.4	80.0	120.0

MSD

						QC LIMITS			
SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	RESULT 2	%REC2 #	LOWER	UPPER	RPD #	LIMIT
23877-85711	Mercury	2.5000	0.0340	2.4920	98.3	80.0	120.0	1.0	20.0

DUPLICATE

SAMPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
23877-85711	Mercury	0.0340	0.0340	0.0	20.0	1.00

CONTROL

					QC LIMITS	
SAMPLE#	ANALYTE	CONC FOUND	CONC KNOWN	% REC #	LOWER	UPPER
CSW-222	Mercury	2.5900	2.5000	103.6	80.0	120.0

					QC LIMITS	
CCV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	LOWER	UPPER
ICV-	Mercury	3.0000	2.9160	97.2	90.0	110.0
CCV--2	Mercury	5.0000	4.9750	99.5	80.0	120.0
CCV--3	Mercury	5.0000	4.9750	99.5	80.0	120.0
CCV--4	Mercury	5.0000	4.9460	98.9	80.0	120.0
CCV--5	Mercury	5.0000	4.9460	98.9	80.0	120.0

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
ICB-	Mercury	ND	0.1000
CCB-	Mercury	ND	0.1000
CCB-	Mercury	ND	0.1000
CCB-	Mercury	ND	0.1000
CCB-	Mercury	ND	0.1000

Groups & Samples

23877-85710 23877-85711 24100-86643 24100-86644 24100-86645 24194-87068 24194-87069 24194-87070
24194-87071 24194-87072 24194-87073

Mountain States Analytical, Inc.
Daily QC Batching Data
Data Released for Reporting

09/30/98
13:22:34
Group: 24100

Analysis Batch Number: ICPWA-09/24/98-061 -1
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 10
Batch Data-Date/Time : 09/25/98 / 09:48:57

Sequence : DATA267

BLANK#	ANALYTE	CONC FOUND #	CONC LIMIT
4103-86655	Silver	0.0040	0.0050
	Arsenic	ND	0.0350
	Barium	ND	0.0030
	Calcium	0.0780	0.3000
	Cadmium	0.0018	0.0040
	Chromium	ND	0.0100
	Copper	ND	0.0100
	Iron	0.0177	0.2000
	Potassium	ND	0.1500
	Magnesium	ND	0.0500
	Manganese	0.0005	0.0030
	Sodium	0.2964(1c)	0.1500
	Lead	ND	0.0500
	Selenium	ND	0.0600

SPIKE

SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	CONC SPIKE	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
4103-86651	Silver	0.0500	0.0100	0.0583	96.6	80.0	120.0
	Arsenic	2.0000	-0.0062	2.1012	105.4	80.0	120.0
	Barium	2.0000	0.0785	2.1733	104.7	80.0	120.0
	Calcium	2.0000	62.8061	66.3201	175.7(2k)	80.0	120.0
	Cadmium	0.0500	-0.0004	0.0525	105.8	80.0	120.0
	Chromium	0.2000	0.0073	0.2233	108.0	80.0	120.0
	Copper	0.2500	0.0020	0.2604	103.4	80.0	120.0
	Iron	1.0000	0.0729	1.1686	109.6	80.0	120.0
	Potassium	10.0000	1.6795	12.0145	103.3	80.0	120.0
	Magnesium	2.0000	19.7145	22.2345	126.0(2k)	80.0	120.0
	Manganese	0.5000	0.0522	0.5765	104.9	80.0	120.0
	Sodium	3.0000	79.2783	84.3427	168.8(2k)	80.0	120.0
	Lead	0.5000	-0.0139	0.5242	107.6	80.0	120.0
	Selenium	2.0000	-0.0524	2.0778	106.5	80.0	120.0

MSD

SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	RESULT 2	%REC2 #	QC LIMITS LOWER	QC LIMITS UPPER	RPD #	LIMIT
4103-86651	Silver	0.0500	0.0100	0.0627	105.5	80.0	120.0	7.3	20.0
	Arsenic	2.0000	-0.0062	2.0963	105.1	80.0	120.0	0.2	20.0
	Barium	2.0000	0.0785	2.1734	104.7	80.0	120.0	0.0	20.0
	Calcium	2.0000	62.8061	66.4974	184.6(2k)	80.0	120.0	0.3	20.0
	Cadmium	0.0500	-0.0004	0.0545	109.7	80.0	120.0	3.7	20.0
	Chromium	0.2000	0.0073	0.2202	106.5	80.0	120.0	1.4	20.0
	Copper	0.2500	0.0020	0.2604	103.4	80.0	120.0	0.0	20.0
	Iron	1.0000	0.0729	1.2398	116.7	80.0	120.0	5.9	20.0
	Potassium	10.0000	1.6795	11.9711	102.9	80.0	120.0	0.4	20.0
	Magnesium	2.0000	19.7145	22.3040	129.5(2k)	80.0	120.0	0.3	20.0
	Manganese	0.5000	0.0522	0.5789	105.3	80.0	120.0	0.4	20.0
	Sodium	3.0000	79.2783	83.9002	154.1(2k)	80.0	120.0	0.5	20.0
	Lead	0.5000	-0.0139	0.5298	108.7	80.0	120.0	1.1	20.0
	Selenium	2.0000	-0.0524	2.0799	106.6	80.0	120.0	0.1	20.0

Mountain States Analytical, Inc.
Daily QC Batching Data
Data Released for Reporting

09/30/98
13:22:35
Group: 24100

Analysis Batch Number: ICPWA-09/24/98-061 -1
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 10
Batch Data-Date/Time : 09/25/98 / 09:48:57

Sequence : DATA267

DUPLICATE

SAMPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
24103-86651	Silver	0.0100	0.0097	2.8	20.0	1.00
	Arsenic	-0.0062	0.0097	922.1(11)	20.0	1.00
	Barium	0.0785	0.0787	0.3	20.0	1.00
	Calcium	62.8061	62.5343	0.4	20.0	1.00
	Cadmium	-0.0004	0.0046	237.0(5a)	20.0	1.00
	Chromium	0.0073	0.0074	1.8	20.0	1.00
	Copper	0.0020	0.0032	48.8(11)	20.0	1.00
	Iron	0.0729	0.1543	71.7(11)	20.0	1.00
	Potassium	1.6795	1.7573	4.5	20.0	1.00
	Magnesium	19.7145	19.6092	0.5	20.0	1.00
	Manganese	0.0522	0.0524	0.3	20.0	1.00
	Sodium	79.2783	78.9522	0.4	20.0	1.00
	Lead	-0.0139	0.0000	200.0(11)	20.0	1.00
	Selenium	-0.0524	0.0086	278.1(11)	20.0	1.00

CONTROL

SAMPLE#	ANALYTE	CONC FOUND	CONC KNOWN	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
24103-86656	Silver	0.0597	0.0500	119.5	80.0	120.0
	Arsenic	2.0574	2.0000	102.9	80.0	120.0
	Barium	2.0527	2.0000	102.6	80.0	120.0
	Calcium	2.1406	2.0000	107.0	80.0	120.0
	Cadmium	0.0560	0.0500	111.9	80.0	120.0
	Chromium	0.2189	0.2000	109.4	80.0	120.0
	Copper	0.2640	0.2500	105.6	80.0	120.0
	Iron	1.1052	1.0000	110.5	80.0	120.0
	Potassium	9.9520	10.0000	99.5	80.0	120.0
	Magnesium	2.0760	2.0000	103.8	80.0	120.0
	Manganese	0.5213	0.5000	104.3	80.0	120.0
	Sodium	3.5163	3.0000	117.2	80.0	120.0
	Lead	0.5430	0.5000	108.6	80.0	120.0
	Selenium	2.0281	2.0000	101.4	80.0	120.0

CCV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
ICV-	Silver	0.4000	0.4064	101.6	90.0	110.0
	Arsenic	1.6000	1.6103	100.6	90.0	110.0
	Barium	4.0000	4.0834	102.1	90.0	110.0
	Calcium	40.0000	40.4738	101.2	90.0	110.0
	Cadmium	4.0000	4.1631	104.1	90.0	110.0
	Chromium	4.0000	4.1952	104.9	90.0	110.0
	Copper	4.0000	4.0853	102.1	90.0	110.0
	Iron	4.0000	4.1454	103.6	90.0	110.0
	Potassium	40.0000	40.9306	102.3	90.0	110.0
	Magnesium	20.0000	20.1841	100.9	90.0	110.0
	Manganese	4.0000	4.0954	102.4	90.0	110.0
	Sodium	40.0000	40.9969	102.5	90.0	110.0
	Lead	20.0000	21.0281	105.1	90.0	110.0
	Selenium	1.6000	1.5645	97.8	90.0	110.0
CCV1--2	Silver	0.4000	0.4194	104.8	90.0	110.0

Mountain States Analytical, Inc.
Daily QC Batching Data
Data Released for Reporting

09/30/98
13:22:35
Group: 24100

Analysis Batch Number: ICPWA-09/24/98-061 -1
Test Identification : ICPWA-*Metals by ICP
umber of Samples : 10
atch Data-Date/Time : 09/25/98 / 09:48:57

Sequence : DATA267

CV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
CCV1--2	Arsenic	1.6000	1.6432	102.7	90.0	110.0
	Barium	4.0000	4.1018	102.5	90.0	110.0
	Calcium	40.0000	40.8217	102.1	90.0	110.0
	Cadmium	4.0000	4.1723	104.3	90.0	110.0
	Chromium	4.0000	4.2290	105.7	90.0	110.0
	Copper	4.0000	4.1212	103.0	90.0	110.0
	Iron	4.0000	4.1652	104.1	90.0	110.0
	Potassium	40.0000	40.8238	102.1	90.0	110.0
	Magnesium	20.0000	20.4256	102.1	90.0	110.0
	Manganese	4.0000	4.1156	102.9	90.0	110.0
	Sodium	40.0000	41.0541	102.6	90.0	110.0
	Lead	20.0000	21.1152	105.6	90.0	110.0
	Selenium	1.6000	1.6191	101.2	90.0	110.0
CV2--3	Silver	0.4000	0.4181	104.5	90.0	110.0
	Arsenic	1.6000	1.6383	102.4	90.0	110.0
	Barium	4.0000	4.0816	102.0	90.0	110.0
	Calcium	40.0000	41.2029	103.0	90.0	110.0
	Cadmium	4.0000	4.2039	105.1	90.0	110.0
	Chromium	4.0000	4.2519	106.3	90.0	110.0
	Copper	4.0000	4.1109	102.8	90.0	110.0
	Iron	4.0000	4.1178	102.9	90.0	110.0
	Potassium	40.0000	40.8026	102.0	90.0	110.0
	Magnesium	20.0000	20.5400	102.7	90.0	110.0
	Manganese	4.0000	4.1300	103.2	90.0	110.0
	Sodium	40.0000	40.6721	101.7	90.0	110.0
	Lead	20.0000	21.3646	106.8	90.0	110.0
	Selenium	1.6000	1.6321	102.0	90.0	110.0
CCV3--4	Silver	0.4000	0.4215	105.4	90.0	110.0
	Arsenic	1.6000	1.6202	101.3	90.0	110.0
	Barium	4.0000	4.0724	101.8	90.0	110.0
	Calcium	40.0000	41.0872	102.7	90.0	110.0
	Cadmium	4.0000	4.1762	104.4	90.0	110.0
	Chromium	4.0000	4.2272	105.7	90.0	110.0
	Copper	4.0000	4.1059	102.6	90.0	110.0
	Iron	4.0000	4.1345	103.4	90.0	110.0
	Potassium	40.0000	40.6969	101.7	90.0	110.0
	Magnesium	20.0000	20.5378	102.7	90.0	110.0
	Manganese	4.0000	4.1119	102.8	90.0	110.0
	Sodium	40.0000	40.4344	101.1	90.0	110.0
	Lead	20.0000	21.2893	106.4	90.0	110.0
	Selenium	1.6000	1.5933	99.6	90.0	110.0
CCV4--5	Silver	0.4000	0.4266	106.6	90.0	110.0
	Arsenic	1.6000	1.6460	102.9	90.0	110.0
	Barium	4.0000	4.0690	101.7	90.0	110.0
	Calcium	40.0000	41.1093	102.8	90.0	110.0
	Cadmium	4.0000	4.1940	104.8	90.0	110.0
	Chromium	4.0000	4.2412	106.0	90.0	110.0
	Copper	4.0000	4.1126	102.8	90.0	110.0
	Iron	4.0000	4.1717	104.3	90.0	110.0

Mountain States Analytical, Inc.
Daily QC Batching Data
Data Released for Reporting

09/30/98
13:22:35
Group: 24100

Analysis Batch Number: ICPWA-09/24/98-061 -1
Test Identification : ICPWA-*Metals by ICP
umber of Samples : 10
atch Data-Date/Time : 09/25/98 / 09:48:57

Sequence : DATA267

CV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
CCV4--5	Potassium	40.0000	40.8221	102.1	90.0	110.0
	Magnesium	20.0000	20.5457	102.7	90.0	110.0
	Manganese	4.0000	4.1232	103.1	90.0	110.0
	Sodium	40.0000	40.5592	101.4	90.0	110.0
	Lead	20.0000	21.3627	106.8	90.0	110.0
	Selenium	1.6000	1.5817	98.9	90.0	110.0

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
CB-	Silver	0.0049	0.0050
	Arsenic	0.0030	0.0350
	Barium	0.0002	0.0030
	Calcium	0.0025	0.3000
	Cadmium	0.0011	0.0040
	Chromium	0.0008	0.0100
	Copper	ND	0.0100
	Iron	ND	0.2000
	Potassium	0.0556	0.1500
	Magnesium	ND	0.0500
	Manganese	0.0002	0.0030
	Sodium	ND	0.1500
	Lead	ND	0.0500
	Selenium	ND	0.0600
CB1-	Silver	0.0056(8a)	0.0050
	Arsenic	ND	0.0350
	Barium	0.0013	0.0030
	Calcium	0.0076	0.3000
	Cadmium	0.0014	0.0040
	Chromium	0.0079	0.0100
	Copper	0.0069	0.0100
	Iron	ND	0.2000
	Potassium	0.1339	0.1500
	Magnesium	0.0169	0.0500
	Manganese	0.0001	0.0030
	Sodium	ND	0.1500
	Lead	ND	0.0500
	Selenium	0.0122	0.0600
CB2-	Silver	0.0069(8a)	0.0050
	Arsenic	0.0092	0.0350
	Barium	0.0015	0.0030
	Calcium	0.0076	0.3000
	Cadmium	0.0012	0.0040
	Chromium	0.0057	0.0100
	Copper	0.0033	0.0100
	Iron	ND	0.2000
	Potassium	0.1043	0.1500
	Magnesium	0.0122	0.0500
	Manganese	0.0001	0.0030
	Sodium	ND	0.1500
	Lead	ND	0.0500

Mountain States Analytical, Inc.
Daily QC Batching Data
Data Released for Reporting

09/30/98
13:22:36
Group: 24100

Analysis Batch Number: ICPWA-09/24/98-061 -1
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 10
Batch Data-Date/Time : 09/25/98 / 09:48:57

Sequence : DATA267

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
CCB2-	Selenium	0.0174	0.0600
CCB3-	Silver	0.0061(8a)	0.0050
	Arsenic	0.0015	0.0350
	Barium	0.0009	0.0030
	Calcium	0.0039	0.3000
	Cadmium	0.0020	0.0040
	Chromium	0.0018	0.0100
	Copper	0.0036	0.0100
	Iron	0.0194	0.2000
	Potassium	0.0463	0.1500
	Magnesium	0.0036	0.0500
	Manganese	0.0006	0.0030
	Sodium	ND	0.1500
	Lead	ND	0.0500
	Selenium	ND	0.0600
CCB4-	Silver	0.0065(8a)	0.0050
	Arsenic	0.0039	0.0350
	Barium	0.0004	0.0030
	Calcium	0.0076	0.3000
	Cadmium	0.0037	0.0040
	Chromium	0.0015	0.0100
	Copper	0.0037	0.0100
	Iron	ND	0.2000
	Potassium	0.0385	0.1500
	Magnesium	0.0114	0.0500
	Manganese	0.0004	0.0030
	Sodium	ND	0.1500
	Lead	ND	0.0500
	Selenium	ND	0.0600

---------- Result Footnotes ----------
(4c) - The preparation blank concentration is less than 5% of each sample in the batch
(2k) - Sample concentration >4X spk added. Serial dilution was recovered within 10% limits.
(11) - The duplicate results cannot be evaluated because both results are <MDL.
(5a) - Duplicates not evaluated: Results are <10x detection limit
(8a) - See comments below.

---------- Batch Notes ----------
The silver CCB's were within customer established limits for some samples, all others were re-analyzed. djk

Groups & Samples

24083-86559 24098-86640 24098-86641 24100-86643 24100-86644 24100-86645 24101-86646 24101-86647
24103-86651 24103-86652 24103-86655 24103-86656

Mountain States Analytical, Inc.
Daily QC Batching Data
Data Released for Reporting

09/30/98
13:22:37
Group: 24100

Analysis Batch Number: ICPWA-09/25/98-061 -1
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 6
Batch Data-Date/Time : 09/25/98 / 14:53:43

Sequence : DATB268

BLANK#	ANALYTE	CONC FOUND #	CONC LIMIT
BW-614	Silver	ND	0.0050

SPIKE

						QC LIMITS	
SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	CONC SPIKE	% REC #	LOWER	UPPER
24103-86651	Silver	0.0500	-0.0037	0.0498	107.0	80.0	120.0

SD

						QC LIMITS				
SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	RESULT 2	%REC2 #	LOWER	UPPER	RPD #		LIMIT
24103-86651	Silver	0.0500	-0.0037	0.0499	107.3	80.0	120.0	0.3		20.0

DUPLICATE

SAMPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
24103-86651	Silver	-0.0037	0.0000	200.0(11)	20.0	1.00

CONTROL

					QC LIMITS	
SAMPLE#	ANALYTE	CONC FOUND	CONC KNOWN	% REC #	LOWER	UPPER
CSW-614	Silver	0.0493	0.0500	98.5	80.0	120.0

					QC LIMITS	
CCV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	LOWER	UPPER
CCV-	Silver	0.4000	0.4057	101.4	90.0	110.0
CCV1--2	Silver	0.4000	0.4041	101.0	90.0	110.0
CCV2--3	Silver	0.4000	0.4039	101.0	90.0	110.0
CCV3--4	Silver	0.4000	0.4055	101.4	90.0	110.0

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
CCB-	Silver	ND	0.0050
CCB1-	Silver	0.0004	0.0050
CCB2-	Silver	0.0017	0.0050
CCB3-	Silver	0.0029	0.0050

---------- Result Footnotes ----------
(11) - The duplicate results cannot be evaluated because both results are <MDL.

Groups & Samples

24100-86643 24100-86644 24100-86645 24101-86646 24101-86647 24103-86651

1062

On Site Technologies, LTD.
612 E. Murray Drive
Farmington, NM 87401
(505) 325-2432

CHAIN-OF-CUSTODY RECORD

Subcontractor:

Mountain States Analytical, Inc.
1645 West 2200 South
Salt Lake City, UT 84119

TEL: (800) 973-6724
FAX: (801) 972-6278
Acct #:

15-Sep-98

Sample ID	Matrix	Collection Date	Bottle Type	Requested Tests						
				SW6010A						
9809035-03B	Aqueous	9/15/98 2:30:00 PM	250HDPE	1						
9809035-04B	Aqueous	9/15/98 2:35:00 PM	250HDPE	1						
9809035-05B	Aqueous	9/15/98 2:26:00 PM	250HDPE	1						

Comments: Please analyze three (3) water samples per RCRA Metals.

	Date/Time		Date/Time
Relinquished by: Heidi Rees	9/16/98 1530	Received by: Pam Olsen MSAI	9-17-98 1000
Relinquished by:		Received by:	

CHAIN OF CUSTODY RECORD

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

Date: [illegible]

Purchase Order No.:	Job No. [illegible]	REPORT RESULTS TO — Name: Larry [illegible]	Title
SEND INVOICE TO — Name: Larry [illegible]		Company: Conoco	
Company: Conoco	Dept.	Mailing Address	
Address		City, State, Zip	
City, State, Zip		Telephone No.	Telefax No.

Sampling Location: [illegible]

Sampler:

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	8020	8015 [illegible]	[illegible]							LAB ID
MW #2	[illegible]	[illegible]	[illegible]	HCl	2	✓									[illegible]
MW #3	[illegible]	[illegible]	[illegible]	HCl	2	✓									[illegible]
MW #4	[illegible]	[illegible]	[illegible]		[illegible]	✓	✓	✓							[illegible]
MW #5	[illegible]	[illegible]	[illegible]		[illegible]	✓	✓	✓							[illegible]
MW #1	[illegible]	[illegible]	[illegible]		[illegible]	✓	✓	✓							[illegible]

Relinquished by: [illegible signature]	Date/Time [illegible]	Received by: [illegible]	Date/Time [illegible]
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	Special Instructions:

Authorized by: ____________ Date ______
(Client Signature Must Accompany Request)

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

CHAIN OF CUSTODY RECORD

ON SITE TECHNOLOGIES, LTD.

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

Date: _____ Page _____ of _____

Purchase Order No.:	Job No.		
SEND INVOICE TO: Name		REPORT RESULTS TO: Name	Title
Company	Dept.	Company	
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No.	Telefax No.
Sampling Location:		Number of Containers	ANALYSIS REQUESTED
Sampler:			

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers										LAB ID

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:

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Rush	24-48 Hours	10 Working Days	Special Instructions:

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

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: *07-Jan-99*

Client:	On Site Technologies, Limited Partnership	**Client Sample Info:**	Farmington B-Com 1E
Work Order:	9812053	**Client Sample ID:**	MW-6
Lab ID:	9812053-01A **Matrix:** AQUEOUS	**Collection Date:**	12/29/98 10:20:00 AM
Project:	4-1374; Conoco: Farmington B-Com 1E	**COC Record:**	5643

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		**SW8021B**				Analyst: **HR**
Benzene	ND	0.5		µg/L	1	12/30/98
Toluene	ND	0.5		µg/L	1	12/30/98
Ethylbenzene	ND	0.5		µg/L	1	12/30/98
m,p-Xylene	ND	1		µg/L	1	12/30/98
o-Xylene	ND	0.5		µg/L	1	12/30/98

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

P.O. BOX 2606 • FARMINGTON, NM 87499

On Site Technologies, LTD.

Date: *07-Jan-99*

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9812053
Project: 4-1374; Conoco: Farmington B-Com 1E

QC SUMMARY REPORT

Method Blank

Sample ID: **MB1** Batch ID: **GC-1_981230** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/30/98** Prep Date:
Client ID: **9812053** Run ID: **GC-1_981230A** SeqNo: **9801**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.0614	0.5									J
Ethylbenzene	.0721	0.5									J
m,p-Xylene	.1759	1									J
Methyl tert-Butyl Ether	.0843	0.5									J
o-Xylene	.0738	0.5									J
Toluene	.1483	0.5									J

Sample ID: **MB1** Batch ID: **GC-1_981231** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/31/98** Prep Date:
Client ID: **9812053** Run ID: **GC-1_981231A** SeqNo: **9830**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.0577	0.5									J
Ethylbenzene	ND	0.5									
m,p-Xylene	.1113	1									J
Methyl tert-Butyl Ether	.035	0.5									J
o-Xylene	ND	0.5									
Toluene	.1093	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: *07-Jan-99*

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9812053
Project: 4-1374; Conoco: Farmington B-Com 1E

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **9812053-04AMS** Batch ID: **GC-1_981230** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/30/98** Prep Date:
Client ID: **MW-1** **9812053** Run ID: **GC-1_981230A** SeqNo: **9802**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	43540	500	40000	610	107.3%	73	115				
Ethylbenzene	44000	500	40000	1000	107.5%	74	117				
m,p-Xylene	90940	1000	80000	6000	106.2%	76	112				
Methyl tert-Butyl Ether	44330	500	40000	100	110.6%	62	122				
o-Xylene	42250	500	40000	100	105.4%	83	112				
Toluene	43500	500	40000	400	107.8%	71	120				

Sample ID: **9812053-04AMSD** Batch ID: **GC-1_981230** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/30/98** Prep Date:
Client ID: **MW-1** **9812053** Run ID: **GC-1_981230A** SeqNo: **9803**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	45270	500	40000	610	111.7%	73	115	43540	3.9%	12	
Ethylbenzene	44990	500	40000	1000	110.0%	74	117	44000	2.2%	11	
m,p-Xylene	93000	1000	80000	6000	108.8%	76	112	90940	2.2%	10	
Methyl tert-Butyl Ether	45850	500	40000	100	114.4%	62	122	44330	3.4%	15	
o-Xylene	43350	500	40000	100	108.1%	83	112	42250	2.6%	14	
Toluene	44610	500	40000	400	110.5%	71	120	43500	2.5%	14	

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: On Site Technologies, Limited Partnership
Work Order: 9812053
Project: 4-1374; Conoco: Farmington B-Com 1E

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **9812056-08AMS** Batch ID: **GC-1_981231** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/31/98** Prep Date:
Client ID: **9812053** Run ID: **GC-1_981231A** SeqNo: **9831**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	221.7	2.5	200	12	104.9%	73	115				
Ethylbenzene	247.1	2.5	200	39	104.0%	74	117				
m,p-Xylene	430.4	5	400	21	102.3%	76	112				
Methyl tert-Butyl Ether	237.5	2.5	200	39	99.3%	62	122				
o-Xylene	207.4	2.5	200	0.4	103.5%	83	112				
Toluene	209.7	2.5	200	0.3	104.7%	71	120				

Sample ID: **9812056-08AMSD** Batch ID: **GC-1_981231** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/31/98** Prep Date:
Client ID: **9812053** Run ID: **GC-1_981231A** SeqNo: **9832**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	215.7	2.5	200	12	101.9%	73	115	221.7	2.7%	12	
Ethylbenzene	240.4	2.5	200	39	100.7%	74	117	247.1	2.7%	11	
m,p-Xylene	418.7	5	400	21	99.4%	76	112	430.4	2.8%	10	
Methyl tert-Butyl Ether	235.2	2.5	200	39	98.1%	62	122	237.5	1.0%	15	
o-Xylene	202.6	2.5	200	0.4	101.1%	83	112	207.4	2.3%	14	
Toluene	204	2.5	200	0.3	101.9%	71	120	209.7	2.7%	14	

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: *07-Jan-99*

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9812053
Project: 4-1374; Conoco: Farmington B-Com 1E

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS WATER** Batch ID: **GC-1_981230** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/30/98** Prep Date:
Client ID: **9812053** Run ID: **GC-1_981230A** SeqNo: **9800**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	43.62	0.5	40	0.06	108.9%	84	110				
Ethylbenzene	43.74	0.5	40	0.07	109.2%	86	113				
m,p-Xylene	85.1	1	80	0.2	106.1%	81	114				
Methyl tert-Butyl Ether	45.56	0.5	40	0.08	113.7%	69	129				
o-Xylene	43.49	0.5	40	0.07	108.5%	86	112				
Toluene	43.24	0.5	40	0.1	107.8%	85	111				

Sample ID: **LCS WATER** Batch ID: **GC-1_981231** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/31/98** Prep Date:
Client ID: **9812053** Run ID: **GC-1_981231A** SeqNo: **9829**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	43.2	0.5	40	0.06	107.9%	84	110				
Ethylbenzene	43.65	0.5	40	0	109.1%	86	113				
m,p-Xylene	85.15	1	80	0.1	106.3%	81	114				
Methyl tert-Butyl Ether	42.98	0.5	40	0.04	107.4%	69	129				
o-Xylene	43.34	0.5	40	0	108.4%	86	112				
Toluene	43.02	0.5	40	0.1	107.3%	85	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: *07-Jan-99*

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9812053
Project: 4-1374; Conoco: Farmington B-Com 1E

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: **CCV1 QC0606/07** Batch ID: **GC-1_981230** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/30/98** Prep Date:
Client ID: **9812053** Run ID: **GC-1_981230A** SeqNo: **9797**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.77	0.5	20	0	108.9%	85	115				
Ethylbenzene	21.93	0.5	20	0	109.7%	85	115				
m,p-Xylene	42.04	1	40	0	105.1%	85	115				
Methyl tert-Butyl Ether	22.44	0.5	20	0	112.2%	85	115				
o-Xylene	21.72	0.5	20	0	108.6%	85	115				
Toluene	21.56	0.5	20	0	107.8%	85	115				
1,4-Difluorobenzene	92.6	0	100	0	92.6%	70	130				
4-Bromochlorobenzene	101.9	0	100	0	101.9%	70	130				
Fluorobenzene	86.3	0	100	0	86.3%	70	130				

Sample ID: **CCV2 QC0606/07** Batch ID: **GC-1_981230** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/30/98** Prep Date:
Client ID: **9812053** Run ID: **GC-1_981230A** SeqNo: **9798**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.88	0.5	20	0	109.4%	85	115				
Ethylbenzene	22.01	0.5	20	0	110.0%	85	115				
m,p-Xylene	42.05	1	40	0	105.1%	85	115				
Methyl tert-Butyl Ether	22.45	0.5	20	0	112.2%	85	115				
o-Xylene	21.76	0.5	20	0	108.8%	85	115				
Toluene	21.76	0.5	20	0	108.8%	85	115				
1,4-Difluorobenzene	92.29	0	100	0	92.3%	70	130				
4-Bromochlorobenzene	104	0	100	0	104.0%	70	130				
Fluorobenzene	86.55	0	100	0	86.5%	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: On Site Technologies, Limited Partnership
Work Order: 9812053
Project: 4-1374; Conoco: Farmington B-Com 1E

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV3 QC0606/07** Batch ID: **GC-1_981230** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/30/98** Prep Date:
Client ID: **9812053** Run ID: **GC-1_981230A** SeqNo: **9799**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	42.67	0.5	40	0	106.7%	85	115				
Ethylbenzene	42.97	0.5	40	0	107.4%	85	115				
m,p-Xylene	83.74	1	80	0	104.7%	85	115				
Methyl tert-Butyl Ether	44.61	0.5	40	0	111.5%	85	115				
o-Xylene	42.62	0.5	40	0	106.5%	85	115				
Toluene	43.9	0.5	40	0	109.8%	85	115				
1,4-Difluorobenzene	92.61	0	100	0	92.6%	70	130				
4-Bromochlorobenzene	105	0	100	0	105.0%	70	130				
Fluorobenzene	85.96	0	100	0	86.0%	70	130				

Sample ID: **CCV1 QC0606/07** Batch ID: **GC-1_981231** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/31/98** Prep Date:
Client ID: **9812053** Run ID: **GC-1_981231A** SeqNo: **9826**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.74	0.5	20	0	108.7%	85	115				
Ethylbenzene	21.96	0.5	20	0	109.8%	85	115				
m,p-Xylene	41.97	1	40	0	104.9%	85	115				
Methyl tert-Butyl Ether	22.06	0.5	20	0	110.3%	85	115				
o-Xylene	21.64	0.5	20	0	108.2%	85	115				
Toluene	21.61	0.5	20	0	108.1%	85	115				
1,4-Difluorobenzene	96	0	100	0	96.0%	70	130				
4-Bromochlorobenzene	98.18	0	100	0	98.2%	70	130				
Fluorobenzene	93.42	0	100	0	93.4%	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: On Site Technologies, Limited Partnership
Work Order: 9812053
Project: 4-1374; Conoco: Farmington B-Com 1E

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV2 QC0606/07** Batch ID: **GC-1_981231** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/31/98** Prep Date:
Client ID: **9812053** Run ID: **GC-1_981231A** SeqNo: **9827**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.25	0.5	20	0	106.2%	85	115				
Ethylbenzene	21.15	0.5	20	0	105.8%	85	115				
m,p-Xylene	40.48	1	40	0	101.2%	85	115				
Methyl tert-Butyl Ether	21.66	0.5	20	0	108.3%	85	115				
o-Xylene	20.94	0.5	20	0	104.7%	85	115				
Toluene	20.93	0.5	20	0	104.7%	85	115				
1,4-Difluorobenzene	96.66	0	100	0	96.7%	70	130				
4-Bromochlorobenzene	97.82	0	100	0	97.8%	70	130				
Fluorobenzene	94.35	0	100	0	94.3%	70	130				

Sample ID: **CCV3 QC0606/07** Batch ID: **GC-1_981231** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/31/98** Prep Date:
Client ID: **9812053** Run ID: **GC-1_981231A** SeqNo: **9828**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	42.44	0.5	40	0	106.1%	85	115				
Ethylbenzene	42.63	0.5	40	0	106.6%	85	115				
m,p-Xylene	83.52	1	80	0	104.4%	85	115				
Methyl tert-Butyl Ether	43.92	0.5	40	0	109.8%	85	115				
o-Xylene	42.98	0.5	40	0	107.5%	85	115				
Toluene	42.18	0.5	40	0	105.4%	85	115				
1,4-Difluorobenzene	96.24	0	100	0	96.2%	70	130				
4-Bromochlorobenzene	96.9	0	100	0	96.9%	70	130				
Fluorobenzene	94.25	0	100	0	94.2%	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: 07-Jan-99

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9812053
Project: 4-1374; Conoco: Farmington B-Co
Test No: SW8021B

QC SUMMARY REPORT
SURROGATE RECOVERIES

BTEX

Sample ID	14FBZ	4BCBZ	FLBZ					
9812050-01A	92.7	102	87					
9812050-02A	92	102	85.7					
9812051-01A	91.6	104	86					
9812051-02A	92.8	105	87.3					
9812051-03A	91.9	104	86.1					
9812051-04A	92.8	104	86.6					
9812051-05A	93.4	103	87					
9812052-01A	90.7	96.2	79.9					
9812052-02A	95.8	98.5	88.4					
9812053-01A	93.3	104	86.9					
9812053-02A	93	104	87.2					
9812053-03A	92.4	102	86.2					
9812053-04A	95	96.1	93.5					
9812053-04AMS	92	104	85.8					
9812053-04AMSD	92.5	102	86.5					
9812053-05A	93.9	104	88					
9812053-06A	93.4	104	87.3					
9812055-01A	92	102	86.3					
9812055-02A	92.2	117	90.9					
9812055-03A	98.6	99.8	94.8					
9812056-02A	96.7	97.4	94.4					
9812056-03A	96.5	97.3	94.4					
9812056-04A	95.5	97.1	94.3					
9812056-05A	95.8	97.2	94.3					
9812056-06A	96	97.6	94.2					
9812056-07A	96.5	97.6	94					
9812056-08AMS	94.6	96.8	93.4					

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

*** Surrogate recovery outside acceptance limits**

CLIENT: On Site Technologies, Limited Partnership
Work Order: 9812053
Project: 4-1374; Conoco: Farmington B-Co
Test No: SW8021B

QC SUMMARY REPORT
SURROGATE RECOVERIES

BTEX

Sample ID	14FBZ	4BCBZ	FLBZ					
9812056-08AMSD	94.5	97.7	93.3					
9812056-09A	96.2	97.4	93.9					
9812056-10A	96.3	97.6	93.8					
9812060-01A	92.8	96.2	91.4					
9812060-02A	95.9	98.2	94.7					
9812060-03A	96.6	96.9	94					
9812060-04A	96	97.2	94.2					
CCV1 QC0606/07	96	98.2	93.4					
CCV2 QC0606/07	96.7	97.8	94.3					
CCV3 QC0606/07	96.2	96.9	94.2					
LCS WATER	96.3	99.1	93.9					
MB1	96.3	98.1	93.9					

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

*** Surrogate recovery outside acceptance limits**

CHAIN OF CUSTODY RECORD

ON SITE TECHNOLOGIES, LTD.

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

Date: 12/27/98

Page ____ of ____

Purchase Order No.:	Job No. 98127		
SEND INVOICE TO: Name	Larry Taylor	REPORT RESULTS TO: Name	Larry Taylor / Title
Company	Conoco / Dept.	Company	Conoco
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No. / Telefax No.	
Sampling Location:	Farmington E-com 1.E		
Sampler:	Larry Taylor		

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	ANALYSIS REQUESTED	LAB ID
MW 6	12/27/98	1000	H2O	HCl	2	✓	98127-1
MW 5		1025			4	✓	-2
MW 4		1050			4	✓	-3
MW 1		1110		NONE	2	✓	-4
MW 2		1140			2	✓	-5
MW 3		1210			2	✓	-6

Relinquished by:	Date/Time 12/28/98 1400	Received by:	Date/Time	
Relinquished by:	Date/Time	Received by:	Date/Time	
Relinquished by:	Date/Time	Received by:	Date/Time	

Method of Shipment:

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Rush	24-48 Hours	10 Working Days	Special Instructions:

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

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

January 07, 1999

Larry Trujillo
On Site Technologies, Limited Partnership
612 E. Murray Drive
P.O. Box 2606
Farmington, NM 87499
TEL: (505) 325-5667
FAX (505) 327-1496

RE: 4-1374; Conoco: Farmington B-Com 1E Order No.: 9812053

Dear Larry Trujillo,

On Site Technologies, LTD. received 6 samples on 12/29/98 for the analyses presented in the following report.

The Samples were analyzed for the following tests:
BTEX (SW8021B)

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

David Cox

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On Site Technologies, LTD. **Date:** *07-Jan-99*

CLIENT: On Site Technologies, Limited Partnership
Project: 4-1374; Conoco: Farmington B-Com 1E
Lab Order: 9812053

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

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ANALYTICAL REPORT

Date: *07-Jan-99*

Client:	On Site Technologies, Limited Partnership	**Client Sample Info:**	Farmington B-Com 1E
Work Order:	9812053	**Client Sample ID:**	MW-1
Lab ID:	9812053-04A **Matrix:** AQUEOUS	**Collection Date:**	12/29/98 11:10:00 AM
Project:	4-1374; Conoco: Farmington B-Com 1E	**COC Record:**	5643

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		**SW8021B**				Analyst: **HR**
Benzene	350	25		µg/L	50	12/31/98
Toluene	ND	25		µg/L	50	12/31/98
Ethylbenzene	420	25		µg/L	50	12/31/98
m,p-Xylene	2800	50		µg/L	50	12/31/98
o-Xylene	ND	25		µg/L	50	12/31/98

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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ANALYTICAL REPORT

Date: *07-Jan-99*

Client:	On Site Technologies, Limited Partnership	**Client Sample Info:**	Farmington B-Com 1E
Work Order:	9812053	**Client Sample ID:**	MW-2
Lab ID:	9812053-05A **Matrix:** AQUEOUS	**Collection Date:**	12/29/98 11:20:00 AM
Project:	4-1374; Conoco: Farmington B-Com 1E	**COC Record:**	5643

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		**SW8021B**				Analyst: **HR**
Benzene	ND	0.5		µg/L	1	12/30/98
Toluene	0.6	0.5		µg/L	1	12/30/98
Ethylbenzene	2.1	0.5		µg/L	1	12/30/98
m,p-Xylene	32	1		µg/L	1	12/30/98
o-Xylene	3	0.5		µg/L	1	12/30/98

Qualifiers:

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ND - Not Detected at Practical Quantitation Limit

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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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ANALYTICAL REPORT

Date: *07-Jan-99*

Client:	On Site Technologies, Limited Partnership	**Client Sample Info:**	Farmington B-Com 1E
Work Order:	9812053	**Client Sample ID:**	MW-3
Lab ID:	9812053-06A **Matrix:** AQUEOUS	**Collection Date:**	12/29/98 11:30:00 AM
Project:	4-1374; Conoco: Farmington B-Com 1E	**COC Record:**	5643

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		**SW8021B**				Analyst: **HR**
Benzene	ND	0.5		µg/L	1	12/30/98
Toluene	ND	0.5		µg/L	1	12/30/98
Ethylbenzene	ND	0.5		µg/L	1	12/30/98
m,p-Xylene	ND	1		µg/L	1	12/30/98
o-Xylene	ND	0.5		µg/L	1	12/30/98

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

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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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ANALYTICAL REPORT

Date: *07-Jan-99*

Client:	On Site Technologies, Limited Partnership	**Client Sample Info:**	Farmington B-Com 1E
Work Order:	9812053	**Client Sample ID:**	MW-4
Lab ID:	9812053-03A **Matrix:** AQUEOUS	**Collection Date:**	12/29/98 10:30:00 AM
Project:	4-1374; Conoco: Farmington B-Com 1E	**COC Record:**	5643

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		**SW8021B**				Analyst: **HR**
Benzene	ND	0.5		µg/L	1	12/30/98
Toluene	ND	0.5		µg/L	1	12/30/98
Ethylbenzene	0.6	0.5		µg/L	1	12/30/98
m,p-Xylene	ND	1		µg/L	1	12/30/98
o-Xylene	ND	0.5		µg/L	1	12/30/98

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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ANALYTICAL REPORT

Date: *07-Jan-99*

Client:	On Site Technologies, Limited Partnership	**Client Sample Info:**	Farmington B-Com 1E
Work Order:	9812053	**Client Sample ID:**	MW-5
Lab ID:	9812053-02A **Matrix:** AQUEOUS	**Collection Date:**	12/29/98 10:25:00 AM
Project:	4-1374; Conoco: Farmington B-Com 1E	**COC Record:**	5643

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		**SW8021B**				Analyst: **HR**
Benzene	ND	0.5		µg/L	1	12/30/98
Toluene	ND	0.5		µg/L	1	12/30/98
Ethylbenzene	ND	0.5		µg/L	1	12/30/98
m,p-Xylene	ND	1		µg/L	1	12/30/98
o-Xylene	ND	0.5		µg/L	1	12/30/98

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

P.O. BOX 2606 • FARMINGTON, NM 87499

Farmington B Com 1E
Unit O, Sec. 30, T29N, R11W
Passive Skimmer Log

Date	Time	Amount Recorded		Name
		Removed Inches/Gallons	Cumulative Inches/Gallons	
June 26, 1998	0915	10.25"/0.85'	10.25"/0.85'	Larry Trujillo
June 26, 1998	1435	1.50'/0.125'	11.75"/0.975'	Larry Trujillo
June 29, 1998	0858	9.5"/0.79 '	21.25"/1.765'	Larry Trujillo
June 30, 1998	1352	8.0"/0.66;	29.25"/2.425'	Larry Trujillo
July 1, 1998	0842	2"/0.16'	31.25"/2.585'	Larry Trujillo
July 2, 1998	1158	2.0"/0.16'	33.25"/ 2.745'	Larry Trujillo
July 6, 1998	1350	7.375"/0.61'	40.625'/3.335'	Larry Trujillo
July 7, 1998	1350	**No Measurable Free Product**	40.625'/3.335'	Larry Trujillo
July 13, 1998	1230	1.75"/0.146	42.375"/3.481'	Larry Trujillo
July 17, 1998	0933	**No Measurable Free Product**	42.375"/3.481'	Larry Trujillo
July 23, 1998	1507	2.0"/ 0.16	44.375"/3.641'	Larry Trujillo
July 29, 1998	1030	No Measurable Free Product	44.375"/3.641'	Larry Trujillo
August 12, 1998	1411	1.0"/0.83	45.375"/3.724	Larry Trujillo
August 25, 1998		No Measurable Free Product	45.375"/3.724	Larry Trujillo
December 3, 1998	1300	0.10 gallons	3.824 gallons	Larry Trujillo

On Site Technologies Ltd. Partnership
P.O. BOX 2606, FARMINGTON, NM 87499
(505) 327-1072

TEST HOLE LOG & MONITORING WELL DETAIL

Monitoring Well: MW-4

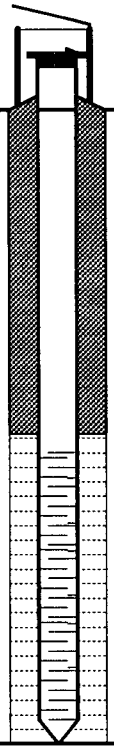
Project: CONOCO: Site Remediation

Project No: 4-1374

Project Location: Farmington B COM #1E		Logged By: Larry Trujillo	Approved: Myke Lane
Drilling Contractor: Western Water Wells		Date Started: August 1998	Date Completed: August 1998
Drilling Equipment: Cable Tool	Driller: Terry Hood	TD (ft): 32.72	Static Water Depth (ft): 25.72
Drilling Method: Cable Tool	Borehole Dia. (in): 6.0	TOC Elevation: 101.40	Ground Elevation:
Sampling Method: NA		Well Casing (Diameter & Type):	2 in. - Sch 40 PVC
COMMENTS: Initial Sch 40 PVC conduction pipe set by trackhoe to a depth of approximately 15 feet. Cable tool rig with 6 inch drove pipe used to set monitoring well.		Slot Size (in): 0.010	Filter Material: Silica Sand 10/20
		Development Method:	Submersible Pump & Bailer

Depth (feet)	Depth to Water During Drilling (ft)	USCS	Lithology	Field Description & Remarks	Sampled Interval	Field PID Reading	Lab TPH: EPA 418.1 (ppm)
SURFACE		SP/SM		CLEAN IMPORTED FILL: Light Brown SANDY SILT to SILTY SAND, moist to wet, firm, earth odor.	No soil samples taken during drilling.		
10'		GW		Light Brown to Olive Gray well graded GRAVEL, moist to wet, dense, earth odor.			
20'	▽			Static Water Level: approx. 25.72 ft.			
30'				TOTAL DEPTH: 32.72'			
40'							
50'							

Monitoring Well Construction & Remarks



Well secured with 2 in. locking plug.

5% Bentonite Cement Grout to surface.

Top of Filter Pack: 16.0'

Top of Screened Interval: 17.72

Bottom of Screened Interval: 32.2 ft

Total Depth: 32.72 ft.

BY: MKL
DATE: 2/8/99
FILE: 91374B4.CAD

On Site Technologies Ltd. Partnership
P.O. BOX 2606, FARMINGTON, NM 87499
(505) 327-1072

TEST HOLE LOG & MONITORING WELL DETAIL

Monitoring Well: MW-5

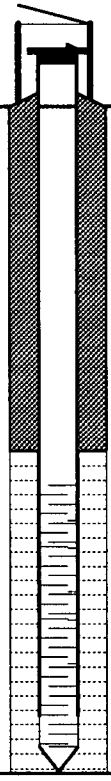
Project: CONOCO: Site Remediation

Project No: 4-1374

Project Location: Farmington B COM #1E		Logged By: Larry Trujillo	Approved: Myke Lane
Drilling Contractor: Western Water Wells		Date Started: August 1998	Date Completed: August 1998
Drilling Equipment: Cable Tool	Driller: Terry Hood	TD (ft): 34.09	Static Water Depth (ft): 27.09
Drilling Method: Cable Tool	Borehole Dia. (in): 6.0	TOC Elevation: 100.52	Ground Elevation:
Sampling Method: NA		Well Casing (Diameter & Type): 2 in. - Sch 40 PVC	
COMMENTS: Initial Sch 40 PVC conduction pipe set by trackhoe to a depth of approximately 15 feet. Cable tool rig with 6 inch drove pipe used to set monitoring well.		Slot Size (in): 0.010	Filter Material: Silica Sand 10/20
		Development Method: Submersible Pump & Bailer	

Depth (feet)	Depth to Water During Drilling (ft)	USCS	Lithology	Field Description & Remarks	Sampled Interval	Field PID Reading	Lab TPH: EPA 418.1 (ppm)
SURFACE		SP/SM		CLEAN IMPORTED FILL: Light Brown SANDY SILT to SILTY SAND, moist to wet, firm, earth odor.	No soil samples taken during drilling.		
10'		GW		Light Brown to Olive Gray well graded GRAVEL, moist to wet, dense, earth odor.			
20'	▽			Static Water Level: approx. 27.09 ft.			
30'				TOTAL DEPTH: 34.09'			
40'							
50'							

Monitoring Well Construction & Remarks



Well secured with 2 in. locking plug.

5% Bentonite Cement Grout to surface.

Top of Filter Pack: 18.0'

Top of Screened Interval: 19.0'

Bottom of Screened Interval: 33.90 ft

Total Depth: 34.09 ft.

BY: MKL
DATE: 2/8/99
FILE: 91374B5.CAD

On Site Technologies Ltd. Partnership
P.O. BOX 2606, FARMINGTON, NM 87499
(505) 327-1072

TEST HOLE LOG & MONITORING WELL DETAIL

Monitoring Well: MW-6

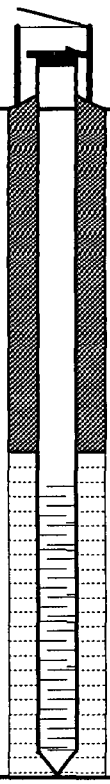
Project: CONOCO: Site Remediation

Project No: 4-1374

Project Location: Farmington B COM #1E		Logged By: Larry Trujillo	Approved: Myke Lane
Drilling Contractor: Western Water Wells		Date Started: August 1998	Date Completed: August 1998
Drilling Equipment: Cable Tool	Driller: Terry Hood	TD (ft): 34.04	Static Water Depth (ft): 27.04
Drilling Method: Cable Tool	Borehole Dia. (in): 6.0	TOC Elevation: 102.14	Ground Elevation:
Sampling Method: NA		Well Casing (Diameter & Type): 2 in. - Sch 40 PVC	
COMMENTS: Initial Sch 40 PVC conduction pipe set by trackhoe to a depth of approximately 15 feet. Cable tool rig with 6 inch drove pipe used to set monitoring well.		Slot Size (in): 0.010	Filter Material: Silica Sand 10/20
		Development Method: Submersible Pump & Bailer	

Depth (feet)	Depth to Water During Drilling (ft)	USCS	Lithology	Field Description & Remarks	Sampled Interval	Field PID Reading	Lab TPH: EPA 418.1 (ppm)
SURFACE		SP/SM		CLEAN IMPORTED FILL: Light Brown SANDY SILT to SILTY SAND, moist to wet, firm, earth odor.	No soil samples taken during drilling.		
10'		GW		Light Brown to Olive Gray well graded GRAVEL, moist to wet, dense, earth odor.			
20'							
30'	▽			Static Water Level: approx. 27.04 ft.			
40'				TOTAL DEPTH: 34.04'			
50'							

Monitoring Well Construction & Remarks



Well secured with 2 in. locking plug.

5% Bentonite Cement Grout to surface.

Top of Filter Pack: 18.0'

Top of Screened Interval: 18.85'

Bottom of Screened Interval: 33.85 ft

Total Depth: 34.09 ft.

BY: MKL
DATE: 2/8/99
FILE: 91374B6.CAD