3R - 83

REPORTS

DATE:

2/1/1998

ON SITE
TECHNOLOGIES, LTD.

February 1, 1998

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

RE: 1997 Annual Ground Water Report
Conoco Location: Farmington, B COM #1
Unit H, Sec. 12, T29N R12W, NMPM, San Juan Co., NM

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 covered the prior calendar year of 1997, and follows the format outlined 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 1997 ACTIVITIES:

Remediation and excavation efforts were done to the Farmington B Com #1 during late 1996 and early 1997. Site assessment, site investigation, excavation, remediation and sampling were previously reported in the following reports:

On Site Technologies, Ltd., April 16, 1997, letter to Mr. W.L. Brignon, Senior Council Conoco, Inc. Midland Division, regarding: Investigation and Remediation Summary, Conoco Location, Farmington B Com #1, Unit H, Sec. 12, T29N, R12W, NMPM, San Juan Co., NM.

On Site Technologies, Ltd., November 6, 1996, letter to Mr. C. John Coy, Field SHEAR Specialist Conoco, Inc. Midland Division, regarding: Suspected Hydrocarbon Release Interim Report, Conoco Location, Farmington B Com #1, Unit H, Sec 12, T29N, R12W, NMPM, San Juan Co., NM.

SAMPLING:

This report will only cover the quarterly sampling events since March, 1997. Any pervious sampling efforts have been reported in the referenced reports.

Following the approved Conoco plan, during each sampling event, water levels were measured on all monitoring wells prior to purging and sampling. Samples were collected in laboratory supplied containers, preserved as needed, 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 each sampling event. Table 2, summarizes the laboratory results for BTEX compounds from all water sampling completed at the referenced site, including assessment data. Table 3, summarizes the laboratory results for RCRA metals and API water quality testing, as required by NMOCD.

Copies of all laboratory reports for the calendar year 1997, along with all laboratory QA/QC documentation and chains-of-custody, are attached with this report.

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

SUMMARY AND CONCLUSIONS:

The following conclusions are based on the 1997 ground water monitoring results and trends associated with the Farmington B Com #1 well location:

1. Except for contamination form BTEX constituents, there appears to have been no significant hydrocarbon impact to ground water above the New Mexico Water Quality Control Commission (NMWQCC) standards.
2. WSP #1, continues to show high concentrations of BTEX contamination. Due to site improvements at the time of excavation, the area surrounding WSP #1 could not be completely excavated. There was a substantial amount of residual contaminated soil left in the area of WSP #1. Addition remedial action may need to be considered to bring contamination levels below regulated levels.
3. The site should be considered closed and no further remedial actions will need to be taken due to BTEX contamination levels below NMWQCC standards.
4. The ground water during 1997, fluctuated seasonally with changes in irrigation and flow in the San Juan River. A ground water trough appears to be present in the proximity of WSP #1, with flows east from the Mobile Home Park and west form the unlined irrigation ditch. Refer to the Ground Water Potentiometric Maps attached.

RECOMMENDATION:

1. All water sampling points, with the exception of WSP #1, show continued improvement with declining levels of contamination through natural attenuation. No further remediation, other than continued monitoring, should be required at this time.
2. WSP #1 continues to show high BTEX contamination levels. It is recommended, to enhance insitu biodegradation, that magnesium peroxide socks be installed into WSP #1 and the recovery well. These socks should increase the dissolved oxygen levels and enhance aerobic microbes, degrading BTEX compounds.

LIMITATIONS AND CLOSURE:

This annual ground water report documents the results of ground water monitoring for the referenced Conoco well location during the calendar year 1997. This report follows the Conoco Ground Water Plan, dated October 15, 1997.

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 the annual 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
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 (August, 1997)
Figure 3: Ground Water Potentiometric Map (December, 1997)
Boring Logs and Monitoring Well Diagrams
Laboratory Results, QA/QC, Chain-of Custody

Acknowledgment:
CONOCO, Inc.

Shirley K. Ebert Sthem Spec.
(Name/Title)

2/19/98
(Date)

MKL/mkl: 41325-97.doc

CONOCO, INC. FARMINGTON B COM. #1 SAN JUAN CO., NM	SITE SKETCH	ON SITE TECHNOLOGIES, LTD. P.O. BOX 2606, FARMINGTON, NM 87499 (505) 325-5667
PROJECT: 1997 Groundwater Summary	DRWN: NOV. 6, 1996	
PROJECT NO: 4-1325	DRWN BY: MKL	
SHEET: 1	REVISED: Feb. 6, 98	

APPROXIMATE SCALE
1" = 40'

A# — Approximate location of Test Holes drilled during soil remediation 11/6/96.

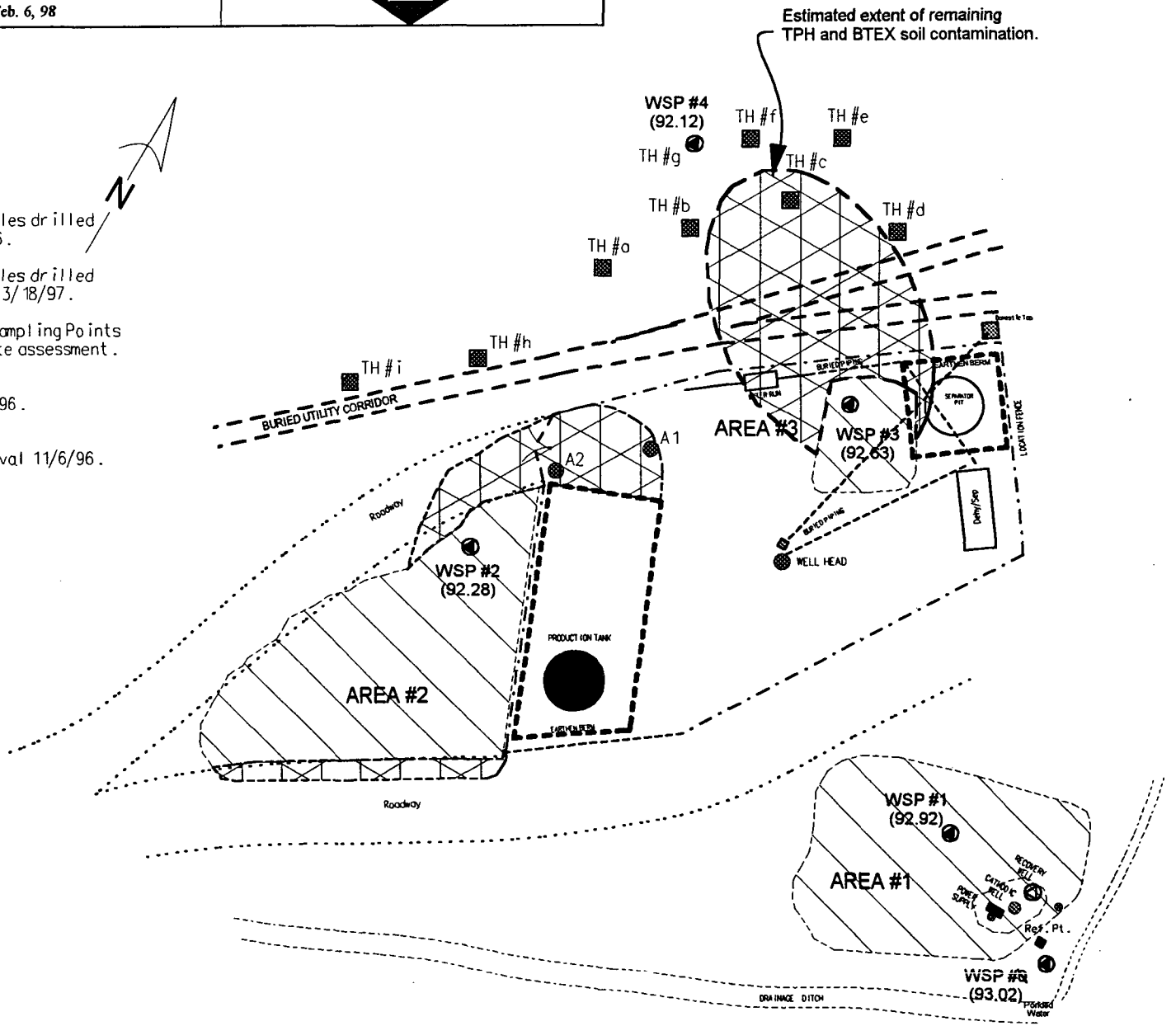
TH # — Approximate location of Test Holes drilled during supplemental assessment 3/18/97.

WSP # — Approximate location of Water Sampling Points set during various phases of site assessment.

Product Recovery Well set 11/1/96.

Areas of contaminated soil removal 11/6/96.

Estimated extent of remaining TPH & BTEX soil contamination.



CONOCO, INC. FARMINGTON B COM. #1 SAN JUAN CO., NM	Ground Water Potentiometric Map June 1, 1997	ON SITE TECHNOLOGIES, LTD. P.O. BOX 2606, FARMINGTON, NM 87499 (505) 325-5667
PROJECT: 1997 Groundwater Summary	DRWN: NOV. 6, 1996	
PROJECT NO: 4-1325	DRWN BY: MKL	
SHEET: 2	REVISED: Feb. 6, 98	

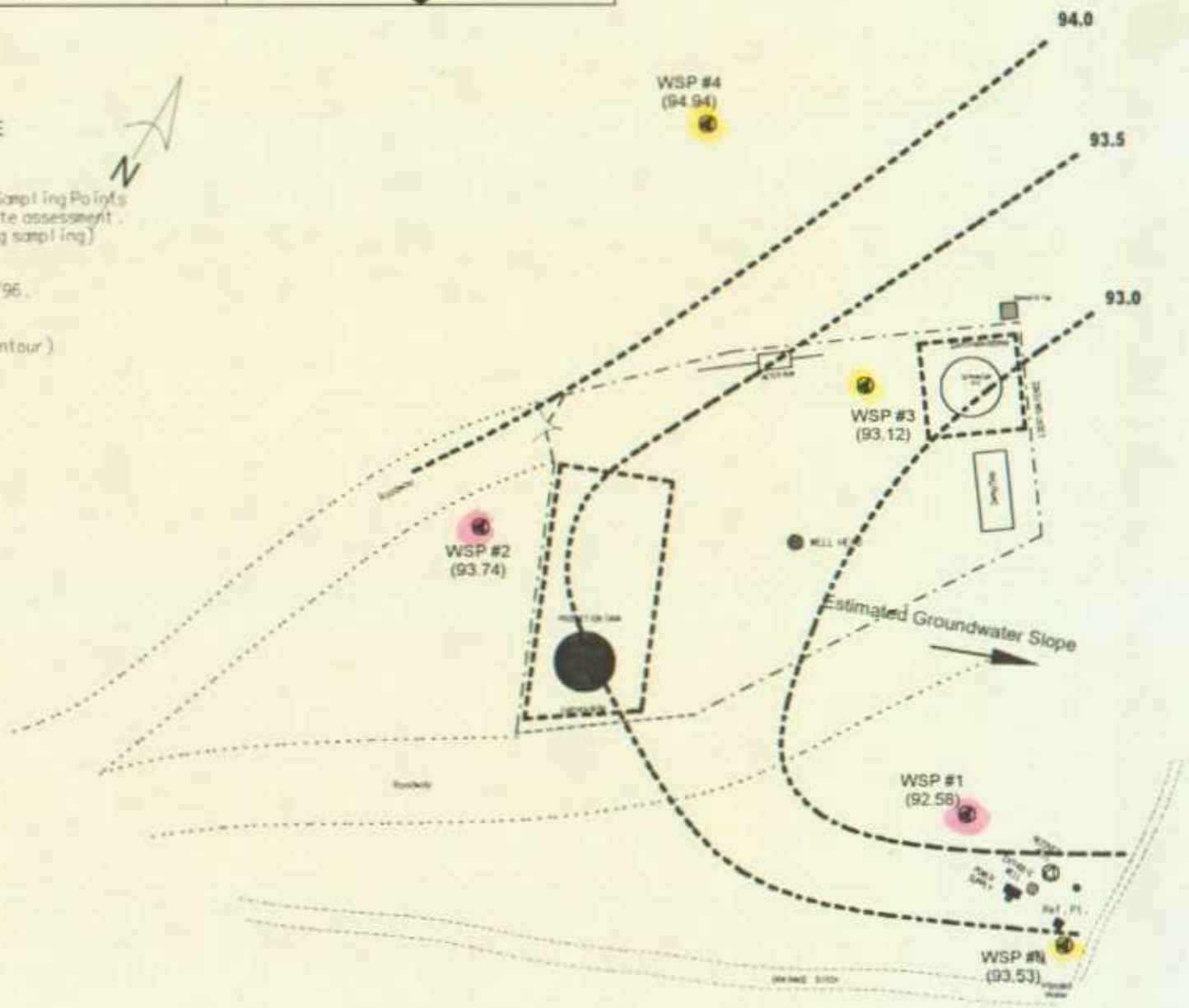
APPROXIMATE SCALE
1" = 40'

N

WSP # Approximate location of Water Sampling Points set during various phases of site assessment. (water elevation measure during sampling)

Product Recovery Well set 11/1/96.

Ground water surface (0.5 ft contour)



CONOCO, INC. FARMINGTON B COM. #1 SAN JUAN CO., NM	Ground Water Potentiometric Map September 16, 1997	ON SITE TECHNOLOGIES, LTD. P.O. BOX 2606, FARMINGTON, NM 87499 (505) 325-7667
PROJECT: 1997 Groundwater Summary	DRWN: NOV. 6, 1996	
PROJECT NO: 4-1325	DRWN BY: MKL	
SHEET: 3	REVISED: Feb. 6, 98	

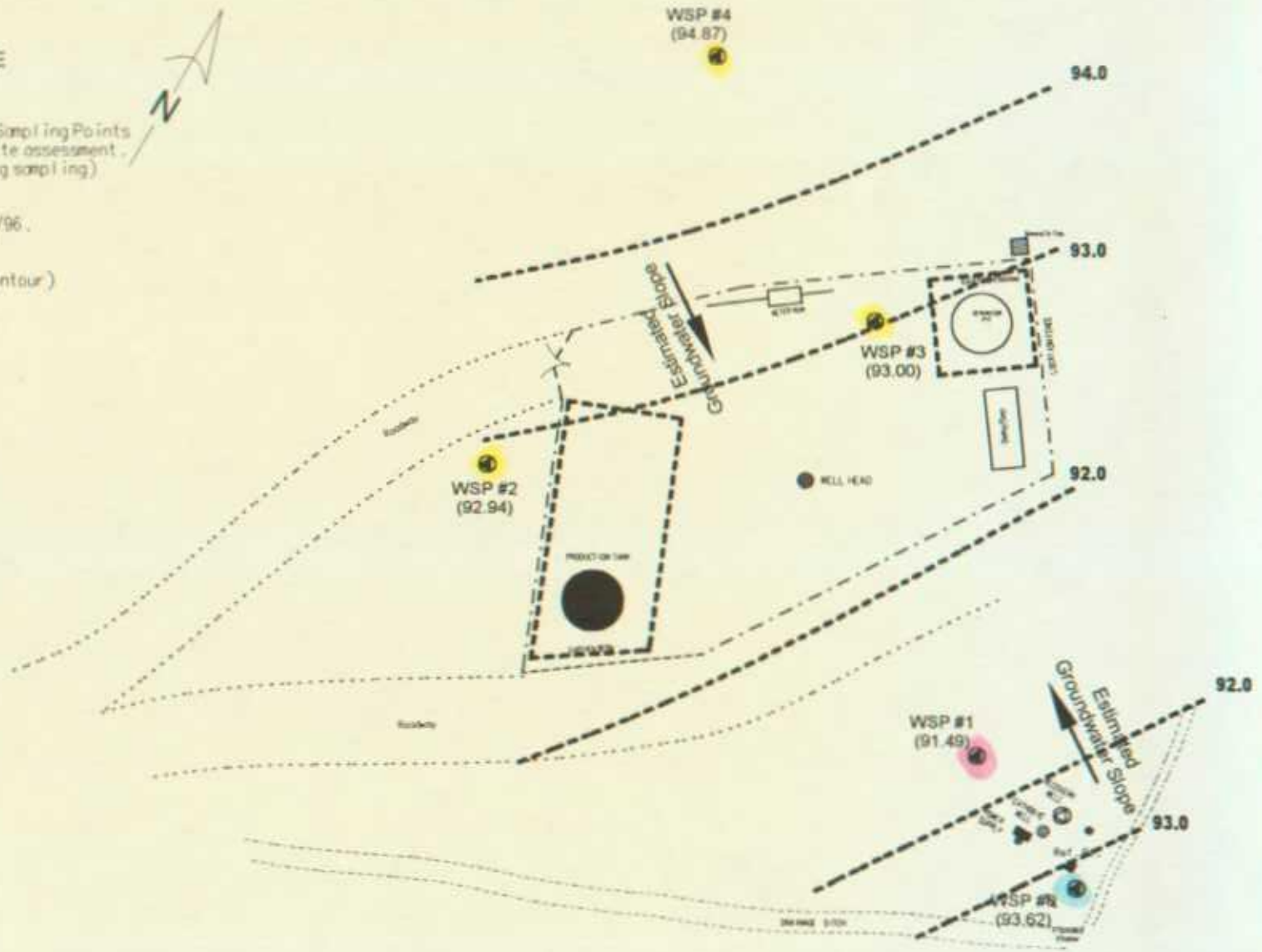
APPROXIMATE SCALE
1" = 40'

N

WSP # Approximate location of Water Sampling Points set during various phases of site assessment. (water elevation measure during sampling)

Product Recovery Well set 11/1/96.

Ground water surface (1.0 ft contour)



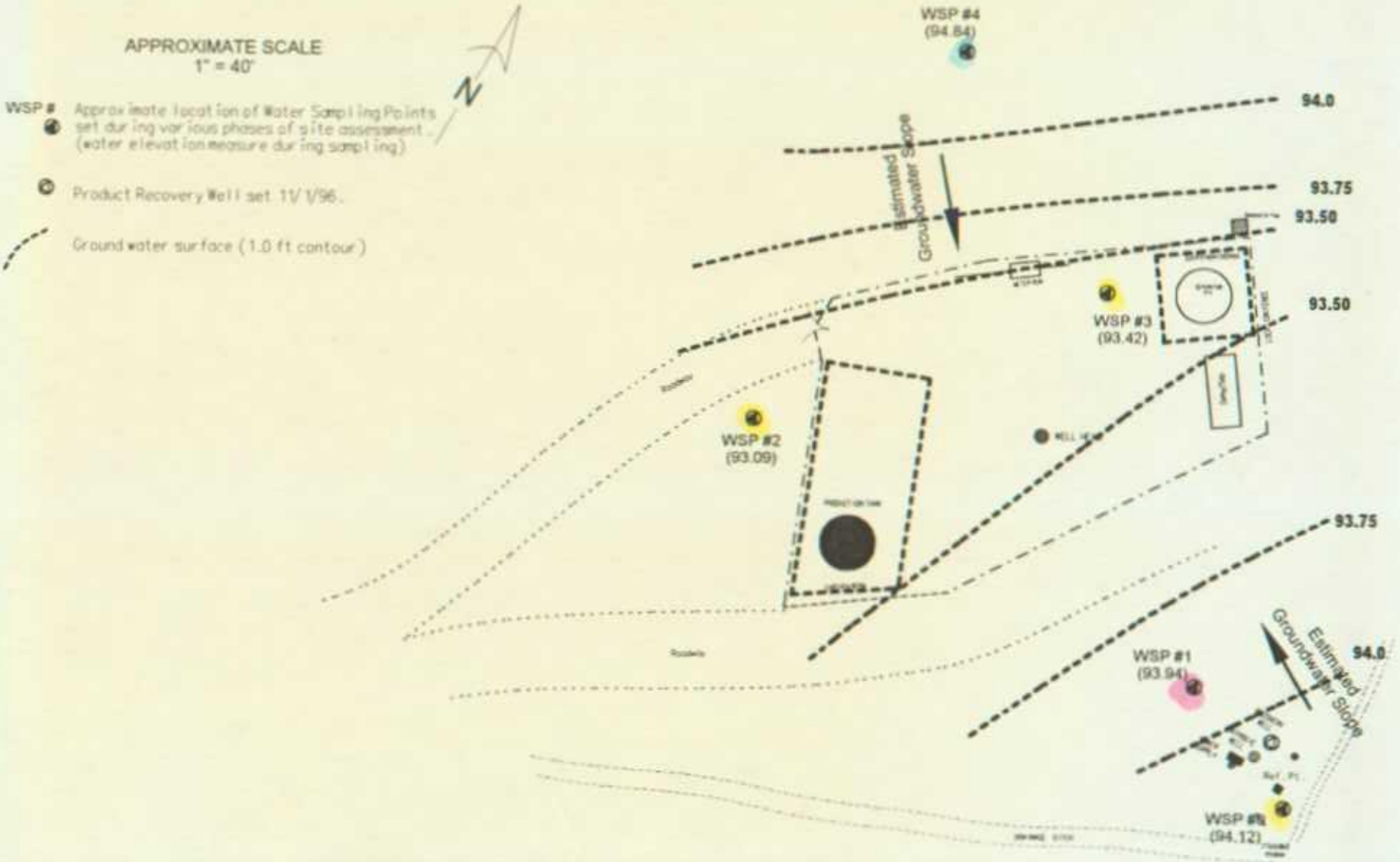
CONOCO, INC. FARMINGTON B COM. #1 SAN JUAN CO., NM	Ground Water Potentiometric Map December 5, 1997	ON SITE TECHNOLOGIES, LTD.
PROJECT: 1997 Groundwater Summary	DRWN: NOV. 6, 1996	
PROJECT NO: 4-1325	DRWN BY: MKL	
SHEET: 3	REVISED: Feb. 6, 98	

APPROXIMATE SCALE
1" = 40'

WSP # Approximate location of Water Sampling Points set during various phases of site assessment. (water elevation measure during sampling)

Product Recovery Well set 11/1/96.

Groundwater surface (1.0 ft contour)



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

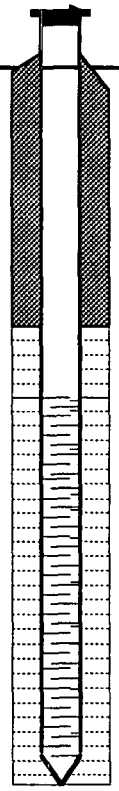
TEST HOLE LOG & MONITORING WELL DETAIL
Water Sampling Point: WSP-0

Project: CONOCO: Site Remediation Farmington B Com #1
Project No: 4-1325

Project Location: Farmington B Com #1		Logged By: Myke Lane	Approved: M K Lane
Drilling Contractor: On Site/Blagg Eng.		Date Started: 11/04/96	Date Completed: 11/04/96
Drilling Equipment: Hand/Flight Auger	Driller: NA	TD (ft): 10'	Static Water Depth (ft):
Drilling Method: NA	Borehole Dia. (in): 2.5	TOC Elevation:	Ground Elevation:
Sampling Method: NA		Well Casing (Diameter & Type): 2 in. - Sch 40 PVC	
COMMENTS: Water sampling point set by hand or flight auger due preliminary site assessment.		Slot Size (in): 0.010	Filter Material: Silica Sand 10/20
		Development Method: Bailer	

Depth (feet)	Depth to Water During Drilling (ft)	USCS	Lithology	Field Description & Remarks	Sampled Interval	Total BTEX EPA 8020	Lab TPH: EPA 8015 (ppm)
SURFACE							
		CL/CH		Dk. Gray CLAY to SANDY CLAY, moist to wet, plastic, soft, earth odor.			
2.5'							
5.0'							
7.5'	▽			Static Water Level: approx. 7.5 ft.		4.8	< 5.0
		GW		Gray CLAYEY GRAVEL to GRAVELY CLAY, saturated, dense.			
10'				TOTAL DEPTH: 10'			
25'							

Monitoring Well Construction & Remarks



Well secured with 2 in. locking plug.

5% Bentonite Cement Grout to surface.

Top of Filter Pack

Top of Screened Interval

Bottom of Screened Interval: 9.5 ft

BY: MKL
DATE: 2/6/98
FILE: 91325B0.CAD

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

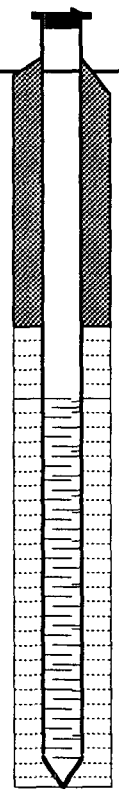
TEST HOLE LOG & MONITORING WELL DETAIL
Water Sampling Point: WSP-1

Project: CONOCO: Site Remediation Farmington B Com #1
Project No: 4-1325

Project Location: Farmington B Com #1		Logged By: Myke Lane	Approved: M K Lane
Drilling Contractor: On Site/Blagg Eng.		Date Started: Apr. 97	Date Completed: Apr. 97
Drilling Equipment: Hand/Flight Auger	Driller: NA	TD Exc. (ft): 10'	Static Water Depth (ft):
Drilling Method: NA	Borehole Dia. (in): 2.5	TOC Elevation:	Ground Elevation:
Sampling Method: NA		Well Casing (Diameter & Type): 2 in. - Sch 40 PVC	
COMMENTS: Water sampling point set by hand or flight auger in backfill following soil remediation by excavation.		Slot Size (in): 0.010	Filter Material: Silica Sand 10/20
		Development Method: Bailer	

Depth (feet)	Depth to Water During Drilling (ft)	USCS	Lithology	Field Description & Remarks	Sampled Interval	Total BTEX EPA 8020	Lab TPH: EPA 8015 (ppm)
SURFACE		SP/SM		Lt. Brown SILTY SAND to FINE SAND, moist to wet, firm, noncohesive.			
2.5'							
5.0'	▽			Static Water Level: approx. 6.0 ft.			
7.5'							
10'		GW		Gray CLAYEY GRAVEL to GRAVELY CLAY, saturated, dense.			
				TOTAL DEPTH: 10'			
25'							

Monitoring Well Construction & Remarks



Well secured with 2 in. locking plug.

5% Bentonite Cement Grout to surface.

Top of Filter Pack

Top of Screened Interval

Bottom of Screened Interval: 9.6 ft

BY: MKL
DATE: 2/6/98
FILE: 91325B1.CAD

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

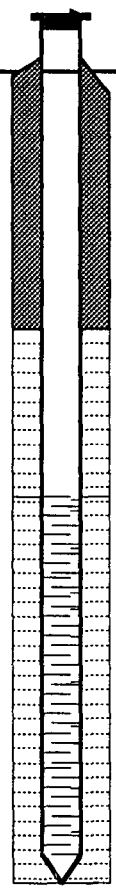
TEST HOLE LOG & MONITORING WELL DETAIL
Water Sampling Point: WSP-2

Project: CONOCO: Site Remediation Farmington B Com #1
Project No: 4-1325

Project Location: Farmington B Com #1		Logged By: Myke Lane	Approved: M K Lane
Drilling Contractor: On Site/Blagg Eng.		Date Started: Apr. 97	Date Completed: Apr. 97
Drilling Equipment: Hand/Flight Auger	Driller: NA	TD Exc. (ft): 10'	Static Water Depth (ft):
Drilling Method: NA	Borehole Dia. (in): 2.5	TOC Elevation:	Ground Elevation:
Sampling Method: NA		Well Casing (Diameter & Type): 2 in. - Sch 40 PVC	
COMMENTS: Water sampling point set by hand or flight auger in backfill following soil remediation by excavation.		Slot Size (in): 0.010	Filter Material: Silica Sand 10/20
		Development Method: Bailer	

Depth (feet)	Depth to Water During Drilling (ft)	USCS	Lithology	Field Description & Remarks	Sampled Interval	Total BTEX EPA 8020	Lab TPH: EPA 8015 (ppm)
SURFACE		SP/SM		Lt. Brown SILTY SAND to FINE SAND, moist to wet, firm, noncohesive.			
2.5'							
5.0'	▽			Static Water Level: approx. 6.0 ft.			
7.5'							
10'		GW		Gray CLAYEY GRAVEL to GRAVELY CLAY, saturated, dense.			
				TOTAL DEPTH: 11'			

Monitoring Well Construction & Remarks



BY: MKL
DATE: 2/6/98
FILE: 91325B2.CAD

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

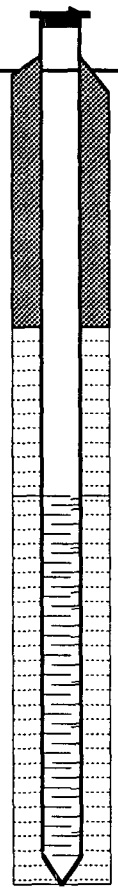
TEST HOLE LOG & MONITORING WELL DETAIL
Water Sampling Point: WSP-3

Project: CONOCO: Site Remediation Farmington B Com #1
Project No: 4-1325

Project Location: Farmington B Com #1		Logged By: Myke Lane	Approved: M K Lane
Drilling Contractor: On Site/Blagg Eng.		Date Started: Apr. 97	Date Completed: Apr. 97
Drilling Equipment: Hand/Flight Auger	Driller: NA	TD Exc. (ft): 10'	Static Water Depth (ft):
Drilling Method: NA	Borehole Dia. (in): 2.5	TOC Elevation:	Ground Elevation:
Sampling Method: NA		Well Casing (Diameter & Type): 2 in. - Sch 40 PVC	
COMMENTS: Water sampling point set by hand or flight auger in backfill following soil remediation by excavation.		Slot Size (in): 0.010	Filter Material: Silica Sand 10/20
		Development Method: Bailer	

Depth (feet)	Depth to Water During Drilling (ft)	USCS	Lithology	Field Description & Remarks	Sampled Interval	Total BTEX EPA 8020	Lab TPH: EPA 8015 (ppm)
SURFACE		SP/SM		Lt. Brown SILTY SAND to FINE SAND, moist to wet, firm, noncohesive.			
2.5'							
5.0'	▽			Static Water Level: approx. 6.0 ft.			
7.5'							
10'		GW		Gray CLAYEY GRAVEL to GRAVELY CLAY, saturated, dense.			
				TOTAL DEPTH: 11'			

Monitoring Well Construction & Remarks



Well secured with 2 in. locking plug.

5% Bentonite Cement Grout to surface.

Top of Filter Pack

Top of Screened Interval

Bottom of Screened Interval: 10.25 ft

BY: MKL
DATE: 2/6/98
FILE: 91325B3.CAD

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

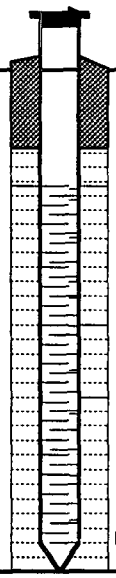
TEST HOLE LOG & MONITORING WELL DETAIL
Water Sampling Point: WSP-4

Project: CONOCO: Site Remediation Farmington B Com #1
Project No: 4-1325

Project Location: Farmington B Com #1		Logged By: Myke Lane	Approved: M K Lane
Drilling Contractor: On Site/Blagg Eng.		Date Started: 3/13/97	Date Completed: 3/13/97
Drilling Equipment: Hand/Flight Auger	Driller: NA	TD (ft): 7.5'	Static Water Depth (ft):
Drilling Method: NA	Borehole Dia. (in): 2.5	TOC Elevation:	Ground Elevation:
Sampling Method: NA		Well Casing (Diameter & Type): 2 in. - Sch 40 PVC	
COMMENTS: Water sampling point set by hand or flight auger due preliminary site assessment.		Slot Size (in): 0.010	Filter Material: Silica Sand 10/20
		Development Method: Bailer	

Depth (feet)	Depth to Water During Drilling (ft)	USCS	Lithology	Field Description & Remarks	Sampled Interval	Field Headspace PID (units)	Lab TPH: EPA 8015 (ppm)
SURFACE							
		CL/CH		Dk. Gray CLAY to SANDY CLAY, moist to wet, plastic, soft, earth odor.			
2.5'							
	▽			Static Water Level: approx. 4.0 ft.			
5.0'					X	ND	
7.5'				TOTAL DEPTH: 6.5'			
10'							

Monitoring Well Construction & Remarks



Well secured with 2 in. locking plug.

5% Bentonite Cement Grout to surface.

Top of Filter Pack

Top of Screened Interval

Bottom of Screened Interval: 6.25 ft

BY: MKL
DATE: 2/6/98
FILE: 91325B4.CAD

On Site Technologies, Ltd.
Table 1
Groundwater Level Summary
Farmington B Com 1
Unit H, Sec. 12, T29N, R12W

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)
WSP-0	100.83	9.41			06/01/97	7.30	93.53
					09/16/97	7.21	93.62
					12/05/97	6.71	94.12
WSP-1	98.01	9.73			06/01/97	5.43	92.58
					09/16/97	6.52	91.49
					12/05/97	4.07	93.94
WSP-2	99.31	10.16			06/01/97	5.57	93.74
					09/16/97	6.37	92.94
					12/05/97	6.22	93.09
WSP-3	99.17	10.15			06/01/97	6.05	93.12
					09/16/97	6.17	93.00
					12/05/97	5.75	93.42

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

On Site Technologies, Ltd.
Table 1
Groundwater Level Summary
Farmington B Com 1
Unit H, Sec. 12, T29N, R12W

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)
WSP-4	98.85	7.41			06/01/97	3.91	94.94
					09/16/97	3.98	94.87
					12/05/97	4.01	94.84

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

On Site Technologies, Ltd.
Table 2
BTEX Analytical Summary
Farmington B Com 1
Unit H, Sec. 12, T29N, R12W

Sample Date	Sample ID#	Monitor Well	Remarks	BTEX per EPA 8020 (ppb)				
				Benzene	Toluene	Ethylbenzene	Total Xylene	Total BTEX
03/18/97	13939	WSP-0	On Site Lab.	<0.3	<0.2	<0.2	0.5	0.7
06/11/97	14902	WSP-0		BDL	0.2	BDL	BDL	0.2
09/16/97	16205	WSP-0		BDL	BDL	BDL	BDL	BDL
12/5/97	17048	WSP-0		BDL	BDL	BDL	0.2	0.2
03/18/97	13935	WSP-1	On Site Lab	557.1	146.3	555.1	3572.1	4830.6
06/11/97	14903			155.0	22.0	184.0	1457.0	1817.0
09/17/97	16206			175.0	23.0	179.0	1236.0	1612.0
12/ 05/97	17049			202.0	22.0	164.0	1196.0	1896.0
01/30/97	13563	WSP-2	On Site Lab.	22.5	23.0	23.7	108.0	177.2
03/18/97	13936			25.8	13.4	11.8	53.8	105.0
06/11/97	14904			10.1	5.3	9.2	22.7	47.3
09/16/97	16208			3.9	1.0	4.5	14.8	24.2
12/05/97	17050			1.6	1.0	1.4	3.6	7.7
01/30/97	13562	WSP-3	On Site Lab.	506.8	22.0	67.8	607.1	1203.8
03/18/97	13937			35.8	1.9	1.1	7.2	45.9
06/12/97	14906			8.5	0.5	1.5	1.4	11.9
09/17/97	16211			ND	0.7	0.4	0.9	2.0
12/05/97	17051			1. 6	BDL	BDL	BDL	BDL
03/18/97	13938	WSP-4	On Site Lab.	<0.2	27.1	<0.2	1.0	28.1
06/11/97	14905			BDL	0.2	BDL	0.4	1.1
09/16/97	16207			0.9	BDL	BDL	BDL	0.9
12/05/97	17052			BDL	BDL	BDL	BDL	BDL

BDL Below Detection Levels

On Site Technologies, Ltd.
Table 3
Other Constituent Analytical Summary
Farmington B Com 1
Unit H, Sec. 12, T29N, R12W

SP#1

CATIONs						ANIONs				
PARAMETER		RESULTS	UNIT of MEASURE	WQCC Standards	UNIT OF MEASURE	PARAMETER		RESULTS	UNIT OF MEASURE	WQCC Standards	UNIT OF MEASURE
Sodium	NA	127.0	mg/L			Chloride	Cl	92.0	mg/L	250.0	mg/L
Calcium	Ca	74.0	mg/L			Sulfate	SO_4	68.0	mg/L	600.0	mg/L
Magnesium	Mg	23.2	mg/L			Carbonate	CO_3	<1	mg/L		
Potassium	K	4.9	mg/L			Bicarbonate	HCO_3	433.0	mg/L		
						Hydroxide	HO	<1	mg/L		
						Sulfide	S_2	NA	mg/L		
						Iron	Fe	<0.05	mg/L	1.0	mg/L
						Total Dissolved Solids		821.0	mg/L	1000.0	mg/L
						Total Naphthalene		0.005	mg/l	0.03	mg/l
						benzo-a-pyrene		<0.0007	mg/L	0.0007	mg/L
						pH		7.30		between 6 and 9	
						Resistivity		8.2919		ohm-m	
						Specific Gravity		1.0012			
						Total hardness of $CaCO_3$		279.0		mg/L	

Sample Date: September 17, 1997

Cation-Anion Balance	
Difference Cation-Anion me/L	0.12
Total Cation-Anion me/L	22.33
Difference Cation-Anion	0.5%

RCRA Metals
Test Method SW-846

PARAMETER	RESULTS	UNITS	WQCC	UNITS
Mercury by CVAA	<0.0005	mg/L	0.002	mg/L
Arsenic by ICP	<0.15	mg/L	0.1	mg/L
Barium by ICP	1.97	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	<0.20	mg/L	0.05	mg/L
Selenium by ICP	<0.35	mg/L	0.05	mg/L
Silver by ICP	<0.030	mg/L	0.05	mg/L

On Site Technologies, Ltd.
Table 3
Other Constituent Analytical Summary
Farmington B Com 1
Unit H, Sec. 12, T29N, R12W

SP#2

CATIONS						ANIONS					
PARAMETER		RESULTS	UNIT OF MEASURE	WQCC Standards	UNIT OF MEASURE	PARAMETER		RESULTS	UNIT OF MEASURE	WQCC Standards	UNIT OF MEASURE
Sodium	NA	195.0	mg/L			Chloride	Cl	332.0	mg/L	250.0	mg/L
Calcium	Ca	255.0	mg/L			Sulfate	SO_4	588.0	mg/L	600.0	mg/L
Magnesium	Mg	7.0	mg/L			Carbonate	CO_3	<1	mg/L		
Potassium	K	7.0	mg/L			Bicarbonate	HCO_3	566.0	mg/L		
						Hydroxide	HO	<1	mg/L		
						Sulfide	S_2	NA	mg/L		
						Iron	Fe	<0.05	mg/L	1.0	mg/L
						Total Dissolved Solids		2021		1000.o	mg/L
						pH		7.20		between 6 and 9	
						Resistivity		3.5714		ohm-m	
						Specific Gravity		1.0014			
						Total hardness of $CaCO_3$		958.0		mg/L	

Sample Date: September 16,1997

Cation-Anion Balance	
Difference Cation-Anion me/L	3.08
Total Cation-Anion me/L	58.69
Difference Cation-Anion	5.2%

RCRA Metals
Test Method SW-846

PARAMETER	RESULTS	UNITS	WQCC	UNITS
Mercury by CVAA	<0.0005	mg/L	0.002	mg/L
Arsenic by ICP	<0.15	mg/L	0.1	mg/L
Barium by ICP	0.28	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	<0.20	mg/L	0.05	mg/L
Selenium by ICP	<0.35	mg/L	0.05	mg/L
Silver by ICP	<0.030	mg/L	0.05	mg/L

On Site Technologies, Ltd.
Table 3
Other Constituent Analytical Summary
Farmington B Com 1
Unit H, Sec. 12, T29N, R12W

WSP#2

CATIONS						ANIONS					
PARAMETER		RESULTS	UNIT OF MEASURE	WQCC Standards	UNIT OF MEASURE	PARAMETER		RESULTS	UNIT OF MEASURE	WQCC Standards	UNIT OF MEASURE
Sodium	NA	54.0	mg/L			Chloride	Cl	66	mg/L	250.0	mg/L
Calcium	Ca	79.0	mg/L			Sulfate	SO_4	153	mg/L	600.0	mg/L
Magnesium	Mg	23.0	mg/L			Carbonate	CO_3	<1	mg/L		
Potassium	K	2.66	mg/L			Bicarbonate	HCO_3	240	mg/L		
						Hydroxide	HO	<1	mg/L		
						Sulfide	S_2	NA	mg/L		
						Iron	Fe	<0.05	mg/L	1.0	mg/L
						Total Dissolved Solids		2021		1000.o	mg/L
						pH		7.39		between 6 and 9	
						Resistivity		11.5875		ohm-m	
						Specific Gravity		1.0011			
						Total hardness of $CaCO_3$		292.0		mg/L	

Sample Date: December 5,1997

Cation-Anion Balance

Difference Cation-Anion me/L	0.74
Total Cation-Anion me/L	17.21
Difference Cation-Anion	4.3%

On Site Technologies, Ltd.
Table 3
Other Constituent Analytical Summary
Farmington B Com 1
Unit H, Sec. 12, T29N, R12W

SP#3

CATIONs						ANIONs				
PARAMETER		RESULTS	UNIT OF MEASURE	WQCC Standards	UNIT OF MEASURE	PARAMETER		RESULTS	UNIT OF MEASURE	WQCC Standards	UNIT OF MEASURE
Sodium	Na	160.0	mg/L			Chloride	Cl	150.0	mg/L	250.0	mg/L
Calcium	Ca	565.0	mg/L			Sulfate	SO_4	1354.0	mg/L	600.0	mg/L
Magnesium	Mg	63.0	mg/L			Carbonate	CO_3	<1	mg/L		
Potassium	K	15.7	mg/L			Bicarbonate	HCO_3	539.0	mg/L		
						Hydroxide	HO	<1	mg/L		
						Sulfide	S_2	NA	mg/L		
						Iron	Fe	<0.05	mg/L	1.0	mg/L
						Total Dissolved Solids		2847.0		1000.o	
						pH		6.79		between 6 and 9	
						Resistivity		3.1546		ohm-m	
						Specific Gravity		1.0028			
						Total hardness of $CaCO_3$		1670.0		mg/L	

Sample Date: September 17, 1997

Cation-Anion Balance	
Difference Cation-Anion me/L	0.51
Total Cation-Anion me/L	81.99
Difference Cation-Anion	0.6%

RCRA Metals
Test Method SW-846

PARAMETER	RESULTS	UNITS	WQCC	UNITS
Mercury by CVAA	<0.0005	mg/L	0.002	mg/L
Arsenic by ICP	<0.15	mg/L	0.1	mg/L
Barium by ICP	0.17	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	<0.20	mg/L	0.05	mg/L
Selenium by ICP	<0.35	mg/L	0.05	mg/L
Silver by ICP	<0.030	mg/L	0.05	mg/L

On Site Technologies, Ltd.
Table 3
Other Constituent Analytical Summary
Farmington B Com 1
Unit H, Sec. 12, T29N, R12W

WSP#3

CATIONS						ANIONS					
PARAMETER		RESULTS	UNIT OF MEASURE	WQCC Standards	UNIT OF MEASURE	PARAMETER		RESULTS	UNIT OF MEASURE	WQCC Standards	UNIT OF MEASURE
Sodium	Na	89	mg/L			Chloride	Cl	82	mg/L	250.0	mg/L
Calcium	Ca	275	mg/L			Sulfate	SO_4	537	mg/L	600.0	mg/L
Magnesium	Mg	42.5	mg/L			Carbonate	CO_3	<1	mg/L		
Potassium	K	6.5	mg/L			Bicarbonate	HCO_3	450	mg/L		
						Hydroxide	HO	<1	mg/L		
						Sulfide	S_2	NA	mg/L		
						Iron	Fe	<0.05	mg/L	1.0	mg/L
						Total Dissolved Solids		1481.0		1000.o	
						pH		7.34		between 6 and 9	
						Resistivity		6.4433		ohm-m	
						Specific Gravity		1.0014			
						Total hardness of $CaCO_3$		861.0		mg/L	

Sample Date: December 5, 1997

Cation-Anion Balance	
Difference Cation-Anion me/L	036
Total Cation-Anion me/L	42.10
Difference Cation-Anion	0.9%

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Larry Trujillo*	Date:	11-Dec-97
Company:	*On Site Technologies, Ltd. c/o Conoco, Inc.*	COC No.:	*6759*
Address:	*612 E. Murray Drive*	Sample No.:	*17048*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1325*

Project Name:	***Conoco, Inc. - Farmington B-Com-1***				
Project Location:	***WSP 0***				
Sampled by:	LT/TY	Date:	5-Dec-97	Time:	9:00
Analyzed by:	DC	Date:	10-Dec-97		
Sample Matrix:	*Liquid*				

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene	ND	ug/L	0.2	ug/L
Toluene	ND	ug/L	0.2	ug/L
Ethylbenzene	ND	ug/L	0.2	ug/L
m,p-Xylene	0.2	ug/L	0.2	ug/L
o-Xylene	ND	ug/L	0.2	ug/L
TOTAL	0.2	ug/L		

ND - Not Detected at Limit of Quantitation

Method - *SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography*

Approved By:
Date: 12/11/97

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Larry Trujillo*	Date:	11-Dec-97
Company:	*On Site Technologies, Ltd. c/o Conoco, Inc.*	COC No.:	*6759*
Address:	*612 E. Murray Drive*	Sample No.:	*17049*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1325*

Project Name:	***Conoco, Inc. - Farmington B-Com-1***				
Project Location:	***WSP 1***				
Sampled by:	LT/TY	Date:	5-Dec-97	Time:	NR
Analyzed by:	DC	Date:	10-Dec-97		
Sample Matrix:	*Liquid*				

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene	202	ug/L	1	ug/L
Toluene	22	ug/L	1	ug/L
Ethylbenzene	164	ug/L	1	ug/L
m,p-Xylene	1196	ug/L	1	ug/L
o-Xylene	310	ug/L	1	ug/L
TOTAL	1896	ug/L		

ND - Not Detected at Limit of Quantitation

Method - *SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography*

Approved By:

Date: 12/11/97

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Larry Trujillo*	Date:	11-Dec-97
Company:	*On Site Technologies, Ltd. c/o Conoco, Inc.*	COC No.:	*6759*
Address:	*612 E. Murray Drive*	Sample No.:	*17050*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1325*

Project Name:	***Conoco, Inc. - Farmington B-Com-1***				
Project Location:	***WSP 2***				
Sampled by:	LT/TY	Date:	5-Dec-97	Time:	NR
Analyzed by:	DC	Date:	10-Dec-97		
Sample Matrix:	*Liquid*				

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene	1.6	ug/L	0.2	ug/L
Toluene	1.0	ug/L	0.2	ug/L
Ethylbenzene	1.4	ug/L	0.2	ug/L
m,p-Xylene	3.4	ug/L	0.2	ug/L
o-Xylene	0.2	ug/L	0.2	ug/L
TOTAL	7.7	ug/L		

ND - Not Detected at Limit of Quantitation

Method - *SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography*

Approved By: DaC
Date: 12/11/97

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Larry Trujillo*	Date:	11-Dec-97
Company:	*On Site Technologies, Ltd. c/o Conoco, Inc.*	COC No.:	*6759*
Address:	*612 E. Murray Drive*	Sample ID.:	*17050*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1325*

Project Name:	***Conoco, Inc. - Farmington B-Com-1***				
Project Location:	***WSP 2***				
Sampled by:	LT/TY	Date:	5-Dec-97	Time:	NR
Analyzed by:	HR	Date:	10-Dec-97		

API RP-45 Laboratory Analysis

Parameter		*Result*	*Unit of Measure*		*Result*	*Unit of Measure*	
Cations							
Sodium	*Na*	54	mg/L		2.33	me/L	
Calcium	*Ca*	79.0	mg/L		3.94	me/L	
Magnesium	*Mg*	23.0	mg/L		1.89	me/L	
Potassium	*K*	2.66	mg/L		0.07	me/L	
Anions							
Chloride	*Cl*	66	mg/L		1.85	me/L	
Sulfate	*SO4*	153	mg/L		3.19	me/L	
Carbonate	*CO3*	<1	mg/L		<0.01	me/L	
Bicarbonate	*HCO3*	240	mg/L		3.93	me/L	
Hydroxide	*OH*	<1	mg/L		<0.01	me/L	
Sulfide	*S2*	NA	mg/L		NA	me/L	
Iron	*Fe*	<0.05	mg/L		<0.01	me/L	
Total Dissolved Solids Calculated, Sum of Cation/Anion		617	mg/L				
pH		7.39					
Resistivity		11.5875	ohm-m				
Specific Gravity		1.0011					
Total Hardness as CaCO3		292	mg/L				

Cation-Anion Balance

0.74 *Difference Cation-Anion, me/L*

17.21 *Total Cation-Anion, me/L*

4.3 *% Difference Cation-Anion*

Comments

NA: *Not Analyzed*

Approved by:

Date: 12/11/97

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Larry Trujillo*	Date:	11-Dec-97
Company:	*On Site Technologies, Ltd. c/o Conoco, Inc.*	COC No.:	*6759*
Address:	*612 E. Murray Drive*	Sample No.:	*17051*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1325*

Project Name:	***Conoco, Inc. - Farmington B-Com-1***				
Project Location:	***WSP 3***				
Sampled by:	LT/TY	Date:	5-Dec-97	Time:	NR
Analyzed by:	DC	Date:	10-Dec-97		
Sample Matrix:	*Liquid*				

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene	ND	ug/L	0.2	ug/L
Toluene	ND	ug/L	0.2	ug/L
Ethylbenzene	ND	ug/L	0.2	ug/L
m,p-Xylene	ND	ug/L	0.2	ug/L
o-Xylene	ND	ug/L	0.2	ug/L
TOTAL	ND	ug/L		

ND - Not Detected at Limit of Quantitation

Method - *SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography*

Approved By:
Date: 12/11/97

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Larry Trujillo*	Date:	11-Dec-97
Company:	*On Site Technologies, Ltd. c/o Conoco, Inc.*	COC No.:	*6759*
Address:	*612 E. Murray Drive*	Sample ID.:	*17051*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1325*

Project Name:	***Conoco, Inc. - Farmington B-Com-1***				
Project Location:	***WSP 3***				
Sampled by:	LT/TY	Date:	5-Dec-97	Time:	NR
Analyzed by:	HR	Date:	10-Dec-97		

API RP-45 Laboratory Analysis

Parameter		*Result*	*Unit of Measure*		*Result*	*Unit of Measure*	
Cations							
Sodium	*Na*	89	mg/L		3.85	me/L	
Calcium	*Ca*	275	mg/L		13.72	me/L	
Magnesium	*Mg*	42.4	mg/L		3.49	me/L	
Potassium	*K*	6.5	mg/L		0.17	me/L	
Anions							
Chloride	*Cl*	82	mg/L		2.31	me/L	
Sulfate	*SO4*	537	mg/L		11.18	me/L	
Carbonate	*CO3*	<1	mg/L		<0.01	me/L	
Bicarbonate	*HCO3*	450	mg/L		7.37	me/L	
Hydroxide	*OH*	<1	mg/L		<0.01	me/L	
Sulfide	*S2*	NA	mg/L		NA	me/L	
Iron	*Fe*	<0.05	mg/L		<0.01	me/L	
Total Dissolved Solids Calculated, Sum of Cation/Anion		1481	mg/L				
pH		7.34					
Resistivity		6.4433	ohm-m				
Specific Gravity		1.0014					
Total Hardness as CaCO3		861	mg/L				

Cation-Anion Balance

0.36	*Difference Cation-Anion, me/L*
42.10	*Total Cation-Anion, me/L*
0.9	*% Difference Cation-Anion*

Comments

NA: *Not Analyzed*

Approved by: [signature]
Date: 12/11/97

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Larry Trujillo*	Date:	9-Dec-97
Company:	*On Site Technologies, Ltd. c/o Conoco, Inc.*	COC No.:	*6759*
Address:	*612 E. Murray Drive*	Sample No.:	*17052*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1325*

Project Name:	***Conoco, Inc. - Farmington B-Com-1***				
Project Location:	***WSP 4***				
Sampled by:	LT/TY	Date:	5-Dec-97	Time:	NR
Analyzed by:	DC	Date:	8-Dec-97		
Sample Matrix:	*Liquid*				

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene	ND	ug/L	0.2	ug/L
Toluene	ND	ug/L	0.2	ug/L
Ethylbenzene	ND	ug/L	0.2	ug/L
m,p-Xylene	ND	ug/L	0.2	ug/L
o-Xylene	ND	ug/L	0.2	ug/L
TOTAL	ND	ug/L		

ND - Not Detected at Limit of Quantitation

Method - *SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography*

Approved By:

Date: 12/10/97

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

QUALITY ASSURANCE REPORT

for EPA Method 8020

Date Analyzed: 8-Dec-97

Internal QC No.: 0559-STD
Surrogate QC No.: 0556-STD
Reference Standard QC No.: 0529/30-QC

Method Blank

Parameter	*Result*	*Unit of Measure*
Average Amount of All Analytes In Blank	<0.2	ppb

Calibration Check

Parameter	*Unit of Measure*	*True Value*	*Analyzed Value*	*RPD*	*Limit*
Benzene	ppb	20.0	20.4	2	15%
Toluene	ppb	20.0	20.9	4	15%
Ethylbenzene	ppb	20.0	21.0	5	15%
m,p-Xylene	ppb	40.0	40.7	2	15%
o-Xylene	ppb	20.0	20.8	4	15%

Matrix Spike

Parameter	*1- Percent Recovered*	*2 - Percent Recovered*	*Limit*	*RPD*	*Limit*
Benzene	95	83	(39-150)	12	20%
Toluene	99	87	(46-148)	12	20%
Ethylbenzene	93	84	(32-160)	9	20%
m,p-Xylene	103	84	(35-145)	6	20%
o-Xylene	94	84	(35-145)	11	20%

Surrogate Recoveries

Laboratory Identification	*S1 Percent Recovered*	*S2 Percent Recovered*	*Laboratory Identification*	*S1 Percent Recovered*	*S2 Percent Recovered*
Limit Percent Recovered	(70-130)		*Limit Percent Recovered*	(70-130)	
17052-6759	93				
				12/11/97	12/10/97

S1: *Flourobenzene*

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

QUALITY ASSURANCE REPORT

for EPA Method 8020

Date Analyzed: 10-Dec-97

Internal QC No.: 0559-STD
Surrogate QC No.: 0556-STD
Reference Standard QC No.: 0529/30-QC

Method Blank

Parameter	Result	Unit of Measure
Average Amount of All Analytes In Blank	<0.2	ppb

Calibration Check

Parameter	Unit of Measure	True Value	Analyzed Value	RPD	Limit
Benzene	ppb	20.0	20.1	0	15%
Toluene	ppb	20.0	20.5	3	15%
Ethylbenzene	ppb	20.0	20.3	2	15%
m,p-Xylene	ppb	40.0	39.3	2	15%
o-Xylene	ppb	20.0	20.4	2	15%

Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	Limit
Benzene	91	83	(39-150)	5	20%
Toluene	103	98	(46-148)	4	20%
Ethylbenzene	97	88	(32-160)	5	20%
m,p-Xylene	108	88	(35-145)	5	20%
o-Xylene	96	85	(35-145)	4	20%

Surrogate Recoveries

Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered	Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered
Limit Percent Recovered	(70-130)		Limit Percent Recovered	(70-130)	
17048-6759	93				
17049-6759	90				
17050-6759	92				
17051-6759	93				
				DK	(DC)
				12/11/97	12/11/97

S1: *Flourobenzene*

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

QUALITY ASSURANCE REPORT

API RP-45 Water Analysis

Date: 10-Dec-97

Quality Control Sample

Parameter	*Laboratory Identification*	*True Value*	*Analyzed Value*	*Unit of Measure*	*% Diff*	*Limit % Diff*
Sodium, Na	0563-QC	2.60	2.41	mg/L	-7	10
Calcium, Ca	0465-QC	2.18	2.20	mg/L	1	10
Magnesium, Mg	0465-QC	1.14	1.22	mg/L	7	10
Potassium, K	0563-QC	1.97	1.83	mg/L	-7	10
Chloride, Cl	0563-QC	85	82	mg/L	-3	10
Sulfate, SO4	0563-QC	96	89	mg/L	-8	10
Alkalinity	0563-QC	163	170	mg/L	4	10
Iron, Fe	0495-QC	1.00	1.01	mg/L	1	10
pH	0563-QC	9.14	9.26		1	10
Conductivity	0563-QC	900	898	uS/cm	0	15

Matrix Spike

Parameter	*Laboratory Identification*	*Analyzed Value*	*Matrix Spike*	*Spike Value*	*Unit of Measure*	*Spike Recovery*
Sodium, Na	17050-6759	1.34	0.50	1.90	mg/L	103%
Calcium, Ca	17051-6759	1.38	0.50	1.94	mg/L	103%
Magnesium, Mg	17051-6759	1.06	0.50	1.62	mg/L	104%
Potassium, K	17051-6759	1.62	0.50	2.14	mg/L	101%
Iron, Fe	17050-6759	0.00	0.50	0.50	mg/L	100%

Method Blank

Parameter	*Laboratory Identification*	*Analyzed Value*	*Unit of Measure*
Sodium, Na	LF-Blank	<0.2	mg/L
Calcium, Ca	LF-Blank	<0.05	mg/L
Magnesium, Mg	LF-Blank	<0.05	mg/L
Potassium, K	LF-Blank	<0.05	mg/L
Iron, Fe	LF-Blank	<0.05	mg/L
Chloride, Cl	LF-Blank	<3 X DL	mg/L
Sulfate, SO4	LF-Blank	<1	mg/L
Sulfide, SO2	LF-Blank	NA	mg/L
Conductivity	LF-Blank	<2	uS/cm

12/11/97 12/11/97

RECEIVED JAN 0 5 1998

Mountain States Analytical, Inc.

The Quality Solution

December 22, 1997

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

Reference:
Project: Farmington B-Com-1
Project No.: 4-1325
MSAI Group: 18975

Dear Mr. Cox:

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

17049-6759

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

If the report is acceptable, please approve the enclosed 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

Corporate Office
1645 West 2200 South, Salt Lake City, Utah 84119
801-973-0050 • 1-800-573-8734(MSAI) • FAX 801-973-5273
e-mail: service@msalabs.com

Intermountain States Region

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: Farmington B-Com-1

MSAI Sample: 72560
MSAI Group: 18975
Date Reported: 12/22/97
Discard Date: 01/21/98
Date Submitted: 12/10/97
Date Sampled: 12/05/97
Collected by: LT
Purchase Order: 6759
Project No.: 4-1325

Sample ID: 17049-6759 WSP 1 (RE) 1/6/98
Matrix: Waste Water

Test	Analysis	Results as Received	Units	Limit of Quantitation
0259B	Mercury by CVAA, w/ww, 7470 Method: SW-846 7470	ND	mg/l	0.0005
0392I	Flame/ICP Prep, w/ww, 3005A Method: SW-846 3005A	Batch. w910		
0392M	Mercury Prep CVAA, w/ww, 7470 Method: SW-846 7470	Batch. w914		
7245	Arsenic by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.15
7246	Barium by ICP, w/ww, 6010A Method: SW-846 6010A	1.68	mg/l	0.02
7249	Cadmium by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.020
7251	Chromium by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.050
7255	Lead by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.20
7264	Selenium by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.35
7266	Silver by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.030

Mountain States Analytical, Inc.
The Quality Solution

On Site Technologies, Ltd.

MSAI Sample: 72560
MSAI Group: 18975

Sample ID: 17049-6759

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

12/19/97
16:02:23
Group: 18975

Analysis Batch Number: 0259B-12/17/97-114 -1
Test Identification : 0259B-Mercury by CVAA, w/ww, 7470 Sequence : 0259B-1
umber of Samples : 6
atch Data-Date/Time : 12/18/97 / 08:44:17

LANK#	ANALYTE	CONC FOUND #	CONC LIMIT
BW1-914	Mercury	-0.0600	0.1000
PBW2-914-2	Mercury	-0.0700	0.1000

PIKE

SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	CONC SPIKE	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
18931-72394	Mercury	2.0000	-0.0100	2.2200	111.5	80.0	120.0

SD

SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	RESULT 2	%REC2 #	QC LIMITS LOWER	QC LIMITS UPPER	RPD #	LIMIT
8931-72394	Mercury	2.0000	-0.0100	2.1000	105.5	80.0	120.0	5.6	20.0

DUPLICATE

SAMPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
8931-72394	Mercury	-0.0100	0.0000	200.0(11)	20.0	1.00

CONTROL

AMPLE#	ANALYTE	CONC FOUND	CONC KNOWN	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
CSW-914	Mercury	2.7000	2.5000	108.0	80.0	120.0

CV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
CCV-	Mercury	3.0000	2.9800	99.3	90.0	110.0
CCV--2	Mercury	5.0000	4.9800	99.6	80.0	120.0
CV--3	Mercury	5.0000	5.0200	100.4	80.0	120.0
CV--4	Mercury	5.0000	4.9800	99.6	80.0	120.0
CCV--5	Mercury	5.0000	5.1000	102.0	80.0	120.0
CV--6	Mercury	5.0000	5.0400	100.8	80.0	120.0

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
CCB-	Mercury	ND	0.1000
CB-	Mercury	-0.0100	0.1000
CCB-	Mercury	-0.0100	0.1000
CCB-	Mercury	-0.0100	0.1000
CB-	Mercury	ND	0.1000
CB-	Mercury	-0.0100	0.1000

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

Groups & Samples

18931-72394 18937-72401 18939-72403 18939-72404 18973-72555 18973-72556 18975-72560

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

12/19/97
16:02:29
Group: 18975

Analysis Batch Number: ICPWA-12/16/97-001 -2
Test Identification : ICPWA-*Metals by ICP
umber of Samples : 10
atch Data-Date/Time : 12/16/97 / 15:26:46

Sequence : DATD350

LANK#	ANALYTE	CONC FOUND #	CONC LIMIT
8949-72465	Silver	ND	0.0060
	Barium	ND	0.0030
	Cadmium	ND	0.0040
	Chromium	ND	0.0100
	Copper	ND	0.0100
	Manganese	ND	0.0020
	Nickel	ND	0.0300
	Lead	0.0302	0.0400
18949-72465-2	Silver	ND	0.0060
	Barium	ND	0.0030
	Cadmium	ND	0.0040
	Chromium	ND	0.0100
	Copper	ND	0.0100
	Manganese	ND	0.0020
	Nickel	ND	0.0300
	Lead	0.0302	0.0400

PIKE

SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	CONC SPIKE	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
18949-72464	Silver	0.0500	-0.0066	0.0470	107.2	80.0	120.0
	Barium	2.0000	0.0998	2.1063	100.3	80.0	120.0
	Cadmium	0.0500	-0.0020	0.0465	97.0	80.0	120.0
	Chromium	0.2000	0.3021	0.5299	113.9	80.0	120.0
	Copper	0.2500	-0.0002	0.2503	100.2	80.0	120.0
	Manganese	0.5000	0.1182	0.6163	99.6	80.0	120.0
	Nickel	0.5000	0.3783	0.8628	96.9	80.0	120.0
	Lead	0.5000	0.0180	0.4796	92.3	80.0	120.0

MSD

SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	RESULT 2	%REC2 #	QC LIMITS LOWER	QC LIMITS UPPER	RPD #	LIMIT
8949-72464	Silver	0.0500	-0.0066	0.0459	105.0	80.0	120.0	2.4	20.0
	Barium	2.0000	0.0998	2.0481	97.4	80.0	120.0	2.8	20.0
	Cadmium	0.0500	-0.0020	0.0474	98.8	80.0	120.0	1.9	20.0
	Chromium	0.2000	0.3021	0.5493	123.6(2c)	80.0	120.0	3.6	20.0
	Copper	0.2500	-0.0002	0.2482	99.4	80.0	120.0	0.8	20.0
	Manganese	0.5000	0.1182	0.6021	96.8	80.0	120.0	2.3	20.0
	Nickel	0.5000	0.3783	0.8488	94.1	80.0	120.0	1.6	20.0
	Lead	0.5000	0.0180	0.4867	93.7	80.0	120.0	1.5	20.0

DUPLICATE

MPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
8949-72464	Silver	-0.0066	0.0000	200.0(11)	20.0	1.00
	Barium	0.0998	0.1006	0.8	20.0	1.00
	Cadmium	-0.0020	0.0000	200.0(11)	20.0	1.00
	Chromium	0.3021	0.3280	8.2	20.0	1.00
	Copper	-0.0002	0.0003	1000.0(11)	20.0	1.00
	Manganese	0.1182	0.1189	0.6	20.0	1.00
	Nickel	0.3783	0.3698	2.3	20.0	1.00
	Lead	0.0180	0.0152	16.9	20.0	1.00

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

12/19/97
16:02:31
Group: 18975

Analysis Batch Number: ICPWA-12/16/97-001 -2
Test Identification : ICPWA-*Metals by ICP
umber of Samples : 10
atch Data-Date/Time : 12/16/97 / 15:26:46

Sequence : DATD350

ONTROL AMPLE#	ANALYTE	CONC FOUND	CONC KNOWN	% REC #	QC LIMITS LOWER	UPPER
18949-72466	Silver	0.0515	0.0500	103.0	80.0	120.0
	Barium	2.0350	2.0000	101.8	80.0	120.0
	Cadmium	0.0504	0.0500	100.8	80.0	120.0
	Chromium	0.2050	0.2000	102.5	80.0	120.0
	Copper	0.2588	0.2500	103.5	80.0	120.0
	Manganese	0.5068	0.5000	101.4	80.0	120.0
	Nickel	0.5114	0.5000	102.3	80.0	120.0
	Lead	0.5184	0.5000	103.7	80.0	120.0
8949-72466-2	Silver	0.0515	0.0500	103.0	80.0	120.0
	Barium	2.0350	2.0000	101.8	80.0	120.0
	Cadmium	0.0504	0.0500	100.8	80.0	120.0
	Chromium	0.2050	0.2000	102.5	80.0	120.0
	Copper	0.2588	0.2500	103.5	80.0	120.0
	Manganese	0.5068	0.5000	101.4	80.0	120.0
	Nickel	0.5114	0.5000	102.3	80.0	120.0
	Lead	0.5184	0.5000	103.7	80.0	120.0

CV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	QC LIMITS LOWER	UPPER
CV-	Silver	0.4000	0.3993	99.8	90.0	110.0
	Barium	4.0000	3.9345	98.4	90.0	110.0
	Cadmium	4.0000	3.9509	98.8	90.0	110.0
	Chromium	4.0000	4.0223	100.6	90.0	110.0
	Copper	4.0000	3.9390	98.5	90.0	110.0
	Manganese	4.0000	3.9281	98.2	90.0	110.0
	Nickel	8.0000	7.9581	99.5	90.0	110.0
	Lead	20.0000	19.5016	97.5	90.0	110.0
CCV1--2	Silver	0.4000	0.3982	99.6	90.0	110.0
	Barium	4.0000	3.9294	98.2	90.0	110.0
	Cadmium	4.0000	3.9528	98.8	90.0	110.0
	Chromium	4.0000	4.0270	100.7	90.0	110.0
	Copper	4.0000	3.9316	98.3	90.0	110.0
	Manganese	4.0000	3.9222	98.1	90.0	110.0
	Nickel	8.0000	7.9491	99.4	90.0	110.0
	Lead	20.0000	19.4233	97.1	90.0	110.0
CV2--3	Silver	0.4000	0.3924	98.1	90.0	110.0
	Barium	4.0000	3.8677	96.7	90.0	110.0
	Cadmium	4.0000	3.8880	97.2	90.0	110.0
	Chromium	4.0000	3.9818	99.5	90.0	110.0
	Copper	4.0000	3.8787	97.0	90.0	110.0
	Manganese	4.0000	3.8669	96.7	90.0	110.0
	Nickel	8.0000	7.8642	98.3	90.0	110.0
	Lead	20.0000	19.1793	95.9	90.0	110.0
CV3--4	Silver	0.4000	0.3951	98.8	90.0	110.0
	Barium	4.0000	3.9414	98.5	90.0	110.0
	Cadmium	4.0000	3.9218	98.0	90.0	110.0
	Chromium	4.0000	4.0150	100.4	90.0	110.0
	Copper	4.0000	3.9469	98.7	90.0	110.0
	Manganese	4.0000	3.9045	97.6	90.0	110.0

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

12/19/97
16:02:33
Group: 18975

Analysis Batch Number: ICPWA-12/16/97-001 -2
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 10
Batch Data-Date/Time : 12/16/97 / 15:26:46

Sequence : DATD350

CV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
CCV3--4	Nickel	8.0000	7.9119	98.9	90.0	110.0
	Lead	20.0000	19.3728	96.9	90.0	110.0
CV4--5	Silver	0.4000	0.3917	97.9	90.0	110.0
	Barium	4.0000	3.9089	97.7	90.0	110.0
	Cadmium	4.0000	3.9339	98.3	90.0	110.0
	Chromium	4.0000	4.0178	100.4	90.0	110.0
	Copper	4.0000	3.9226	98.1	90.0	110.0
	Manganese	4.0000	3.8985	97.5	90.0	110.0
	Nickel	8.0000	7.9151	98.9	90.0	110.0
	Lead	20.0000	19.4466	97.2	90.0	110.0

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
CCB-	Silver	ND	0.0060
	Barium	ND	0.0030
	Cadmium	ND	0.0040
	Chromium	ND	0.0100
	Copper	ND	0.0100
	Manganese	ND	0.0020
	Nickel	ND	0.0300
	Lead	ND	0.0400
CCB1-	Silver	ND	0.0060
	Barium	ND	0.0030
	Cadmium	ND	0.0040
	Chromium	ND	0.0100
	Copper	ND	0.0100
	Manganese	ND	0.0020
	Nickel	ND	0.0300
	Lead	0.0070	0.0400
CCB2-	Silver	ND	0.0060
	Barium	ND	0.0030
	Cadmium	ND	0.0040
	Chromium	ND	0.0100
	Copper	ND	0.0100
	Manganese	ND	0.0020
	Nickel	ND	0.0300
	Lead	0.0081	0.0400
CCB3-	Silver	ND	0.0060
	Barium	ND	0.0030
	Cadmium	ND	0.0040
	Chromium	ND	0.0100
	Copper	ND	0.0100
	Manganese	ND	0.0020
	Nickel	0.0058	0.0300
	Lead	0.0107	0.0400
CCB4-	Silver	ND	0.0060
	Barium	ND	0.0030
	Cadmium	ND	0.0040
	Chromium	ND	0.0100
	Copper	ND	0.0100

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

12/19/97
16:02:35
Group: 18975

Analysis Batch Number: ICPWA-12/16/97-001 -2
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 10
Batch Data-Date/Time : 12/16/97 / 15:26:46

Sequence : DATD350

CB#	ANALYTE	CONC FOUND #	CONC LIMIT
CB4-	Manganese	ND	0.0020
	Nickel	ND	0.0300
	Lead	0.0154	0.0400

---------- Result Footnotes ----------

(2c) - Spike result outside limits. PDS is within acceptance limits.
(1) - The duplicate results cannot be evaluated because both results are <MDL.

Groups & Samples

18949-72463 18949-72464 18949-72465 18949-72466 18971-72551 18971-72552 18971-72553 18973-72555
18973-72556 18974-72558 18974-72559 18975-72560

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

12/19/97
16:02:39
Group: 18975

Analysis Batch Number: ICPWA-12/16/97-001 -4
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 10
Batch Data-Date/Time : 12/17/97 / 08:40:00

Sequence : DATF350

BLANK#	ANALYTE	CONC FOUND #	CONC LIMIT
18949-72465	Arsenic	ND	0.0300
	Selenium	ND	0.0700
18949-72465-2	Arsenic	ND	0.0300
	Selenium	ND	0.0700

SPIKE

						QC LIMITS	
SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	CONC SPIKE	% REC #	LOWER	UPPER
18949-72464	Arsenic	2.0000	-0.0024	2.0394	102.1	80.0	120.0
	Selenium	2.0000	-0.0408	2.0551	104.8	80.0	120.0

SD

						QC LIMITS			
SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	RESULT 2	%REC2 #	LOWER	UPPER	RPD #	LIMIT
18949-72464	Arsenic	2.0000	-0.0024	1.9905	99.6	80.0	120.0	2.4	20.0
	Selenium	2.0000	-0.0408	2.0421	104.1	80.0	120.0	0.6	20.0

DUPLICATE

SAMPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
18949-72464	Arsenic	-0.0024	0.0012	600.0(11)	20.0	1.00
	Selenium	-0.0408	0.0000	200.0(11)	20.0	1.00

CONTROL

					QC LIMITS	
SAMPLE#	ANALYTE	CONC FOUND	CONC KNOWN	% REC #	LOWER	UPPER
18949-72466	Arsenic	1.9948	2.0000	99.7	80.0	120.0
	Selenium	2.0066	2.0000	100.3	80.0	120.0
18949-72466-2	Arsenic	1.9948	2.0000	99.7	80.0	120.0
	Selenium	2.0066	2.0000	100.3	80.0	120.0

					QC LIMITS	
CCV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	LOWER	UPPER
ICV-	Arsenic	1.6000	1.6277	101.7	90.0	110.0
	Selenium	1.6000	1.5643	97.8	90.0	110.0
CCV2--2	Arsenic	1.6000	1.5884	99.3	90.0	110.0
	Selenium	1.6000	1.5789	98.7	90.0	110.0
CCV3--3	Arsenic	1.6000	1.6338	102.1	90.0	110.0
	Selenium	1.6000	1.6266	101.7	90.0	110.0
CCV4--4	Arsenic	1.6000	1.6017	100.1	90.0	110.0
	Selenium	1.6000	1.5533	97.1	90.0	110.0
CCV5--5	Arsenic	1.6000	1.6257	101.6	90.0	110.0
	Selenium	1.6000	1.6128	100.8	90.0	110.0
CCV6--6	Arsenic	1.6000	1.6385	102.4	90.0	110.0
	Selenium	1.6000	1.5974	99.8	90.0	110.0

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
CCB-	Arsenic	ND	0.0300
	Selenium	ND	0.0700
CCB2-	Arsenic	ND	0.0300
	Selenium	ND	0.0700
CCB3-	Arsenic	0.0014	0.0300
	Selenium	ND	0.0700
CCB4-	Arsenic	ND	0.0300

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

Analysis Batch Number: ICPWA-12/16/97-001 -4
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 10
Batch Data-Date/Time : 12/17/97 / 08:40:00

Sequence : DATF350

CB#	ANALYTE	CONC FOUND #	CONC LIMIT
CB4-	Selenium	ND	0.0700
CCB5-	Arsenic	0.0106	0.0300
	Selenium	ND	0.0700
CB6-	Arsenic	ND	0.0300
	Selenium	ND	0.0700

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

Groups & Samples

18949-72463 18949-72464 18949-72465 18949-72466 18971-72551 18971-72552 18971-72553 18973-72555
18973-72556 18974-72558 18974-72559 18975-72560

10-97

CHAIN OF CUSTODY RECORD

6765

ON SITE TECHNOLOGIES, LTD.

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

Date: 12/9/97

Page 1 of 1

Purchase Order No.: 6759	Job No. 4-1325		
SEND INVOICE TO: Name	ACCOUNTS PAY.	REPORT RESULTS TO: Name	DAVID COX
Company	ON SITE	Company	ON SITE
Dept.		Mailing Address	
Address		City, State, Zip	
City, State, Zip		Telephone No. 325-2432	Telefax No. 505-325-6256

Sampling Location: FARMINGTON B-COM-1

Sampler: LT/TY

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	RCRA METALS / TOTAL	LAB ID
FARMINGTON B-COM-1 WSP #1	12/5/97	0900	WW	HNO_3	1	✓	7049-6759
							pH ≤ 2

ANALYSIS REQUESTED

Relinquished by:	Date/Time 12/5/97 1600	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 12/9/97
(Client Signature Must Accompany Request)

Rush	24-48 Hours	10 Working Days	Special Instructions:

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

CHAIN OF CUSTODY RECORD

6759

ON SITE TECHNOLOGIES, LTD.

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

Date: 12-5-97

Page 1 of 1

Purchase Order No.:	Job No. 71225		
SEND INVOICE TO: Name	Larry Trujillo	REPORT RESULTS TO: Name	Larry Trujillo / Title
Company	Conoco / Dept.	Company	Conoco
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No.	Telefax No.
Sampling Location:	FRTN E-COM-1		
Sampler:	Larry Trujillo, Terrie Vazzie		

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	BTEX	API	METAL	LAB ID
WSP Ø BTEX	12-5-97	0900	H2O	HCl	2	✓			17641-17559
WSP 1 MTL, BTEX	12-5-97	—	—	—	3	✓		✓	17641-
WSP 2 API, BTEX	12-5-97	—	—	—	3	✓	✓		17650-
WSP 3 API, BTEX	12-5-97	—	—	—	3	✓	✓		17651-
WSP 4 BTEX	12-5-97	—	—	—	2	✓			17657-

Relinquished by: Larry Trujillo	Date/Time 12-5-97 1114	Received by:	Date/Time 12-5-97 1114
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

Con - 1

SITE LOCATION Fmtn B-Com-1

UNIT: H SEC. 12 TOWNSHIP 29N RANGE 12W

LEASE #: NUMBER OF MONITORING WELLS:

WELL	TOTAL WELL DEPTH	DEPTH TO WATER	1 VOLUME	3 VOLUME
MP-Ø	9.31	7.21	0.34	1.0
SP-1	9.73	6.52	0.6	1.5
SP-2	10.16	6.37	0.6	1.8
SP-3	10.15	6.17	0.59	1.7
SP-4				

Monitoring Well # 0 Date 9-16-92

Volume	pH	Conductivity
#1	7.0	0.70
#2	6.0	0.66
#3	6.0	0.60

Monitoring Well # 1 Date

Volume	pH	Conductivity
#1	~~7~~ 7.0	1.30
#2	7.0	1.20
#3	7.0	1.20

Purge dry
well Check
Recovery for
Sampling with

Monitoring Well # 3 Date

Volume	pH	Conductivity
#1	6.0	3.10

Purged dry

Monitoring Well # 4 Date

Volume	pH	Conductivity
# 1	7.0	1.40
# 2	7.0	1.50
# 3	7.0	1.50

Monitoring Well # 2 Date

Volume	pH	Conductivity
#1	7.0	3.10
#2	7.0	3.20
#3	7.0	3.2

Sample Containers:

PAH = 1 liter amber
Metals = 2, 500 mL plastic
BTEX = 2, 40 mL VOA
TPH = 1 liter plastic
API Water = 1 liter plastic

Formulas/Conversions

Area = R^2 X 3.14 X Height
Cu. Ft. to gallons multiply by 7.48
Volume of a 1.6" X 42" bailer approximately 1.2 liter
Volume of a 0.41" X 36" bailer approximately 70 mL

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Larry Trujillo*	Date:	26-Sep-97
Company:	*On Site Technologies, Ltd. c/o Conoco, Inc.*	COC No.:	*6478*
Address:	*612 E. Murray Drive*	Sample No.:	*16205*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1325*

Project Name:	***Conoco, Inc. - Farmington B-Com-1***				
Project Location:	***4-1325-SP0***				
Sampled by:	LT	Date:	16-Sep-97	Time:	14:37
Analyzed by:	DC	Date:	18-Sep-97		
Sample Matrix:	*Liquid*				

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene	ND	ug/L	0.2	ug/L
Toluene	ND	ug/L	0.2	ug/L
Ethylbenzene	ND	ug/L	0.2	ug/L
m,p-Xylene	ND	ug/L	0.2	ug/L
o-Xylene	ND	ug/L	0.2	ug/L
TOTAL	ND	ug/L		

ND - Not Detected at Limit of Quantitation

Method - *SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography*

Approved By:
Date: 9/26/97

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Larry Trujillo*	Date:	26-Sep-97
Company:	*On Site Technologies, Ltd. c/o Conoco, Inc.*	COC No.:	*6479*
Address:	*612 E. Murray Drive*	Sample No.:	*16212*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1325*

Project Name:	***Conoco, Inc. - Farmington B-Com-1***				
Project Location:	***4-1325-SP#1***				
Sampled by:	LT	Date:	17-Sep-97	Time:	9:47
Analyzed by:	DC	Date:	18-Sep-97		
Sample Matrix:	*Liquid*				

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene	175	ug/L	2	ug/L
Toluene	23	ug/L	2	ug/L
Ethylbenzene	179	ug/L	2	ug/L
m,p-Xylene	969	ug/L	2	ug/L
o-Xylene	267	ug/L	2	ug/L
TOTAL	1612	ug/L		

ND - Not Detected at Limit of Quantitation

Method - *SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography*

Approved By:

Date: 9/29/97

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

API WATER ANALYSIS

Attn:	*Larry Trujillo*	Date:	10-Oct-97
Company:	*On Site Technologies, Ltd. c/o Conoco, Inc.*	*COC No.:*	*6479*
Address:	*612 E. Murray Drive*	*Sample ID:*	*16212*
City, State:	*Farmington, NM 87401*	*Job No.:*	*4-1325*

Project Name:	***Conoco Inc. - Farmington B-Com-1***				
Project Location:	***4-1325-SP#1***				
Sampled by:	LT	Date:	17-Sep-97	Time:	8:47
Analyzed by:	HR	Date:	25-Sep-97		

API RP-45 Laboratory Analysis

Parameter		*Result*	*Unit of Measure*		*Result*	*Unit of Measure*	
Cations							
Sodium	*Na*	127	mg/L		5.52	me/L	
Calcium	*Ca*	74	mg/L		3.67	me/L	
Magnesium	*Mg*	23.2	mg/L		1.91	me/L	
Potassium	*K*	4.9	mg/L		0.13	me/L	
Anions							
Chloride	*Cl*	92	mg/L		2.60	me/L	
Sulfate	*SO4*	68	mg/L		1.41	me/L	
Carbonate	*CO3*	<1	mg/L		<0.01	me/L	
Bicarbonate	*HCO3*	433	mg/L		7.10	me/L	
Hydroxide	*OH*	<1	mg/L		<0.01	me/L	
Sulfide	*S2*	NA	mg/L		NA	me/L	
Iron	*Fe*	<0.05	mg/L		<0.01	me/L	
Total Dissolved Solids Calculated, Sum of Cation/Anion		821	mg/L				
pH		7.30					
Resistivity		8.2919	ohm-m				
Specific Gravity		1.0012					
Total Hardness as CaCO3		279	mg/L				

Cation-Anion Balance

0.12	*Difference Cation-Anion, me/L*
22.33	*Total Cation-Anion, me/L*
0.5	*% Difference Cation-Anion*

Comments

NA: *Not Analyzed*

Approved by:

Date: 10/15/97

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

QUALITY ASSURANCE REPORT

for EPA Method 8020

Date Analyzed: 18-Sep-97

Internal QC No.: 0527-STD
Surrogate QC No.: 0528-STD
Reference Standard QC No.: 0529/30-QC

Method Blank

Parameter	Result	Unit of Measure
Average Amount of All Analytes In Blank	<0.2	ppb

Calibration Check

Parameter	Unit of Measure	True Value	Analyzed Value	RPD	Limit
Benzene	ppb	20.0	19.4	3	15%
Toluene	ppb	20.0	20.1	0	15%
Ethylbenzene	ppb	20.0	20.2	1	15%
m,p-Xylene	ppb	40.0	39.1	2	15%
o-Xylene	ppb	20.0	20.1	0	15%

Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	Limit
Benzene	91	89	(39-150)	2	20%
Toluene	97	95	(46-148)	2	20%
Ethylbenzene	95	93	(32-160)	2	20%
m,p-Xylene	90	84	(35-145)	1	20%
o-Xylene	92	90	(35-145)	2	20%

Surrogate Recoveries

Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered	Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered
Limit Percent Recovered	(70-130)		Limit Percent Recovered	(70-130)	
16211-6479	97				
16212-6479	94				
				JM 10/16/97	(JK) 9/29/97

S1: Flourobenzene

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

QUALITY ASSURANCE REPORT

API RP-45 Water Analysis

Date: 25-Sep-97

Quality Control Sample

Parameter	*Laboratory Identification*	*True Value*	*Analyzed Value*	*Unit of Measure*	*% Diff*	*Limit % Diff*
Sodium, Na	0541-QC	2.32	2.22	mg/L	-4	10
Calcium, Ca	0465-QC	2.18	2.03	mg/L	-7	10
Magnesium, Mg	0465-QC	1.14	1.22	mg/L	7	10
Potassium, K	0541-QC	1.33	1.30	mg/L	-2	10
Chloride, Cl	0437-QC	200	193	mg/L	-4	10
Sulfate, SO4	0538-QC	78	79	mg/L	2	10
Alkalinity	0538-QC	159	156	mg/L	-2	10
Iron, Fe	0495-QC	1.00	0.98	mg/L	-2	10
pH	0538-QC	9.13	9.30		2	10
Conductivity	0541-QC	740	738	uS/cm	0	15

Matrix Spike

Parameter	*Laboratory Identification*	*Analyzed Value*	*Matrix Spike*	*Spike Value*	*Unit of Measure*	*Spike Recovery*
Sodium, Na	16203-6477	0.84	0.50	1.38	mg/L	103%
Calcium, Ca	16208-6478	1.28	0.50	1.75	mg/L	98%
Magnesium, Mg	16208-6478	1.95	0.50	2.45	mg/L	100%
Potassium, K	16203-6477	0.88	0.50	1.36	mg/L	99%
Iron, Fe	16308-6500	0.04	0.50	0.50	mg/L	93%

Method Blank

Parameter	*Laboratory Identification*	*Analyzed Value*	*Unit of Measure*
Sodium, Na	LF-Blank	<0.2	mg/L
Calcium, Ca	LF-Blank	<0.05	mg/L
Magnesium, Mg	LF-Blank	<0.05	mg/L
Potassium, K	LF-Blank	<0.05	mg/L
Iron, Fe	LF-Blank	<0.05	mg/L
Chloride, Cl	LF-Blank	<3 X DL	mg/L
Sulfate, SO4	LF-Blank	<1	mg/L
Sulfide, SO2	LF-Blank	NA	mg/L
Conductivity	LF-Blank	<2	uS/cm

10/15/97 10/16/97

RECEIVED OCT 1 6 '97

Mountain States Analytical, Inc.

The Quality Solution

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

Attn: Mr. David Cox
Project: Farmington B-COM-1

Sample ID: 16212-6479 d-1375-SP #1 (pc)
Matrix: Waste Water

MSAI Sample: 68589
MSAI Group: 17956
Date Reported: 10/09/97
Discard Date: 11/08/97
Date Submitted: 09/23/97
Date Sampled: 09/17/97
Collected by: DC
Purchase Order: 6479
Project No.:

Test	Analysis	Results as Received	Units	Limit of Quantitation
0259B	Mercury by CVAA, w/ww, 7470 Method: SW-846 7470	ND	mg/l	0.0005
0392I	Flame/ICP Prep, w/ww, 3005A Method: SW-846 3005A	Complete		
0392M	Mercury Prep CVAA, w/ww, 7470 Method: SW-846 7470	W 0		
7245	Arsenic by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.15
7246	Barium by ICP, w/ww, 6010A Method: SW-846 6010A	1.94	mg/l	0.02
7249	Cadmium by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.020
7251	Chromium by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.050
7255	Lead by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.20
7264	Selenium by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.35
7266	Silver by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.030

Mountain States Analytical, Inc.
The Quality Solution

On Site Technologies, Ltd.

MSAI Sample: 68589
MSAI Group: 17956

Sample ID: 16212-6479

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

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9709897-01

On Site Technologies
612 East Murray
Farmington, NM 87401
ATTN: David Cox

P.O.# 6478
10/02/97

PROJECT: Water Analysis
SITE: Farmington B-COM-1
SAMPLED BY: On Site Technologies
SAMPLE ID: 4-1325-SP1-PAH

PROJECT NO:
MATRIX: WATER
DATE SAMPLED: 09/16/97 15:16:00
DATE RECEIVED: 09/18/97

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Naphthalene	5	0.5	ug/L
Acenaphthylene	0.2	0.1	ug/L
Acenaphthene	ND	1.5	ug/L
Fluorene	ND	1.5	ug/L
Phenanthrene	ND	0.5	ug/L
Anthracene	ND	0.5	ug/L
Fluoranthene	ND	0.5	ug/L
Pyrene	ND	0.5	ug/L
Chrysene	ND	0.5	ug/L
Benzo (a) anthracene	ND	0.5	ug/L
Benzo (b) fluoranthene	ND	0.5	ug/L
Benzo (k) fluoranthene	ND	0.5	ug/L
Benzo (a) pyrene	ND	0.5	ug/L
Dibenzo (a,h) anthracene	ND	0.5	ug/L
Benzo (g,h,i) perylene	ND	0.5	ug/L
Indeno (1,2,3-cd) pyrene	ND	0.5	ug/L

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1-Fluoronaphthalene	0.20 ug/L	110	50	150
Phenanthrene d-10	0.20 ug/L	125	50	150

ANALYZED BY: KA DATE/TIME: 09/29/97 17:03:34
EXTRACTED BY: AM DATE/TIME: 09/23/97 14:00:00
METHOD: 8310 Polynuclear Aromatic Hydrocarbons
NOTES: * - Practical Quantitation Limit ND - Not Detected
NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

* SPL BATCH QUALITY CONTROL REPORT ** PAGE
Method 8310 ***

Matrix: Aqueous
Units: ug/L

Batch Id: 2970925121220

BLANK SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(**) (Advisory) RPD Max.	QC Limits(**) (Advisory) Recovery Range
NAPHTHALENE	ND	0.5	0.33	66.0	0.35	70.0	5.88	30	33 - 122
ACENAPHTHYLENE	ND	0.5	0.55	110	0.36	72.0	41.8 *	30	42 - 138
ACENAPHTHENE	ND	0.5	0.32	64.0	0.34	68.0	6.06	30	25 - 123
FLUORENE	ND	0.5	0.32	64.0	0.35	70.0	8.96	30	19 - 142
PHENANTHRENE	ND	0.5	0.36	72.0	0.36	72.0	0	30	40 - 121
ANTHRACENE	ND	0.5	0.29	58.0	0.32	64.0	9.84	30	32 - 121
FLUORANTHENE	ND	0.5	0.38	76.0	0.40	80.0	5.13	30	51 - 115
PYRENE	ND	0.5	0.37	74.0	0.39	78.0	5.26	30	45 - 117
CHRYSENE	ND	0.5	0.41	82.0	0.42	84.0	2.41	30	44 - 122
BENZO (A) ANTHRACENE	ND	0.5	0.38	76.0	0.40	80.0	5.13	30	57 - 118
BENZO (B) FLUORANTHENE	ND	0.5	0.42	84.0	0.43	86.0	2.35	30	62 - 121
BENZO (K) FLUORANTHENE	ND	0.5	0.43	86.0	0.45	90.0	4.55	30	63 - 117
BENZO (A) PYRENE	ND	0.5	0.46	92.0	0.48	96.0	4.26	30	42 - 120
DIBENZO (A,H) ANTHRACENE	ND	0.5	0.40	80.0	0.41	82.0	2.47	30	53 - 118
BENZO (G,H,I) PERYLENE	ND	0.5	0.41	82.0	0.42	84.0	2.41	30	51 - 116
INDENO (1,2,3-CD) PYRENE	ND	0.5	0.43	86.0	0.44	88.0	2.30	30	60 - 116

Analyst: KA
Sequence Date: 09/25/97
Method Blank File ID:
Sample File ID:
Blank Spike File ID: 970915B\003-0301
Matrix Spike File ID:
Matrix Spike Duplicate File ID:

* = Values Outside QC Range. « = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL Temporary Limits

SAMPLES IN BATCH(SPL ID):

9709899-01A 9709894-01A 9709897-01A 9709881-33B
9709869-08B 9709869-17B 9709869-18B 9709869-27B
9709869-28B

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

QUALITY CONTROL

DOCUMENTATION

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Larry Trujillo*	Date:	26-Sep-97
Company:	*On Site Technologies, Ltd. c/o Conoco, Inc.*	COC No.:	*6478*
Address:	*612 E. Murray Drive*	Sample No.:	*16208*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1325*

Project Name:	***Conoco, Inc. - Farmington B-Com-1***				
Project Location:	***4-1325-SP2***				
Sampled by:	LT	Date:	16-Sep-97	Time:	16:10
Analyzed by:	DC	Date:	17-Sep-97		
Sample Matrix:	*Liquid*				

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene	3.9	ug/L	0.2	ug/L
Toluene	1.0	ug/L	0.2	ug/L
Ethylbenzene	4.5	ug/L	0.2	ug/L
m,p-Xylene	14.3	ug/L	0.2	ug/L
o-Xylene	0.5	ug/L	0.2	ug/L
TOTAL	24.2	ug/L		

ND - Not Detected at Limit of Quantitation

Method - *SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography*

Approved By: DaC
Date: 9/26/97

CHAIN OF CUSTODY RECORD

9709841 9/20/97 6485

ON SITE TECHNOLOGIES, LTD.

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

Date: 9/17/97

Page 1 of 1

Purchase Order No.: 6478	Job No. 4-1325		
SEND INVOICE TO: Name ACCOUNTS REC.		REPORT RESULTS TO: Name DAVID COX	Title
Company ON SITE	Dept.	Company ON SITE TECH	
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No. 505-325-2432	Telefax No. 505-325-6256

Sampling Location: FARMINGTON B-COM-1

Sampler: LT

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	PAH 8310	LAB ID
4-1325-SP1-PAH	9/16/97	1516	WW	cool	1	✓	160 (12) 16206-6478
							6°C

Relinquished by:	Date/Time 9/17/97 1600	Received by:	Date/Time 9/18/97 1000
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

Authorized by: _____ Date 9/17/97
(Client Signature Must Accompany Request)

Rush	24-48 Hours	10 Working Days	Special Instructions:
			UPS: 1Z W858501 1000 385 1

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

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

API WATER ANALYSIS

Attn:	*Larry Trujillo*	Date:	10-Oct-97
Company:	*On Site Technologies, Ltd. c/o Conoco, Inc.*	*COC No.:*	*6478*
Address:	*612 E. Murray Drive*	*Sample ID:*	*16208*
City, State:	*Farmington, NM 87401*	*Job No.:*	*4-1325*

Project Name:	***Conoco Inc. - Farmington B-Com-1***				
Project Location:	***4-1325; SP-2***				
Sampled by:	LT	Date:	16-Sep-97	Time:	15:58
Analyzed by:	HR	Date:	25-Sep-97		

API RP-45 Laboratory Analysis

Parameter		*Result*	*Unit of Measure*		*Result*	*Unit of Measure*	
Cations							
Sodium	*Na*	195	mg/L		8.48	me/L	
Calcium	*Ca*	255	mg/L		12.73	me/L	
Magnesium	*Mg*	78	mg/L		6.42	me/L	
Potassium	*K*	7.0	mg/L		0.18	me/L	
Anions							
Chloride	*Cl*	332	mg/L		9.36	me/L	
Sulfate	*SO4*	588	mg/L		12.24	me/L	
Carbonate	*CO3*	<1	mg/L		<0.01	me/L	
Bicarbonate	*HCO3*	566	mg/L		9.28	me/L	
Hydroxide	*OH*	<1	mg/L		<0.01	me/L	
Sulfide	*S2*	NA	mg/L		NA	me/L	
Iron	*Fe*	<0.05	mg/L		<0.01	me/L	
Total Dissolved Solids Calculated, Sum of Cation/Anion		2021	mg/L				
pH		7.20					
Resistivity		3.5714	ohm-m				
Specific Gravity		1.0014					
Total Hardness as CaCO3		958	mg/L				

Cation-Anion Balance

3.08	*Difference Cation-Anion, me/L*
58.69	*Total Cation-Anion, me/L*
5.2	*% Difference Cation-Anion*

Comments

NA: *Not Analyzed*

Approved by:

Date: 10/15/97

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

QUALITY ASSURANCE REPORT

for EPA Method 8020

Date Analyzed: 17-Sep-97

Internal QC No.: 0527-STD
Surrogate QC No.: 0528-STD
Reference Standard QC No.: 0529/30-QC

Method Blank

Parameter	*Result*	*Unit of Measure*
Average Amount of All Analytes In Blank	<0.2	ppb

Calibration Check

Parameter	*Unit of Measure*	*True Value*	*Analyzed Value*	*RPD*	*Limit*
Benzene	ppb	20.0	19.7	1	15%
Toluene	ppb	20.0	20.5	2	15%
Ethylbenzene	ppb	20.0	20.4	2	15%
m,p-Xylene	ppb	40.0	39.7	1	15%
o-Xylene	ppb	20.0	20.6	3	15%

Matrix Spike

Parameter	*1- Percent Recovered*	*2 - Percent Recovered*	*Limit*	*RPD*	*Limit*
Benzene	95	93	(39-150)	1	20%
Toluene	100	99	(46-148)	1	20%
Ethylbenzene	99	98	(32-160)	1	20%
m,p-Xylene	95	94	(35-145)	1	20%
o-Xylene	99	97	(35-145)	1	20%

Surrogate Recoveries

Laboratory Identification	*S1 Percent Recovered*	*S2 Percent Recovered*	*Laboratory Identification*	*S1 Percent Recovered*	*S2 Percent Recovered*
Limit Percent Recovered	(70-130)		*Limit Percent Recovered*	(70-130)	
16208-6478	95				
				10/16/97	9/26/97

S1: *Flourobenzene*

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

QUALITY ASSURANCE REPORT

for EPA Method 8020

Date Analyzed: 18-Sep-97

Internal QC No.: 0527-STD
Surrogate QC No.: 0528-STD
Reference Standard QC No.: 0529/30-QC

Method Blank

Parameter	Result	Unit of Measure
Average Amount of All Analytes In Blank	<0.2	ppb

Calibration Check

Parameter	Unit of Measure	True Value	Analyzed Value	RPD	Limit
Benzene	ppb	20.0	19.4	3	15%
Toluene	ppb	20.0	20.1	0	15%
Ethylbenzene	ppb	20.0	20.2	1	15%
m,p-Xylene	ppb	40.0	39.1	2	15%
o-Xylene	ppb	20.0	20.1	0	15%

Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	Limit
Benzene	91	89	(39-150)	2	20%
Toluene	97	95	(46-148)	2	20%
Ethylbenzene	95	93	(32-160)	2	20%
m,p-Xylene	90	84	(35-145)	1	20%
o-Xylene	92	90	(35-145)	2	20%

Surrogate Recoveries

Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered	Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered
Limit Percent Recovered	(70-130)		Limit Percent Recovered	(70-130)	
16205-6478	95				
16207-6478	96				
				[initials]	(DC)
				10/16/97	9/26/97

S1: Flourobenzene

P.O. BOX 2606 • FARMINGTON, NM 87499

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

QUALITY ASSURANCE REPORT

API RP-45 Water Analysis

Date: 25-Sep-97

Quality Control Sample

Parameter	*Laboratory Identification*	*True Value*	*Analyzed Value*	*Unit of Measure*	*% Diff*	*Limit % Diff*
Sodium, Na	0541-QC	2.32	2.22	mg/L	-4	10
Calcium, Ca	0465-QC	2.18	2.03	mg/L	-7	10
Magnesium, Mg	0465-QC	1.14	1.22	mg/L	7	10
Potassium, K	0541-QC	1.33	1.30	mg/L	-2	10
Chloride, Cl	0437-QC	200	193	mg/L	-4	10
Sulfate, SO4	0538-QC	78	79	mg/L	2	10
Alkalinity	0538-QC	159	156	mg/L	-2	10
Iron, Fe	0495-QC	1.00	0.98	mg/L	-2	10
pH	0538-QC	9.13	9.30		2	10
Conductivity	0541-QC	740	738	uS/cm	0	15

Matrix Spike

Parameter	*Laboratory Identification*	*Analyzed Value*	*Matrix Spike*	*Spike Value*	*Unit of Measure*	*Spike Recovery*
Sodium, Na	16203-6477	0.84	0.50	1.38	mg/L	103%
Calcium, Ca	16208-6478	1.28	0.50	1.75	mg/L	98%
Magnesium, Mg	16208-6478	1.95	0.50	2.45	mg/L	100%
Potassium, K	16203-6477	0.88	0.50	1.36	mg/L	99%
Iron, Fe	16308-6500	0.04	0.50	0.50	mg/L	93%

Method Blank

Parameter	*Laboratory Identification*	*Analyzed Value*	*Unit of Measure*
Sodium, Na	LF-Blank	<0.2	mg/L
Calcium, Ca	LF-Blank	<0.05	mg/L
Magnesium, Mg	LF-Blank	<0.05	mg/L
Potassium, K	LF-Blank	<0.05	mg/L
Iron, Fe	LF-Blank	<0.05	mg/L
Chloride, Cl	LF-Blank	<3 X DL	mg/L
Sulfate, SO4	LF-Blank	<1	mg/L
Sulfide, SO2	LF-Blank	NA	mg/L
Conductivity	LF-Blank	<2	uS/cm

(DE) 10/15/97 10/16/97

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

October 2, 1997

Mr. David Cox
ON SITE TECHNOLOGIES
612 East Murray
Farmington, NM 87401

The following report contains analytical results for samples received at Southern Petroleum Laboratories (SPL) on September 18, 1997. The samples were assigned to Certificate of Analysis No.(s)9709897 and analyzed for all parameters as listed on the chain of custody.

There were no analytical problems encountered with this group of samples and all quality control data was within acceptance limits.

If you have any questions or comments pertaining to this data report, please do not hesitate to contact me. Please reference the above Certificate of Analysis No. during any inquiries.

Again, SPL is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Southern Petroleum Laboratories

Sonia West

Sonia West
Client Services Representative

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

RECEIVED OCT 0 6 1997

Southern Petroleum Laboratories, Inc.

Certificate of Analysis Number: 97-09-897

Approved for Release by:

Sonia West
Sonia West, Client Services Representative

10-2-97
Date:

Greg Grandits
Laboratory Director

Idelis Williams
Quality Assurance Officer

RECEIVED OCT 16 1997

Mountain States Analytical, Inc.
The Quality Solution

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

Attn: Mr. David Cox
Project: Farmington B-COM-1

MSAI Sample: 68592
MSAI Group: 17959
Date Reported: 10/09/97
Discard Date: 11/08/97
Date Submitted: 09/23/97
Date Sampled: 09/16/97
Collected by: DC
Purchase Order:
Project No.:

Sample ID: 16208-6478 4-1325-SP #2 (RE)
Matrix: Waste Water

Test	Analysis	Results as Received	Units	Limit of Quantitation
0259B	Mercury by CVAA, w/ww, 7470 Method: SW-846 7470	ND	mg/l	0.0005
0392I	Flame/ICP Prep, w/ww, 3005A Method: SW-846 3005A	Complete		
0392M	Mercury Prep CVAA, w/ww, 7470 Method: SW-846 7470	W 0		
7245	Arsenic by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.15
7246	Barium by ICP, w/ww, 6010A Method: SW-846 6010A	0.28	mg/l	0.02
7249	Cadmium by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.020
7251	Chromium by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.050
7255	Lead by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.20
7264	Selenium by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.35
7266	Silver by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.030

Mountain States Analytical, Inc.
The Quality Solution

On Site Technologies, Ltd.

MSAI Sample: 68592
MSAI Group: 17959

Sample ID: 16208-6478

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

10/09/97
15:20:25
Group: 17959

Analysis Batch Number: 0259B-10/07/97-107 -1
Test Identification : 0259B-Mercury by CVAA, w/ww, 7470 Sequence : 0259B-1
umber of Samples : 8
atch Data-Date/Time : 10/08/97 / 13:18:09

LANK#	ANALYTE	CONC FOUND #	CONC LIMIT
BW1-698	Mercury	-0.0900	0.1000

SPIKE

						QC LIMITS	
AMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	CONC SPIKE	% REC #	LOWER	UPPER
7959-68592	Mercury	2.0000	0.1200	1.7800	83.0	80.0	120.0

SD

						QC LIMITS				
AMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	RESULT 2	%REC2 #	LOWER	UPPER	RPD #		LIMIT
17959-68592	Mercury	2.0000	0.1200	1.8200	85.0	80.0	120.0	2.2		20.0

UPLICATE

SAMPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
17958-68591	Mercury	0.0200	-0.0400	600.0(11)	20.0	1.00

ONTROL

					QC LIMITS	
SAMPLE#	ANALYTE	CONC FOUND	CONC KNOWN	% REC #	LOWER	UPPER
CSW-698	Mercury	2.3700	2.5000	94.8	80.0	120.0

					QC LIMITS	
CCV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	LOWER	UPPER
CV-	Mercury	3.0000	2.8600	95.3	90.0	110.0
CCV--2	Mercury	5.0000	5.0500	101.0	80.0	120.0
CCV--3	Mercury	5.0000	5.1700	103.4	80.0	120.0
CV--4	Mercury	5.0000	5.2100	104.2	80.0	120.0

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
CB-	Mercury	0.0300	0.1000
CB-	Mercury	0.0900	0.1000
CCB-	Mercury	0.0300	0.1000
CCB-	Mercury	0.0500	0.1000

---------- Result Footnotes ----------

(11) - Both Duplicate results are less than the MDL.

Groups & Samples

17956-68588 17956-68589 17957-68590 17958-68591 17959-68592 17961-68594 17961-68595 17962-68596

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

10/09/97
15:20:31
Group: 17959

Analysis Batch Number: ICPWA-10/02/97-118 -1
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 18
Batch Data-Date/Time : 10/03/97 / 12:21:19

Sequence : DATB275

BLANK#	ANALYTE	CONC FOUND #	CONC LIMIT
SW1-670	Silver	ND	0.0060
	Aluminum	0.0193	0.0500
	Arsenic	0.0064	0.0300
	Barium	0.0013	0.0030
	Beryllium	ND	0.0002
	Calcium	0.1138	0.4000
	Cadmium	0.0005	0.0040
	Chromium	0.0014	0.0100
	Copper	0.0050	0.0100
	Iron	0.0380	0.2000
	Potassium	0.0292	0.1000
	Magnesium	0.0206	0.0500
	Manganese	0.0016	0.0020
	Molybdenum	0.0152	0.0300
	Sodium	0.0604	0.2000
	Nickel	0.0050	0.0300
	Lead	ND	0.0400
	Antimony	ND	0.1000
	Selenium	ND	0.0700
	Silicon	0.0459	0.2000
	Thallium	0.0054	0.1000
	Vanadium	ND	0.0030
	Zinc	0.0296	0.0300
SW2-670-2	Silver	ND	0.0060
	Aluminum	0.0054	0.0500
	Arsenic	ND	0.0300
	Barium	0.0002	0.0030
	Beryllium	ND	0.0002
	Calcium	0.0586	0.4000
	Cadmium	ND	0.0040
	Chromium	0.0001	0.0100
	Copper	0.0045	0.0100
	Iron	0.0121	0.2000
	Potassium	0.0038	0.1000
	Magnesium	0.0106	0.0500
	Manganese	0.0009	0.0020
	Molybdenum	0.0111	0.0300
	Sodium	0.0070	0.2000
	Nickel	ND	0.0300
	Lead	0.0001	0.0400
	Antimony	0.0197	0.1000
	Selenium	ND	0.0700
	Silicon	0.0927	0.2000
	Thallium	ND	0.1000
	Vanadium	ND	0.0030
	Zinc	0.0027	0.0300

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

10/09/97
15:20:33
Group: 17959

Analysis Batch Number: ICPWA-10/02/97-118 -1
Test Identification : ICPWA-*Metals by ICP
umber of Samples : 18
atch Data-Date/Time : 10/03/97 / 12:21:19

Sequence : DATB275

PIKE

AMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	CONC SPIKE	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
17956-68588	Silver	0.0500	-0.0010	0.0442	90.4	80.0	120.0
	Aluminum	2.0000	9.8158	15.4624	282.3(2a)	80.0	120.0
	Arsenic	2.0000	0.0163	1.8581	92.1	80.0	120.0
	Barium	2.0000	0.1714	1.8801	85.4	80.0	120.0
	Beryllium	0.0500	0.0017	0.0455	87.6	80.0	120.0
	Calcium	2.0000	624.8877	628.1472	163.0(2a)	80.0	120.0
	Cadmium	0.0500	0.0007	0.0473	93.2	80.0	120.0
	Chromium	0.2000	0.0072	0.1861	89.4	80.0	120.0
	Copper	0.2500	0.0514	0.2654	85.6	80.0	120.0
	Iron	1.0000	21.0847	23.5782	249.3(2a)	80.0	120.0
	Potassium	10.0000	14.4180	24.4076	99.9	80.0	120.0
	Magnesium	2.0000	55.4827	57.8857	120.1(2a)	80.0	120.0
	Manganese	0.5000	20.3162	20.8274	102.2	80.0	120.0
	Molybdenum	0.5000	0.0247	0.4674	88.5	80.0	120.0
	Sodium	3.0000	164.0427	167.3475	110.2	80.0	120.0
	Nickel	0.5000	0.0378	0.4738	87.2	80.0	120.0
	Lead	0.5000	0.0191	0.4421	84.6	80.0	120.0
	Antimony	0.5000	0.0000	0.3993	79.9(A1)	80.0	120.0
	Selenium	2.0000	-0.0525	1.8224	93.7	80.0	120.0
	Silicon	2.0000	26.0226	33.8212	389.9(2a)	80.0	120.0
	Thallium	2.0000	0.0911	1.8017	85.5	80.0	120.0
	Vanadium	0.5000	0.0235	0.4729	89.9	80.0	120.0
	Zinc	0.5000	0.0973	0.5342	87.4	80.0	120.0

MSD

AMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	RESULT 2	%REC2 #	QC LIMITS LOWER	QC LIMITS UPPER	RPD #	LIMIT
7956-68588	Silver	0.0500	-0.0010	0.0489	99.8	80.0	120.0	10.1	20.0
	Aluminum	2.0000	9.8158	15.5592	287.2(2a)	80.0	120.0	0.6	20.0
	Arsenic	2.0000	0.0163	1.8846	93.4	80.0	120.0	1.4	20.0
	Barium	2.0000	0.1714	1.9214	87.5	80.0	120.0	2.2	20.0
	Beryllium	0.0500	0.0017	0.0463	89.2	80.0	120.0	1.7	20.0
	Calcium	2.0000	624.8877	615.1779	-485.5(2a)	80.0	120.0	2.1(2a)	20.0
	Cadmium	0.0500	0.0007	0.0474	93.4	80.0	120.0	0.2	20.0
	Chromium	0.2000	0.0072	0.1921	92.4	80.0	120.0	3.2	20.0
	Copper	0.2500	0.0514	0.2714	88.0	80.0	120.0	2.2	20.0
	Iron	1.0000	21.0847	23.7541	266.9(2a)	80.0	120.0	0.7	20.0
	Potassium	10.0000	14.4180	24.7133	103.0	80.0	120.0	1.2	20.0
	Magnesium	2.0000	55.4827	57.0179	76.8(2a)	80.0	120.0	1.5(2a)	20.0
	Manganese	0.5000	20.3162	20.5152	39.8(2a)	80.0	120.0	1.5(2a)	20.0
	Molybdenum	0.5000	0.0247	0.4775	90.6	80.0	120.0	2.1	20.0
	Sodium	3.0000	164.0427	164.3913	11.6(2a)	80.0	120.0	1.8(2a)	20.0
	Nickel	0.5000	0.0378	0.4666	85.8	80.0	120.0	1.5	20.0
	Lead	0.5000	0.0191	0.4537	86.9	80.0	120.0	2.6	20.0
	Antimony	0.5000	0.0809	0.4267	69.2(A1)	80.0	120.0	6.6	20.0
	Selenium	2.0000	-0.0525	1.8262	93.9	80.0	120.0	0.2	20.0
	Silicon	2.0000	26.0226	35.0630	452.0(2a)	80.0	120.0	3.6	20.0
	Thallium	2.0000	0.0911	1.8211	86.5	80.0	120.0	1.1	20.0
	Vanadium	0.5000	0.0235	0.4806	91.4	80.0	120.0	1.6	20.0
	Zinc	0.5000	0.0973	0.5424	89.0	80.0	120.0	1.5	20.0

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

10/09/97
15:20:36
Group: 17959

Analysis Batch Number: ICPWA-10/02/97-118 -1
Test Identification : ICPWA-*Metals by ICP
mber of Samples : 18
tch Data-Date/Time : 10/03/97 / 12:21:19

Sequence : DATB275

PLICATE

MPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
17956-68588	Silver	-0.0010	0.0023	507.7(11)	20.0	1.00
	Aluminum	9.8158	8.1057	19.1	20.0	1.00
	Arsenic	0.0163	0.0113	36.2(11)	20.0	1.00
	Barium	0.1714	0.1518	12.1	20.0	1.00
	Beryllium	0.0017	0.0017	0.0	20.0	1.00
	Calcium	624.8877	610.9565	2.3	20.0	1.00
	Cadmium	0.0007	0.0029	122.2(11)	20.0	1.00
	Chromium	0.0072	0.0086	17.7	20.0	1.00
	Copper	0.0514	0.0502	2.4	20.0	1.00
	Iron	21.0847	19.6861	6.9	20.0	1.00
	Potassium	14.4180	13.6026	5.8	20.0	1.00
	Magnesium	55.4827	53.6734	3.3	20.0	1.00
	Manganese	20.3162	19.8042	2.6	20.0	1.00
	Molybdenum	0.0247	0.0164	40.4(11)	20.0	1.00
	Sodium	164.0427	156.4015	4.8	20.0	1.00
	Nickel	0.0378	0.0344	9.4	20.0	1.00
	Lead	0.0191	0.0151	23.4(11)	20.0	1.00
	Antimony	0.0809	0.0479	51.2(11)	20.0	1.00
	Selenium	-0.0525	0.0000	200.0(11)	20.0	1.00
	Silicon	26.0226	23.5304	10.1	20.0	1.00
	Thallium	0.0911	0.0537	51.7(11)	20.0	1.00
	Vanadium	0.0235	0.0214	9.4	20.0	1.00
	Zinc	0.0973	0.0877	10.4	20.0	1.00

CONTROL

MPLE#	ANALYTE	CONC FOUND	CONC KNOWN	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
SW-670	Silver	0.0450	0.0500	90.0	80.0	120.0
	Aluminum	1.9110	2.0000	95.6	80.0	120.0
	Arsenic	1.9465	2.0000	97.3	80.0	120.0
	Barium	1.8681	2.0000	93.4	80.0	120.0
	Beryllium	0.0478	0.0500	95.6	80.0	120.0
	Calcium	2.0468	2.0000	102.3	80.0	120.0
	Cadmium	0.0491	0.0500	98.2	80.0	120.0
	Chromium	0.1977	0.2000	98.9	80.0	120.0
	Copper	0.2360	0.2500	94.4	80.0	120.0
	Iron	0.9697	1.0000	97.0	80.0	120.0
	Potassium	9.6682	10.0000	96.7	80.0	120.0
	Magnesium	1.9609	2.0000	98.0	80.0	120.0
	Manganese	0.4854	0.5000	97.1	80.0	120.0
	Molybdenum	0.4946	0.5000	98.9	80.0	120.0
	Sodium	2.9941	3.0000	99.8	80.0	120.0
	Nickel	0.4869	0.5000	97.4	80.0	120.0
	Lead	0.4985	0.5000	99.7	80.0	120.0
	Antimony	0.4445	0.5000	88.9	80.0	120.0
	Selenium	1.9148	2.0000	95.7	80.0	120.0
	Silicon	1.9804	2.0000	99.0	80.0	120.0
	Thallium	1.9557	2.0000	97.8	80.0	120.0
	Vanadium	0.4870	0.5000	97.4	80.0	120.0
	Zinc	0.4834	0.5000	96.7	80.0	120.0

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

10/09/97
15:20:38
Group: 17959

Analysis Batch Number: ICPWA-10/02/97-118 -1
Test Identification : ICPWA-*Metals by ICP
mber of Samples : 18
tch Data-Date/Time : 10/03/97 / 12:21:19

Sequence : DATB275

V #	ANALYTE	TRUE VALUE	BATCH READ	% REC	#	QC LIMITS LOWER	UPPER
ICV-	Silver	0.4000	0.3964	99.1		90.0	110.0
	Aluminum	20.0000	19.1585	95.8		90.0	110.0
	Arsenic	1.6000	1.5872	99.2		90.0	110.0
	Barium	4.0000	3.8304	95.8		90.0	110.0
	Beryllium	0.4000	0.3901	97.5		90.0	110.0
	Calcium	40.0000	40.1705	100.4		90.0	110.0
	Cadmium	4.0000	3.9535	98.8		90.0	110.0
	Chromium	4.0000	4.1066	102.7		90.0	110.0
	Copper	4.0000	3.8662	96.7		90.0	110.0
	Iron	4.0000	4.0692	101.7		90.0	110.0
	Potassium	40.0000	38.0531	95.1		90.0	110.0
	Magnesium	20.0000	19.3594	96.8		90.0	110.0
	Manganese	4.0000	3.9836	99.6		90.0	110.0
	Molybdenum	20.0000	20.3030	101.5		90.0	110.0
	Sodium	40.0000	37.2168	93.0		90.0	110.0
	Nickel	8.0000	7.9838	99.8		90.0	110.0
	Lead	20.0000	20.1874	100.9		90.0	110.0
	Antimony	4.0000	4.0015	100.0		90.0	110.0
	Selenium	1.6000	1.5349	95.9		90.0	110.0
	Silicon	1.6000	1.6574	103.6		90.0	110.0
	Thallium	4.0000	3.9596	99.0		90.0	110.0
	Vanadium	1.6000	1.5553	97.2		90.0	110.0
	Zinc	4.0000	3.9384	98.5		90.0	110.0
V1--2	Silver	0.4000	0.3955	98.9		90.0	110.0
	Aluminum	20.0000	19.4301	97.2		90.0	110.0
	Arsenic	1.6000	1.5657	97.9		90.0	110.0
	Barium	4.0000	3.8164	95.4		90.0	110.0
	Beryllium	0.4000	0.3840	96.0		90.0	110.0
	Calcium	40.0000	39.6588	99.1		90.0	110.0
	Cadmium	4.0000	3.8962	97.4		90.0	110.0
	Chromium	4.0000	4.0424	101.1		90.0	110.0
	Copper	4.0000	3.8584	96.5		90.0	110.0
	Iron	4.0000	4.0902	102.3		90.0	110.0
	Potassium	40.0000	37.8083	94.5		90.0	110.0
	Magnesium	20.0000	19.3860	96.9		90.0	110.0
	Manganese	4.0000	3.9478	98.7		90.0	110.0
	Molybdenum	20.0000	20.0684	100.3		90.0	110.0
	Sodium	40.0000	37.5082	93.8		90.0	110.0
	Nickel	8.0000	7.8509	98.1		90.0	110.0
	Lead	20.0000	20.0413	100.2		90.0	110.0
	Antimony	4.0000	3.8553	96.4		90.0	110.0
	Selenium	1.6000	1.5364	96.0		90.0	110.0
	Silicon	1.6000	1.6484	103.0		90.0	110.0
	Thallium	4.0000	3.8984	97.5		90.0	110.0
	Vanadium	1.6000	1.5437	96.5		90.0	110.0
	Zinc	4.0000	3.8874	97.2		90.0	110.0
V3--3	Silver	0.4000	0.4031	100.8		90.0	110.0
	Aluminum	20.0000	19.8229	99.1		90.0	110.0
	Arsenic	1.6000	1.6116	100.7		90.0	110.0

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

10/09/97
15:20:41
Group: 17959

Analysis Batch Number: ICPWA-10/02/97-118 -1
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 18
Batch Data-Date/Time : 10/03/97 / 12:21:19

Sequence : DATB275

CV #	ANALYTE	TRUE VALUE	BATCH READ	% REC	QC LIMITS #	LOWER	UPPER
CCV3--3	Barium	4.0000	3.7625	94.1		90.0	110.0
	Beryllium	0.4000	0.3929	98.2		90.0	110.0
	Calcium	40.0000	40.5814	101.5		90.0	110.0
	Cadmium	4.0000	3.9254	98.1		90.0	110.0
	Chromium	4.0000	4.0540	101.4		90.0	110.0
	Copper	4.0000	3.7990	95.0		90.0	110.0
	Iron	4.0000	3.9559	98.9		90.0	110.0
	Potassium	40.0000	39.4701	98.7		90.0	110.0
	Magnesium	20.0000	19.9198	99.6		90.0	110.0
	Manganese	4.0000	3.9365	98.4		90.0	110.0
	Molybdenum	20.0000	19.9715	99.9		90.0	110.0
	Sodium	40.0000	39.4913	98.7		90.0	110.0
	Nickel	8.0000	7.8848	98.6		90.0	110.0
	Lead	20.0000	20.0248	100.1		90.0	110.0
	Antimony	4.0000	3.9634	99.1		90.0	110.0
	Selenium	1.6000	1.5651	97.8		90.0	110.0
	Silicon	1.6000	1.6585	103.7		90.0	110.0
	Thallium	4.0000	3.9366	98.4		90.0	110.0
	Vanadium	1.6000	1.5663	97.9		90.0	110.0
	Zinc	4.0000	3.9044	97.6		90.0	110.0
CCV4--4	Silver	0.4000	0.4034	100.9		90.0	110.0
	Aluminum	20.0000	19.7115	98.6		90.0	110.0
	Arsenic	1.6000	1.6084	100.5		90.0	110.0
	Barium	4.0000	3.7167	92.9		90.0	110.0
	Beryllium	0.4000	0.3944	98.6		90.0	110.0
	Calcium	40.0000	41.0179	102.5		90.0	110.0
	Cadmium	4.0000	3.9885	99.7		90.0	110.0
	Chromium	4.0000	4.0841	102.1		90.0	110.0
	Copper	4.0000	3.7672	94.2		90.0	110.0
	Iron	4.0000	4.0335	100.8		90.0	110.0
	Potassium	40.0000	39.3301	98.3		90.0	110.0
	Magnesium	20.0000	19.8714	99.4		90.0	110.0
	Manganese	4.0000	3.9529	98.8		90.0	110.0
	Molybdenum	20.0000	20.1712	100.9		90.0	110.0
	Sodium	40.0000	38.6626	96.7		90.0	110.0
	Nickel	8.0000	7.9696	99.6		90.0	110.0
	Lead	20.0000	20.4132	102.1		90.0	110.0
	Antimony	4.0000	4.0318	100.8		90.0	110.0
	Selenium	1.6000	1.5555	97.2		90.0	110.0
	Silicon	1.6000	1.6630	103.9		90.0	110.0
	Thallium	4.0000	4.0951	102.4		90.0	110.0
	Vanadium	1.6000	1.5737	98.4		90.0	110.0
	Zinc	4.0000	3.9076	97.7		90.0	110.0
CV5--5	Silver	0.4000	0.4048	101.2		90.0	110.0
	Aluminum	20.0000	19.9291	99.6		90.0	110.0
	Arsenic	1.6000	1.6115	100.7		90.0	110.0
	Barium	4.0000	3.7499	93.7		90.0	110.0
	Beryllium	0.4000	0.3969	99.2		90.0	110.0
	Calcium	40.0000	41.0726	102.7		90.0	110.0

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

10/09/97
15:20:43
Group: 17959

Analysis Batch Number: ICPWA-10/02/97-118 -1
Test Identification : ICPWA-*Metals by ICP
mber of Samples : 18
tch Data-Date/Time : 10/03/97 / 12:21:19

Sequence : DATB275

V #	ANALYTE	TRUE VALUE	BATCH READ	% REC	#	QC LIMITS LOWER	UPPER
CCV5--5	Cadmium	4.0000	3.9626	99.1		90.0	110.0
	Chromium	4.0000	4.0761	101.9		90.0	110.0
	Copper	4.0000	3.7917	94.8		90.0	110.0
	Iron	4.0000	4.0093	100.2		90.0	110.0
	Potassium	40.0000	39.4128	98.5		90.0	110.0
	Magnesium	20.0000	19.8925	99.5		90.0	110.0
	Manganese	4.0000	3.9714	99.3		90.0	110.0
	Molybdenum	20.0000	20.2328	101.2		90.0	110.0
	Sodium	40.0000	38.7226	96.8		90.0	110.0
	Nickel	8.0000	7.9312	99.1		90.0	110.0
	Lead	20.0000	20.2610	101.3		90.0	110.0
	Antimony	4.0000	4.0479	101.2		90.0	110.0
	Selenium	1.6000	1.5589	97.4		90.0	110.0
	Silicon	1.6000	1.6940	105.9		90.0	110.0
	Thallium	4.0000	3.9805	99.5		90.0	110.0
	Vanadium	1.6000	1.5753	98.5		90.0	110.0
	Zinc	4.0000	3.9067	97.7		90.0	110.0
CCV6--6	Silver	0.4000	0.4064	101.6		90.0	110.0
	Aluminum	20.0000	20.0266	100.1		90.0	110.0
	Arsenic	1.6000	1.6059	100.4		90.0	110.0
	Barium	4.0000	3.8215	95.5		90.0	110.0
	Beryllium	0.4000	0.3964	99.1		90.0	110.0
	Calcium	40.0000	40.2553	100.6		90.0	110.0
	Cadmium	4.0000	3.8681	96.7		90.0	110.0
	Chromium	4.0000	4.0367	100.9		90.0	110.0
	Copper	4.0000	3.8576	96.4		90.0	110.0
	Iron	4.0000	4.0279	100.7		90.0	110.0
	Potassium	40.0000	39.8829	99.7		90.0	110.0
	Magnesium	20.0000	19.8221	99.1		90.0	110.0
	Manganese	4.0000	3.9359	98.4		90.0	110.0
	Molybdenum	20.0000	19.9920	100.0		90.0	110.0
	Sodium	40.0000	39.7069	99.3		90.0	110.0
	Nickel	8.0000	7.8587	98.2		90.0	110.0
	Lead	20.0000	19.8836	99.4		90.0	110.0
	Antimony	4.0000	4.1087	102.7		90.0	110.0
	Selenium	1.6000	1.6033	100.2		90.0	110.0
	Silicon	1.6000	1.6775	104.8		90.0	110.0
	Thallium	4.0000	3.9228	98.1		90.0	110.0
	Vanadium	1.6000	1.5851	99.1		90.0	110.0
	Zinc	4.0000	3.8934	97.3		90.0	110.0
CCV7--7	Silver	0.4000	0.3996	99.9		90.0	110.0
	Aluminum	20.0000	19.6809	98.4		90.0	110.0
	Arsenic	1.6000	1.5787	98.7		90.0	110.0
	Barium	4.0000	3.7522	93.8		90.0	110.0
	Beryllium	0.4000	0.3945	98.6		90.0	110.0
	Calcium	40.0000	40.2471	100.6		90.0	110.0
	Cadmium	4.0000	3.8827	97.1		90.0	110.0
	Chromium	4.0000	4.0237	100.6		90.0	110.0
	Copper	4.0000	3.7722	94.3		90.0	110.0

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

10/09/97
15:20:46
Group: 17959

Analysis Batch Number: ICPWA-10/02/97-118 -1
Test Identification : ICPWA-*Metals by ICP
mber of Samples : 18
tch Data-Date/Time : 10/03/97 / 12:21:19

Sequence : DATB275

CV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
CCV7--7	Iron	4.0000	3.9816	99.5	90.0	110.0
	Potassium	40.0000	39.1539	97.9	90.0	110.0
	Magnesium	20.0000	19.6912	98.5	90.0	110.0
	Manganese	4.0000	3.9101	97.8	90.0	110.0
	Molybdenum	20.0000	19.9909	100.0	90.0	110.0
	Sodium	40.0000	38.6078	96.5	90.0	110.0
	Nickel	8.0000	7.8442	98.1	90.0	110.0
	Lead	20.0000	19.9819	99.9	90.0	110.0
	Antimony	4.0000	4.0704	101.8	90.0	110.0
	Selenium	1.6000	1.5951	99.7	90.0	110.0
	Silicon	1.6000	1.6592	103.7	90.0	110.0
	Thallium	4.0000	4.0553	101.4	90.0	110.0
	Vanadium	1.6000	1.5741	98.4	90.0	110.0
	Zinc	4.0000	3.8924	97.3	90.0	110.0
CCV8--8	Silver	0.4000	0.4009	100.2	90.0	110.0
	Aluminum	20.0000	20.4039	102.0	90.0	110.0
	Arsenic	1.6000	1.5744	98.4	90.0	110.0
	Barium	4.0000	3.9083	97.7	90.0	110.0
	Beryllium	0.4000	0.4050	101.3	90.0	110.0
	Calcium	40.0000	40.5777	101.4	90.0	110.0
	Cadmium	4.0000	3.8634	96.6	90.0	110.0
	Chromium	4.0000	4.0972	102.4	90.0	110.0
	Copper	4.0000	3.9155	97.9	90.0	110.0
	Iron	4.0000	4.1504	103.8	90.0	110.0
	Potassium	40.0000	40.8615	102.2	90.0	110.0
	Magnesium	20.0000	20.5928	103.0	90.0	110.0
	Manganese	4.0000	3.9379	98.4	90.0	110.0
	Molybdenum	20.0000	19.8151	99.1	90.0	110.0
	Sodium	40.0000	40.2360	100.6	90.0	110.0
	Nickel	8.0000	7.8717	98.4	90.0	110.0
	Lead	20.0000	20.0637	100.3	90.0	110.0
	Antimony	4.0000	4.2415	106.0	90.0	110.0
	Selenium	1.6000	1.5689	98.1	90.0	110.0
	Silicon	1.6000	1.6552	103.5	90.0	110.0
	Thallium	4.0000	3.9026	97.6	90.0	110.0
	Vanadium	1.6000	1.5921	99.5	90.0	110.0
	Zinc	4.0000	3.9489	98.7	90.0	110.0

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
CB-	Silver	ND	0.0060
	Aluminum	0.0106	0.0500
	Arsenic	ND	0.0300
	Barium	ND	0.0030
	Beryllium	ND	0.0002
	Calcium	ND	0.4000
	Cadmium	0.0014	0.0040
	Chromium	0.0008	0.0100
	Copper	ND	0.0100
	Iron	0.0244	0.2000

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

10/09/97
15:20:48
Group: 17959

Analysis Batch Number: ICPWA-10/02/97-118 -1
Test Identification : ICPWA-*Metals by ICP
umber of Samples : 18
atch Data-Date/Time : 10/03/97 / 12:21:19

Sequence : DATB275

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
CB-	Potassium	0.0083	0.1000
	Magnesium	ND	0.0500
	Manganese	0.0010	0.0020
	Molybdenum	0.0178	0.0300
	Sodium	0.0370	0.2000
	Nickel	0.0064	0.0300
	Lead	ND	0.0400
	Antimony	0.0014	0.1000
	Selenium	ND	0.0700
	Silicon	0.0060	0.2000
	Thallium	ND	0.1000
	Vanadium	ND	0.0030
	Zinc	0.0014	0.0300
CB1-	Silver	0.0012	0.0060
	Aluminum	0.0150	0.0500
	Arsenic	0.0023	0.0300
	Barium	0.0006	0.0030
	Beryllium	ND	0.0002
	Calcium	0.0109	0.4000
	Cadmium	0.0009	0.0040
	Chromium	0.0013	0.0100
	Copper	0.0002	0.0100
	Iron	0.0561	0.2000
	Potassium	ND	0.1000
	Magnesium	0.0236	0.0500
	Manganese	0.0008	0.0020
	Molybdenum	0.0182	0.0300
	Sodium	0.1052	0.2000
	Nickel	0.0014	0.0300
	Lead	0.0049	0.0400
	Antimony	ND	0.1000
	Selenium	ND	0.0700
	Silicon	ND	0.2000
	Thallium	0.0491	0.1000
	Vanadium	ND	0.0030
	Zinc	0.0027	0.0300
CCB3-	Silver	ND	0.0060
	Aluminum	0.0006	0.0500
	Arsenic	0.0049	0.0300
	Barium	0.0002	0.0030
	Beryllium	ND	0.0002
	Calcium	0.0056	0.4000
	Cadmium	ND	0.0040
	Chromium	0.0004	0.0100
	Copper	0.0008	0.0100
	Iron	ND	0.2000
	Potassium	0.0229	0.1000
	Magnesium	ND	0.0500
	Manganese	0.0005	0.0020
	Molybdenum	0.0185	0.0300

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

10/09/97
15:20:50
Group: 17959

Analysis Batch Number: ICPWA-10/02/97-118 -1
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 18
Batch Data-Date/Time : 10/03/97 / 12:21:19

Sequence : DATB275

CB#	ANALYTE	CONC FOUND #	CONC LIMIT
CB3-	Sodium	0.0604	0.2000
	Nickel	0.0087	0.0300
	Lead	ND	0.0400
	Antimony	ND	0.1000
	Selenium	ND	0.0700
	Silicon	ND	0.2000
	Thallium	ND	0.1000
	Vanadium	ND	0.0030
	Zinc	ND	0.0300
CB4-	Silver	ND	0.0060
	Aluminum	ND	0.0500
	Arsenic	0.0042	0.0300
	Barium	0.0003	0.0030
	Beryllium	ND	0.0002
	Calcium	0.0087	0.4000
	Cadmium	0.0002	0.0040
	Chromium	ND	0.0100
	Copper	ND	0.0100
	Iron	ND	0.2000
	Potassium	0.0229	0.1000
	Magnesium	ND	0.0500
	Manganese	0.0004	0.0020
	Molybdenum	0.0092	0.0300
	Sodium	0.0986	0.2000
	Nickel	ND	0.0300
	Lead	ND	0.0400
	Antimony	0.0518	0.1000
	Selenium	ND	0.0700
	Silicon	ND	0.2000
	Thallium	0.0125	0.1000
	Vanadium	ND	0.0030
	Zinc	ND	0.0300
CCB5-	Silver	ND	0.0060
	Aluminum	ND	0.0500
	Arsenic	0.0041	0.0300
	Barium	ND	0.0030
	Beryllium	ND	0.0002
	Calcium	0.0136	0.4000
	Cadmium	0.0002	0.0040
	Chromium	ND	0.0100
	Copper	ND	0.0100
	Iron	ND	0.2000
	Potassium	0.0420	0.1000
	Magnesium	ND	0.0500
	Manganese	0.0007	0.0020
	Molybdenum	0.0209	0.0300
	Sodium	0.0976	0.2000
	Nickel	ND	0.0300
	Lead	ND	0.0400
	Antimony	ND	0.1000

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

10/09/97
15:20:52
Group: 17959

Analysis Batch Number: ICPWA-10/02/97-118 -1
Test Identification : ICPWA-*Metals by ICP
umber of Samples : 18
atch Data-Date/Time : 10/03/97 / 12:21:19

Sequence : DATB275

CB#	ANALYTE	CONC FOUND #	CONC LIMIT
CB5-	Selenium	ND	0.0700
	Silicon	0.0095	0.2000
	Thallium	ND	0.1000
	Vanadium	ND	0.0030
	Zinc	ND	0.0300
CCB6-	Silver	0.0020	0.0060
	Aluminum	0.0025	0.0500
	Arsenic	0.0149	0.0300
	Barium	0.0005	0.0030
	Beryllium	ND	0.0002
	Calcium	0.0058	0.4000
	Cadmium	0.0008	0.0040
	Chromium	0.0031	0.0100
	Copper	0.0023	0.0100
	Iron	ND	0.2000
	Potassium	0.0236	0.1000
	Magnesium	0.0112	0.0500
	Manganese	0.0013	0.0020
	Molybdenum	0.0063	0.0300
	Sodium	ND	0.2000
	Nickel	0.0007	0.0300
	Lead	ND	0.0400
	Antimony	0.0792	0.1000
	Selenium	ND	0.0700
	Silicon	0.0033	0.2000
	Thallium	ND	0.1000
	Vanadium	0.0003	0.0030
	Zinc	0.0015	0.0300
CCB7-	Silver	0.0004	0.0060
	Aluminum	0.0107	0.0500
	Arsenic	0.0039	0.0300
	Barium	0.0001	0.0030
	Beryllium	ND	0.0002
	Calcium	0.0062	0.4000
	Cadmium	ND	0.0040
	Chromium	0.0016	0.0100
	Copper	0.0018	0.0100
	Iron	0.0521	0.2000
	Potassium	0.0236	0.1000
	Magnesium	0.0094	0.0500
	Manganese	0.0009	0.0020
	Molybdenum	0.0052	0.0300
	Sodium	ND	0.2000
	Nickel	ND	0.0300
	Lead	ND	0.0400
	Antimony	ND	0.1000
	Selenium	0.0143	0.0700
	Silicon	0.0119	0.2000
	Thallium	ND	0.1000
	Vanadium	ND	0.0030

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

10/09/97
15:20:54
Group: 17959

Analysis Batch Number: ICPWA-10/02/97-118 -1
Test Identification : ICPWA-*Metals by ICP
umber of Samples : 18
atch Data-Date/Time : 10/03/97 / 12:21:19

Sequence : DATB275

CB#	ANALYTE	CONC FOUND #	CONC LIMIT
CB7-	Zinc	0.0003	0.0300
CCB8-	Silver	0.0013	0.0060
	Aluminum	0.0414	0.0500
	Arsenic	0.0071	0.0300
	Barium	0.0006	0.0030
	Beryllium	ND	0.0002
	Calcium	0.0248	0.4000
	Cadmium	ND	0.0040
	Chromium	0.0039	0.0100
	Copper	0.0050	0.0100
	Iron	0.0602	0.2000
	Potassium	0.0893	0.1000
	Magnesium	0.0270	0.0500
	Manganese	0.0011	0.0020
	Molybdenum	0.0029	0.0300
	Sodium	ND	0.2000
	Nickel	0.0056	0.0300
	Lead	ND	0.0400
	Antimony	ND	0.1000
	Selenium	0.0292	0.0700
	Silicon	0.0061	0.2000
	Thallium	ND	0.1000
	Vanadium	0.0014	0.0030
	Zinc	0.0006	0.0300

---------- Result Footnotes ----------
2a) - Recovery is insignificant because sample conc. is >4x spike added.
A1) - Matrix Interference with regard to digestion
(11) - Both Duplicate results are less than the MDL.

---------- Batch Notes ----------
Serial dilutions were recovereved within acceptance limits of +/- 10% for aluminum, calcium, iron, magnesium, manganese, silicon. A post digestion spike was recovered within acceptance limits of +/- 25% for antimony.
jdb

Groups & Samples

17956-68588 17956-68589 17957-68590 17958-68591 17959-68592 17960-68593 17961-68594 17961-68595
17962-68596 17989-68678 17989-68679 18004-68720 18004-68721 18004-68722 18004-68723 18004-68726
18004-68728 18004-68729

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Larry Trujillo*	Date:	26-Sep-97
Company:	*On Site Technologies, Ltd. c/o Conoco, Inc.*	COC No.:	*6479*
Address:	*612 E. Murray Drive*	Sample No.:	*16211*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1325*

Project Name:	***Conoco, Inc. - Farmington B-Com-1***				
Project Location:	***4-1325-SP#3***				
Sampled by:	LT	Date:	17-Sep-97	Time:	8:44
Analyzed by:	DC	Date:	18-Sep-97		
Sample Matrix:	*Liquid*				

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene	ND	ug/L	0.2	ug/L
Toluene	0.7	ug/L	0.2	ug/L
Ethylbenzene	0.4	ug/L	0.2	ug/L
m,p-Xylene	0.3	ug/L	0.2	ug/L
o-Xylene	0.6	ug/L	0.2	ug/L
TOTAL	2.0	ug/L		

ND - Not Detected at Limit of Quantitation

Method - *SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography*

Approved By:
Date: 9/29/97

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

API WATER ANALYSIS

Attn:	Larry Trujillo	Date:	10-Oct-97
Company:	On Site Technologies, Ltd. c/o Conoco, Inc.	COC No.:	6479
Address:	612 E. Murray Drive	Sample ID:	16211
City, State:	Farmington, NM 87401	Job No.:	4-1325

Project Name:	**Conoco Inc. - Farmington B-Com-1**				
Project Location:	**4-1325-SP#3**				
Sampled by:	LT	Date:	17-Sep-97	Time:	8:44
Analyzed by:	HR	Date:	25-Sep-97		

API RP-45 Laboratory Analysis

Parameter		Result	Unit of Measure		Result	Unit of Measure	
Cations							
Sodium	Na	160	mg/L		6.96	me/L	
Calcium	Ca	565	mg/L		28.20	me/L	
Magnesium	Mg	63	mg/L		5.18	me/L	
Potassium	K	15.7	mg/L		0.40	me/L	
Anions							
Chloride	Cl	150	mg/L		4.23	me/L	
Sulfate	SO4	1354	mg/L		28.19	me/L	
Carbonate	CO3	<1	mg/L		<0.01	me/L	
Bicarbonate	HCO3	539	mg/L		8.83	me/L	
Hydroxide	OH	<1	mg/L		<0.01	me/L	
Sulfide	S2	NA	mg/L		NA	me/L	
Iron	Fe	<0.05	mg/L		<0.01	me/L	
Total Dissolved Solids Calculated, Sum of Cation/Anion		2847	mg/L				
pH		6.79					
Resistivity		3.1546	ohm-m				
Specific Gravity		1.0028					
Total Hardness as CaCO3		1670	mg/L				

Cation-Anion Balance

0.51 Difference Cation-Anion, me/L

81.99 Total Cation-Anion, me/L

0.6 % Difference Cation-Anion

Comments

NA: Not Analyzed

Approved by: CAG

Date: 10/15/97

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Larry Trujillo*	Date:	26-Sep-97
Company:	*On Site Technologies, Ltd. c/o Conoco, Inc.*	COC No.:	*6478*
Address:	*612 E. Murray Drive*	Sample No.:	*16207*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1325*

Project Name:	***Conoco, Inc. - Farmington B-Com-1***				
Project Location:	***4-1325-SP4***				
Sampled by:	LT	Date:	16-Sep-97	Time:	15:41
Analyzed by:	DC	Date:	18-Sep-97		
Sample Matrix:	*Liquid*				

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene	0.9	ug/L	0.2	ug/L
Toluene	ND	ug/L	0.2	ug/L
Ethylbenzene	ND	ug/L	0.2	ug/L
m,p-Xylene	ND	ug/L	0.2	ug/L
o-Xylene	ND	ug/L	0.2	ug/L
TOTAL	0.9	ug/L		

ND - Not Detected at Limit of Quantitation

Method - *SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography*

Approved By: DaC
Date: 9/26/97

RECEIVED OCT 1 6 1997

Mountain States Analytical, Inc.
The Quality Solution

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

Attn: Mr. David Cox
Project: Farmington B-COM-1

MSAI Sample: 68588
MSAI Group: 17956
Date Reported: 10/09/97
Discard Date: 11/08/97
Date Submitted: 09/23/97
Date Sampled: 09/17/97
Collected by: DC
Purchase Order: 6479
Project No.:

Sample ID: 16211-6479 4-1325-SP #3 (02)
Matrix: Waste Water

Test	Analysis	Results as Received	Units	Limit of Quantitation
0259B	Mercury by CVAA, w/ww, 7470 Method: SW-846 7470	ND	mg/l	0.0005
0392I	Flame/ICP Prep, w/ww, 3005A Method: SW-846 3005A	Complete		
0392M	Mercury Prep CVAA, w/ww, 7470 Method: SW-846 7470	W 0		
7245	Arsenic by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.15
7246	Barium by ICP, w/ww, 6010A Method: SW-846 6010A	0.17	mg/l	0.02
7249	Cadmium by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.020
7251	Chromium by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.050
7255	Lead by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.20
7264	Selenium by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.35
7266	Silver by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.030

Mountain States Analytical, Inc.
The Quality Solution

On Site Technologies, Ltd.

MSAI Sample: 68588
MSAI Group: 17956

Sample ID: 16211-6479

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:

R E Larsen

Rolf E. Larsen
Project Manager

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

Analysis Batch Number: ICPWA-10/02/97-118 -1
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 18
Batch Data-Date/Time : 10/03/97 / 12:21:19

Sequence : DATB275

CCV #	ANALYTE	TRUE VALUE	BATCH READ	% REC	#	QC LIMITS LOWER	UPPER
CCV5--5	Cadmium	4.0000	3.9626	99.1		90.0	110.0
	Chromium	4.0000	4.0761	101.9		90.0	110.0
	Copper	4.0000	3.7917	94.8		90.0	110.0
	Iron	4.0000	4.0093	100.2		90.0	110.0
	Potassium	40.0000	39.4128	98.5		90.0	110.0
	Magnesium	20.0000	19.8925	99.5		90.0	110.0
	Manganese	4.0000	3.9714	99.3		90.0	110.0
	Molybdenum	20.0000	20.2328	101.2		90.0	110.0
	Sodium	40.0000	38.7226	96.8		90.0	110.0
	Nickel	8.0000	7.9312	99.1		90.0	110.0
	Lead	20.0000	20.2610	101.3		90.0	110.0
	Antimony	4.0000	4.0479	101.2		90.0	110.0
	Selenium	1.6000	1.5589	97.4		90.0	110.0
	Silicon	1.6000	1.6940	105.9		90.0	110.0
	Thallium	4.0000	3.9805	99.5		90.0	110.0
	Vanadium	1.6000	1.5753	98.5		90.0	110.0
	Zinc	4.0000	3.9067	97.7		90.0	110.0
CCV6--6	Silver	0.4000	0.4064	101.6		90.0	110.0
	Aluminum	20.0000	20.0266	100.1		90.0	110.0
	Arsenic	1.6000	1.6059	100.4		90.0	110.0
	Barium	4.0000	3.8215	95.5		90.0	110.0
	Beryllium	0.4000	0.3964	99.1		90.0	110.0
	Calcium	40.0000	40.2553	100.6		90.0	110.0
	Cadmium	4.0000	3.8681	96.7		90.0	110.0
	Chromium	4.0000	4.0367	100.9		90.0	110.0
	Copper	4.0000	3.8576	96.4		90.0	110.0
	Iron	4.0000	4.0279	100.7		90.0	110.0
	Potassium	40.0000	39.8829	99.7		90.0	110.0
	Magnesium	20.0000	19.8221	99.1		90.0	110.0
	Manganese	4.0000	3.9359	98.4		90.0	110.0
	Molybdenum	20.0000	19.9920	100.0		90.0	110.0
	Sodium	40.0000	39.7069	99.3		90.0	110.0
	Nickel	8.0000	7.8587	98.2		90.0	110.0
	Lead	20.0000	19.8836	99.4		90.0	110.0
	Antimony	4.0000	4.1087	102.7		90.0	110.0
	Selenium	1.6000	1.6033	100.2		90.0	110.0
	Silicon	1.6000	1.6775	104.8		90.0	110.0
	Thallium	4.0000	3.9228	98.1		90.0	110.0
	Vanadium	1.6000	1.5851	99.1		90.0	110.0
	Zinc	4.0000	3.8934	97.3		90.0	110.0
CCV7--7	Silver	0.4000	0.3996	99.9		90.0	110.0
	Aluminum	20.0000	19.6809	98.4		90.0	110.0
	Arsenic	1.6000	1.5787	98.7		90.0	110.0
	Barium	4.0000	3.7522	93.8		90.0	110.0
	Beryllium	0.4000	0.3945	98.6		90.0	110.0
	Calcium	40.0000	40.2471	100.6		90.0	110.0
	Cadmium	4.0000	3.8827	97.1		90.0	110.0
	Chromium	4.0000	4.0237	100.6		90.0	110.0
	Copper	4.0000	3.7722	94.3		90.0	110.0

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

10/09/97
15:18:45
Group: 17956

Analysis Batch Number: ICPWA-10/02/97-118 -1
Test Identification : ICPWA-*Metals by ICP
mber of Samples : 18
Batch Data-Date/Time : 10/03/97 / 12:21:19

Sequence : DATB275

V #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
CCV7--7	Iron	4.0000	3.9816	99.5	90.0	110.0
	Potassium	40.0000	39.1539	97.9	90.0	110.0
	Magnesium	20.0000	19.6912	98.5	90.0	110.0
	Manganese	4.0000	3.9101	97.8	90.0	110.0
	Molybdenum	20.0000	19.9909	100.0	90.0	110.0
	Sodium	40.0000	38.6078	96.5	90.0	110.0
	Nickel	8.0000	7.8442	98.1	90.0	110.0
	Lead	20.0000	19.9819	99.9	90.0	110.0
	Antimony	4.0000	4.0704	101.8	90.0	110.0
	Selenium	1.6000	1.5951	99.7	90.0	110.0
	Silicon	1.6000	1.6592	103.7	90.0	110.0
	Thallium	4.0000	4.0553	101.4	90.0	110.0
	Vanadium	1.6000	1.5741	98.4	90.0	110.0
	Zinc	4.0000	3.8924	97.3	90.0	110.0
CCV8--8	Silver	0.4000	0.4009	100.2	90.0	110.0
	Aluminum	20.0000	20.4039	102.0	90.0	110.0
	Arsenic	1.6000	1.5744	98.4	90.0	110.0
	Barium	4.0000	3.9083	97.7	90.0	110.0
	Beryllium	0.4000	0.4050	101.3	90.0	110.0
	Calcium	40.0000	40.5777	101.4	90.0	110.0
	Cadmium	4.0000	3.8634	96.6	90.0	110.0
	Chromium	4.0000	4.0972	102.4	90.0	110.0
	Copper	4.0000	3.9155	97.9	90.0	110.0
	Iron	4.0000	4.1504	103.8	90.0	110.0
	Potassium	40.0000	40.8615	102.2	90.0	110.0
	Magnesium	20.0000	20.5928	103.0	90.0	110.0
	Manganese	4.0000	3.9379	98.4	90.0	110.0
	Molybdenum	20.0000	19.8151	99.1	90.0	110.0
	Sodium	40.0000	40.2360	100.6	90.0	110.0
	Nickel	8.0000	7.8717	98.4	90.0	110.0
	Lead	20.0000	20.0637	100.3	90.0	110.0
	Antimony	4.0000	4.2415	106.0	90.0	110.0
	Selenium	1.6000	1.5689	98.1	90.0	110.0
	Silicon	1.6000	1.6552	103.5	90.0	110.0
	Thallium	4.0000	3.9026	97.6	90.0	110.0
	Vanadium	1.6000	1.5921	99.5	90.0	110.0
	Zinc	4.0000	3.9489	98.7	90.0	110.0

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
CB-	Silver	ND	0.0060
	Aluminum	0.0106	0.0500
	Arsenic	ND	0.0300
	Barium	ND	0.0030
	Beryllium	ND	0.0002
	Calcium	ND	0.4000
	Cadmium	0.0014	0.0040
	Chromium	0.0008	0.0100
	Copper	ND	0.0100
	Iron	0.0244	0.2000

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

10/09/97
15:18:47
Group: 17956

Analysis Batch Number: ICPWA-10/02/97-118 -1
Test Identification : ICPWA-*Metals by ICP
umber of Samples : 18
tch Data-Date/Time : 10/03/97 / 12:21:19

Sequence : DATB275

CB#	ANALYTE	CONC FOUND #	CONC LIMIT
B-	Potassium	0.0083	0.1000
	Magnesium	ND	0.0500
	Manganese	0.0010	0.0020
	Molybdenum	0.0178	0.0300
	Sodium	0.0370	0.2000
	Nickel	0.0064	0.0300
	Lead	ND	0.0400
	Antimony	0.0014	0.1000
	Selenium	ND	0.0700
	Silicon	0.0060	0.2000
	Thallium	ND	0.1000
	Vanadium	ND	0.0030
	Zinc	0.0014	0.0300
B1-	Silver	0.0012	0.0060
	Aluminum	0.0150	0.0500
	Arsenic	0.0023	0.0300
	Barium	0.0006	0.0030
	Beryllium	ND	0.0002
	Calcium	0.0109	0.4000
	Cadmium	0.0009	0.0040
	Chromium	0.0013	0.0100
	Copper	0.0002	0.0100
	Iron	0.0561	0.2000
	Potassium	ND	0.1000
	Magnesium	0.0236	0.0500
	Manganese	0.0008	0.0020
	Molybdenum	0.0182	0.0300
	Sodium	0.1052	0.2000
	Nickel	0.0014	0.0300
	Lead	0.0049	0.0400
	Antimony	ND	0.1000
	Selenium	ND	0.0700
	Silicon	ND	0.2000
	Thallium	0.0491	0.1000
	Vanadium	ND	0.0030
	Zinc	0.0027	0.0300
B3-	Silver	ND	0.0060
	Aluminum	0.0006	0.0500
	Arsenic	0.0049	0.0300
	Barium	0.0002	0.0030
	Beryllium	ND	0.0002
	Calcium	0.0056	0.4000
	Cadmium	ND	0.0040
	Chromium	0.0004	0.0100
	Copper	0.0008	0.0100
	Iron	ND	0.2000
	Potassium	0.0229	0.1000
	Magnesium	ND	0.0500
	Manganese	0.0005	0.0020
	Molybdenum	0.0185	0.0300

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

10/09/97
15:18:49
Group: 17956

Analysis Batch Number: ICPWA-10/02/97-118 -1
Test Identification : ICPWA-*Metals by ICP
mber of Samples : 18
tch Data-Date/Time : 10/03/97 / 12:21:19

Sequence : DATB275

B#	ANALYTE	CONC FOUND #	CONC LIMIT
B3-	Sodium	0.0604	0.2000
	Nickel	0.0087	0.0300
	Lead	ND	0.0400
	Antimony	ND	0.1000
	Selenium	ND	0.0700
	Silicon	ND	0.2000
	Thallium	ND	0.1000
	Vanadium	ND	0.0030
	Zinc	ND	0.0300
B4-	Silver	ND	0.0060
	Aluminum	ND	0.0500
	Arsenic	0.0042	0.0300
	Barium	0.0003	0.0030
	Beryllium	ND	0.0002
	Calcium	0.0087	0.4000
	Cadmium	0.0002	0.0040
	Chromium	ND	0.0100
	Copper	ND	0.0100
	Iron	ND	0.2000
	Potassium	0.0229	0.1000
	Magnesium	ND	0.0500
	Manganese	0.0004	0.0020
	Molybdenum	0.0092	0.0300
	Sodium	0.0986	0.2000
	Nickel	ND	0.0300
	Lead	ND	0.0400
	Antimony	0.0518	0.1000
	Selenium	ND	0.0700
	Silicon	ND	0.2000
	Thallium	0.0125	0.1000
	Vanadium	ND	0.0030
	Zinc	ND	0.0300
CCB5-	Silver	ND	0.0060
	Aluminum	ND	0.0500
	Arsenic	0.0041	0.0300
	Barium	ND	0.0030
	Beryllium	ND	0.0002
	Calcium	0.0136	0.4000
	Cadmium	0.0002	0.0040
	Chromium	ND	0.0100
	Copper	ND	0.0100
	Iron	ND	0.2000
	Potassium	0.0420	0.1000
	Magnesium	ND	0.0500
	Manganese	0.0007	0.0020
	Molybdenum	0.0209	0.0300
	Sodium	0.0976	0.2000
	Nickel	ND	0.0300
	Lead	ND	0.0400
	Antimony	ND	0.1000

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

10/09/97
15:18:51
Group: 17956

Analysis Batch Number: ICPWA-10/02/97-118 -1
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 18
Batch Data-Date/Time : 10/03/97 / 12:21:19

Sequence : DATB275

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
CCB5-	Selenium	ND	0.0700
	Silicon	0.0095	0.2000
	Thallium	ND	0.1000
	Vanadium	ND	0.0030
	Zinc	ND	0.0300
CCB6-	Silver	0.0020	0.0060
	Aluminum	0.0025	0.0500
	Arsenic	0.0149	0.0300
	Barium	0.0005	0.0030
	Beryllium	ND	0.0002
	Calcium	0.0058	0.4000
	Cadmium	0.0008	0.0040
	Chromium	0.0031	0.0100
	Copper	0.0023	0.0100
	Iron	ND	0.2000
	Potassium	0.0236	0.1000
	Magnesium	0.0112	0.0500
	Manganese	0.0013	0.0020
	Molybdenum	0.0063	0.0300
	Sodium	ND	0.2000
	Nickel	0.0007	0.0300
	Lead	ND	0.0400
	Antimony	0.0792	0.1000
	Selenium	ND	0.0700
	Silicon	0.0033	0.2000
	Thallium	ND	0.1000
	Vanadium	0.0003	0.0030
	Zinc	0.0015	0.0300
CCB7-	Silver	0.0004	0.0060
	Aluminum	0.0107	0.0500
	Arsenic	0.0039	0.0300
	Barium	0.0001	0.0030
	Beryllium	ND	0.0002
	Calcium	0.0062	0.4000
	Cadmium	ND	0.0040
	Chromium	0.0016	0.0100
	Copper	0.0018	0.0100
	Iron	0.0521	0.2000
	Potassium	0.0236	0.1000
	Magnesium	0.0094	0.0500
	Manganese	0.0009	0.0020
	Molybdenum	0.0052	0.0300
	Sodium	ND	0.2000
	Nickel	ND	0.0300
	Lead	ND	0.0400
	Antimony	ND	0.1000
	Selenium	0.0143	0.0700
	Silicon	0.0119	0.2000
	Thallium	ND	0.1000
	Vanadium	ND	0.0030

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

10/09/97
15:18:53
Group: 17956

Analysis Batch Number: ICPWA-10/02/97-118 -1
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 18
Batch Data-Date/Time : 10/03/97 / 12:21:19

Sequence : DATB275

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
CCB7-	Zinc	0.0003	0.0300
CCB8-	Silver	0.0013	0.0060
	Aluminum	0.0414	0.0500
	Arsenic	0.0071	0.0300
	Barium	0.0006	0.0030
	Beryllium	ND	0.0002
	Calcium	0.0248	0.4000
	Cadmium	ND	0.0040
	Chromium	0.0039	0.0100
	Copper	0.0050	0.0100
	Iron	0.0602	0.2000
	Potassium	0.0893	0.1000
	Magnesium	0.0270	0.0500
	Manganese	0.0011	0.0020
	Molybdenum	0.0029	0.0300
	Sodium	ND	0.2000
	Nickel	0.0056	0.0300
	Lead	ND	0.0400
	Antimony	ND	0.1000
	Selenium	0.0292	0.0700
	Silicon	0.0061	0.2000
	Thallium	ND	0.1000
	Vanadium	0.0014	0.0030
	Zinc	0.0006	0.0300

---------- Result Footnotes ----------

(2a) - Recovery is insignificant because sample conc. is >4x spike added.
(A1) - Matrix Interference with regard to digestion
(11) - Both Duplicate results are less than the MDL.

---------- Batch Notes ----------

Serial dilutions were recovereved within acceptance limits of +/- 10% for aluminum, calcium, iron, magnesium, manganese, silicon. A post digestion spike was recovered within acceptance limits of +/- 25% for antimony.
jdb

Groups & Samples

17956-68588	17956-68589	17957-68590	17958-68591	17959-68592	17960-68593	17961-68594	17961-68595
17962-68596	17989-68678	17989-68679	18004-68720	18004-68721	18004-68722	18004-68723	18004-68726
18004-68728	18004-68729						

CHAIN OF CUSTODY RECORD

6481

ON SITE TECHNOLOGIES, LTD.

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

Date: 9/17/97 Page ____ of ____

Purchase Order No.: 6479 Job No.

SEND INVOICE TO
Name ACCOUNTS REC.
Company ON SITE Dept.
Address
City, State, Zip

REPORT RESULTS TO
Name DAVID COX Title
Company ON SITE TECH
Mailing Address
City, State, Zip
Telephone No. 505-325-2432 Telefax No. 325-6256

Sampling Location: FARMINGTON B-COM-1

Sampler: LT

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	RCRA METALS + TOTAL	LAB ID
4-1325-SP #3	9/17/97	0844	WW	—	1	✓	16211-6479
4-1325-SP #1	9/17/97	0847	↓	—	1	✓	16212-↓
PH on well 16212 = 7 added 2ml of HNO3 pH≤2							

ANALYSIS REQUESTED: 20C 2053 w/f

Relinquished by:	Date/Time	Received by:	Date/Time
[signature]	9/17/97 1602	Nichole Dirks	09/23/97 1096
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

Authorized by: [signature] Date 9/17/97
(Client Signature Must Accompany Request)

Rush	24-48 Hours	10 Working Days	Special Instructions:

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

CHAIN OF CUSTODY RECORD

6479

ON SITE TECHNOLOGIES, LTD.

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

Date: 9-17-97

Page 1 of 1

Purchase Order No.:	Job No. 4-1325		
SEND INVOICE TO: Name	Larry Tuggill	REPORT RESULTS TO: Name	Larry Tuggill — Title
Company	Conoco — Dept.	Company	Conoco
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No.	Telefax No.
Sampling Location:	Fmin B-Com-1		
Sampler:	Larry Tuggill		

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	ANALYSIS REQUESTED: ADT	Total Metals	BTEX	LAB ID
4-1325 - NP SP#3 - API - Metals - BTEX	9-17-97	0844	H2O		5	✓	✓	✓	16711-16779
4-1325 - SP#1 - API - Metals - BTEX	9-17-97	0947	H2O		5	✓	✓	✓	16712 - V

Relinquished by: Larry Tuggill	Date/Time 9-17-97 / 0950	Received by:	Date/Time 9/17/97 1048
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

CHAIN OF CUSTODY RECORD

6488

ON SITE TECHNOLOGIES, LTD.

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

Date: 9/17/97

Page 1 of 1

Purchase Order No.: 6478	Job No. 4-1325		
SEND INVOICE TO: Name		REPORT RESULTS TO: Name DAVID COX	Title
Company	Dept.	Company ON SITE TECH	
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No. 505-325-2432	Telefax No. 325-6256

Sampling Location: FARMINGTON B-COM-1

Sampler: LT

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	ANALYSIS REQUESTED: RCRA METALS / TOTAL	LAB ID
4-1325-SP2-MET	9/16/97	1602	WW	HNO_3	1	✓	16208-6478 pH=2 added 2ml HNO_3 pH<2

Relinquished by: ~~Date/Time~~		Received by: Nichole Davies	Date/Time 09/23/97 1056
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

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

10/09/97
15:18:24
Group: 17956

Analysis Batch Number: 0259B-10/07/97-107 -1
Test Identification : 0259B-Mercury by CVAA, w/ww, 7470 Sequence : 0259B-1
mber of Samples : 8
tch Data-Date/Time : 10/08/97 / 13:18:09

ANK#	ANALYTE	CONC FOUND #	CONC LIMIT
W1-698	Mercury	-0.0900	0.1000

SPIKE

MPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	CONC SPIKE	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
7959-68592	Mercury	2.0000	0.1200	1.7800	83.0	80.0	120.0

D

MPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	RESULT 2	%REC2 #	QC LIMITS LOWER	QC LIMITS UPPER	RPD #	LIMIT
17959-68592	Mercury	2.0000	0.1200	1.8200	85.0	80.0	120.0	2.2	20.0

PLICATE

SAMPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
17958-68591	Mercury	0.0200	-0.0400	600.0(11)	20.0	1.00

NTROL

SAMPLE#	ANALYTE	CONC FOUND	CONC KNOWN	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
SW-698	Mercury	2.3700	2.5000	94.8	80.0	120.0

CCV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
V-	Mercury	3.0000	2.8600	95.3	90.0	110.0
CV--2	Mercury	5.0000	5.0500	101.0	80.0	120.0
CCV--3	Mercury	5.0000	5.1700	103.4	80.0	120.0
V--4	Mercury	5.0000	5.2100	104.2	80.0	120.0

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
B-	Mercury	0.0300	0.1000
B-	Mercury	0.0900	0.1000
CCB-	Mercury	0.0300	0.1000
CCB-	Mercury	0.0500	0.1000

---------- Result Footnotes ----------

(11) - Both Duplicate results are less than the MDL.

Groups & Samples

17956-68588 17956-68589 17957-68590 17958-68591 17959-68592 17961-68594 17961-68595 17962-68596

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

10/09/97
15:18:29
Group: 17956

Analysis Batch Number: ICPWA-10/02/97-118 -1
Test Identification : ICPWA-*Metals by ICP
mber of Samples : 18
tch Data-Date/Time : 10/03/97 / 12:21:19

Sequence : DATB275

ANK#	ANALYTE	CONC FOUND #	CONC LIMIT
W1-670	Silver	ND	0.0060
	Aluminum	0.0193	0.0500
	Arsenic	0.0064	0.0300
	Barium	0.0013	0.0030
	Beryllium	ND	0.0002
	Calcium	0.1138	0.4000
	Cadmium	0.0005	0.0040
	Chromium	0.0014	0.0100
	Copper	0.0050	0.0100
	Iron	0.0380	0.2000
	Potassium	0.0292	0.1000
	Magnesium	0.0206	0.0500
	Manganese	0.0016	0.0020
	Molybdenum	0.0152	0.0300
	Sodium	0.0604	0.2000
	Nickel	0.0050	0.0300
	Lead	ND	0.0400
	Antimony	ND	0.1000
	Selenium	ND	0.0700
	Silicon	0.0459	0.2000
	Thallium	0.0054	0.1000
	Vanadium	ND	0.0030
	Zinc	0.0296	0.0300
W2-670-2	Silver	ND	0.0060
	Aluminum	0.0054	0.0500
	Arsenic	ND	0.0300
	Barium	0.0002	0.0030
	Beryllium	ND	0.0002
	Calcium	0.0586	0.4000
	Cadmium	ND	0.0040
	Chromium	0.0001	0.0100
	Copper	0.0045	0.0100
	Iron	0.0121	0.2000
	Potassium	0.0038	0.1000
	Magnesium	0.0106	0.0500
	Manganese	0.0009	0.0020
	Molybdenum	0.0111	0.0300
	Sodium	0.0070	0.2000
	Nickel	ND	0.0300
	Lead	0.0001	0.0400
	Antimony	0.0197	0.1000
	Selenium	ND	0.0700
	Silicon	0.0927	0.2000
	Thallium	ND	0.1000
	Vanadium	ND	0.0030
	Zinc	0.0027	0.0300

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

10/09/97
15:18:32
Group: 17956

Analysis Batch Number: ICPWA-10/02/97-118 -1
Test Identification : ICPWA-*Metals by ICP
mber of Samples : 18
tch Data-Date/Time : 10/03/97 / 12:21:19

Sequence : DATB275

IKE

MPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	CONC SPIKE	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
17956-68588	Silver	0.0500	-0.0010	0.0442	90.4	80.0	120.0
	Aluminum	2.0000	9.8158	15.4624	282.3(2a)	80.0	120.0
	Arsenic	2.0000	0.0163	1.8581	92.1	80.0	120.0
	Barium	2.0000	0.1714	1.8801	85.4	80.0	120.0
	Beryllium	0.0500	0.0017	0.0455	87.6	80.0	120.0
	Calcium	2.0000	624.8877	628.1472	163.0(2a)	80.0	120.0
	Cadmium	0.0500	0.0007	0.0473	93.2	80.0	120.0
	Chromium	0.2000	0.0072	0.1861	89.4	80.0	120.0
	Copper	0.2500	0.0514	0.2654	85.6	80.0	120.0
	Iron	1.0000	21.0847	23.5782	249.3(2a)	80.0	120.0
	Potassium	10.0000	14.4180	24.4076	99.9	80.0	120.0
	Magnesium	2.0000	55.4827	57.8857	120.1(2a)	80.0	120.0
	Manganese	0.5000	20.3162	20.8274	102.2	80.0	120.0
	Molybdenum	0.5000	0.0247	0.4674	88.5	80.0	120.0
	Sodium	3.0000	164.0427	167.3475	110.2	80.0	120.0
	Nickel	0.5000	0.0378	0.4738	87.2	80.0	120.0
	Lead	0.5000	0.0191	0.4421	84.6	80.0	120.0
	Antimony	0.5000	0.0000	0.3993	79.9(A1)	80.0	120.0
	Selenium	2.0000	-0.0525	1.8224	93.7	80.0	120.0
	Silicon	2.0000	26.0226	33.8212	389.9(2a)	80.0	120.0
	Thallium	2.0000	0.0911	1.8017	85.5	80.0	120.0
	Vanadium	0.5000	0.0235	0.4729	89.9	80.0	120.0
	Zinc	0.5000	0.0973	0.5342	87.4	80.0	120.0

MSD

MPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	RESULT 2	%REC2 #	QC LIMITS LOWER	QC LIMITS UPPER	RPD #	LIMIT
956-68588	Silver	0.0500	-0.0010	0.0489	99.8	80.0	120.0	10.1	20.0
	Aluminum	2.0000	9.8158	15.5592	287.2(2a)	80.0	120.0	0.6	20.0
	Arsenic	2.0000	0.0163	1.8846	93.4	80.0	120.0	1.4	20.0
	Barium	2.0000	0.1714	1.9214	87.5	80.0	120.0	2.2	20.0
	Beryllium	0.0500	0.0017	0.0463	89.2	80.0	120.0	1.7	20.0
	Calcium	2.0000	624.8877	615.1779	-485.5(2a)	80.0	120.0	2.1(2a)	20.0
	Cadmium	0.0500	0.0007	0.0474	93.4	80.0	120.0	0.2	20.0
	Chromium	0.2000	0.0072	0.1921	92.4	80.0	120.0	3.2	20.0
	Copper	0.2500	0.0514	0.2714	88.0	80.0	120.0	2.2	20.0
	Iron	1.0000	21.0847	23.7541	266.9(2a)	80.0	120.0	0.7	20.0
	Potassium	10.0000	14.4180	24.7133	103.0	80.0	120.0	1.2	20.0
	Magnesium	2.0000	55.4827	57.0179	76.8(2a)	80.0	120.0	1.5(2a)	20.0
	Manganese	0.5000	20.3162	20.5152	39.8(2a)	80.0	120.0	1.5(2a)	20.0
	Molybdenum	0.5000	0.0247	0.4775	90.6	80.0	120.0	2.1	20.0
	Sodium	3.0000	164.0427	164.3913	11.6(2a)	80.0	120.0	1.8(2a)	20.0
	Nickel	0.5000	0.0378	0.4666	85.8	80.0	120.0	1.5	20.0
	Lead	0.5000	0.0191	0.4537	86.9	80.0	120.0	2.6	20.0
	Antimony	0.5000	0.0809	0.4267	69.2(A1)	80.0	120.0	6.6	20.0
	Selenium	2.0000	-0.0525	1.8262	93.9	80.0	120.0	0.2	20.0
	Silicon	2.0000	26.0226	35.0630	452.0(2a)	80.0	120.0	3.6	20.0
	Thallium	2.0000	0.0911	1.8211	86.5	80.0	120.0	1.1	20.0
	Vanadium	0.5000	0.0235	0.4806	91.4	80.0	120.0	1.6	20.0
	Zinc	0.5000	0.0973	0.5424	89.0	80.0	120.0	1.5	20.0

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

10/09/97
15:18:35
Group: 17956

Analysis Batch Number: ICPWA-10/02/97-118 -1
Test Identification : ICPWA-*Metals by ICP
mber of Samples : 18
tch Data-Date/Time : 10/03/97 / 12:21:19

Sequence : DATB275

PLICATE

MPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
17956-68588	Silver	-0.0010	0.0023	507.7(11)	20.0	1.00
	Aluminum	9.8158	8.1057	19.1	20.0	1.00
	Arsenic	0.0163	0.0113	36.2(11)	20.0	1.00
	Barium	0.1714	0.1518	12.1	20.0	1.00
	Beryllium	0.0017	0.0017	0.0	20.0	1.00
	Calcium	624.8877	610.9565	2.3	20.0	1.00
	Cadmium	0.0007	0.0029	122.2(11)	20.0	1.00
	Chromium	0.0072	0.0086	17.7	20.0	1.00
	Copper	0.0514	0.0502	2.4	20.0	1.00
	Iron	21.0847	19.6861	6.9	20.0	1.00
	Potassium	14.4180	13.6026	5.8	20.0	1.00
	Magnesium	55.4827	53.6734	3.3	20.0	1.00
	Manganese	20.3162	19.8042	2.6	20.0	1.00
	Molybdenum	0.0247	0.0164	40.4(11)	20.0	1.00
	Sodium	164.0427	156.4015	4.8	20.0	1.00
	Nickel	0.0378	0.0344	9.4	20.0	1.00
	Lead	0.0191	0.0151	23.4(11)	20.0	1.00
	Antimony	0.0809	0.0479	51.2(11)	20.0	1.00
	Selenium	-0.0525	0.0000	200.0(11)	20.0	1.00
	Silicon	26.0226	23.5304	10.1	20.0	1.00
	Thallium	0.0911	0.0537	51.7(11)	20.0	1.00
	Vanadium	0.0235	0.0214	9.4	20.0	1.00
	Zinc	0.0973	0.0877	10.4	20.0	1.00

CONTROL

MPLE#	ANALYTE	CONC FOUND	CONC KNOWN	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
SW-670	Silver	0.0450	0.0500	90.0	80.0	120.0
	Aluminum	1.9110	2.0000	95.6	80.0	120.0
	Arsenic	1.9465	2.0000	97.3	80.0	120.0
	Barium	1.8681	2.0000	93.4	80.0	120.0
	Beryllium	0.0478	0.0500	95.6	80.0	120.0
	Calcium	2.0468	2.0000	102.3	80.0	120.0
	Cadmium	0.0491	0.0500	98.2	80.0	120.0
	Chromium	0.1977	0.2000	98.9	80.0	120.0
	Copper	0.2360	0.2500	94.4	80.0	120.0
	Iron	0.9697	1.0000	97.0	80.0	120.0
	Potassium	9.6682	10.0000	96.7	80.0	120.0
	Magnesium	1.9609	2.0000	98.0	80.0	120.0
	Manganese	0.4854	0.5000	97.1	80.0	120.0
	Molybdenum	0.4946	0.5000	98.9	80.0	120.0
	Sodium	2.9941	3.0000	99.8	80.0	120.0
	Nickel	0.4869	0.5000	97.4	80.0	120.0
	Lead	0.4985	0.5000	99.7	80.0	120.0
	Antimony	0.4445	0.5000	88.9	80.0	120.0
	Selenium	1.9148	2.0000	95.7	80.0	120.0
	Silicon	1.9804	2.0000	99.0	80.0	120.0
	Thallium	1.9557	2.0000	97.8	80.0	120.0
	Vanadium	0.4870	0.5000	97.4	80.0	120.0
	Zinc	0.4834	0.5000	96.7	80.0	120.0

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

10/09/97
15:18:37
Group: 17956

Analysis Batch Number: ICPWA-10/02/97-118 -1
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 18
Batch Data-Date/Time : 10/03/97 / 12:21:19

Sequence : DATB275

CV #	ANALYTE	TRUE VALUE	BATCH READ	% REC	#	QC LIMITS LOWER	QC LIMITS UPPER
ICV-	Silver	0.4000	0.3964	99.1		90.0	110.0
	Aluminum	20.0000	19.1585	95.8		90.0	110.0
	Arsenic	1.6000	1.5872	99.2		90.0	110.0
	Barium	4.0000	3.8304	95.8		90.0	110.0
	Beryllium	0.4000	0.3901	97.5		90.0	110.0
	Calcium	40.0000	40.1705	100.4		90.0	110.0
	Cadmium	4.0000	3.9535	98.8		90.0	110.0
	Chromium	4.0000	4.1066	102.7		90.0	110.0
	Copper	4.0000	3.8662	96.7		90.0	110.0
	Iron	4.0000	4.0692	101.7		90.0	110.0
	Potassium	40.0000	38.0531	95.1		90.0	110.0
	Magnesium	20.0000	19.3594	96.8		90.0	110.0
	Manganese	4.0000	3.9836	99.6		90.0	110.0
	Molybdenum	20.0000	20.3030	101.5		90.0	110.0
	Sodium	40.0000	37.2168	93.0		90.0	110.0
	Nickel	8.0000	7.9838	99.8		90.0	110.0
	Lead	20.0000	20.1874	100.9		90.0	110.0
	Antimony	4.0000	4.0015	100.0		90.0	110.0
	Selenium	1.6000	1.5349	95.9		90.0	110.0
	Silicon	1.6000	1.6574	103.6		90.0	110.0
	Thallium	4.0000	3.9596	99.0		90.0	110.0
	Vanadium	1.6000	1.5553	97.2		90.0	110.0
	Zinc	4.0000	3.9384	98.5		90.0	110.0
CV1--2	Silver	0.4000	0.3955	98.9		90.0	110.0
	Aluminum	20.0000	19.4301	97.2		90.0	110.0
	Arsenic	1.6000	1.5657	97.9		90.0	110.0
	Barium	4.0000	3.8164	95.4		90.0	110.0
	Beryllium	0.4000	0.3840	96.0		90.0	110.0
	Calcium	40.0000	39.6588	99.1		90.0	110.0
	Cadmium	4.0000	3.8962	97.4		90.0	110.0
	Chromium	4.0000	4.0424	101.1		90.0	110.0
	Copper	4.0000	3.8584	96.5		90.0	110.0
	Iron	4.0000	4.0902	102.3		90.0	110.0
	Potassium	40.0000	37.8083	94.5		90.0	110.0
	Magnesium	20.0000	19.3860	96.9		90.0	110.0
	Manganese	4.0000	3.9478	98.7		90.0	110.0
	Molybdenum	20.0000	20.0684	100.3		90.0	110.0
	Sodium	40.0000	37.5082	93.8		90.0	110.0
	Nickel	8.0000	7.8509	98.1		90.0	110.0
	Lead	20.0000	20.0413	100.2		90.0	110.0
	Antimony	4.0000	3.8553	96.4		90.0	110.0
	Selenium	1.6000	1.5364	96.0		90.0	110.0
	Silicon	1.6000	1.6484	103.0		90.0	110.0
	Thallium	4.0000	3.8984	97.5		90.0	110.0
	Vanadium	1.6000	1.5437	96.5		90.0	110.0
	Zinc	4.0000	3.8874	97.2		90.0	110.0
CV3--3	Silver	0.4000	0.4031	100.8		90.0	110.0
	Aluminum	20.0000	19.8229	99.1		90.0	110.0
	Arsenic	1.6000	1.6116	100.7		90.0	110.0

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

10/09/97
15:18:40
Group: 17956

Analysis Batch Number: ICPWA-10/02/97-118 -1
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 18
Batch Data-Date/Time : 10/03/97 / 12:21:19

Sequence : DATB275

CCV #	ANALYTE	TRUE VALUE	BATCH READ	% REC	QC LIMITS #	LOWER	UPPER
CCV3--3	Barium	4.0000	3.7625	94.1		90.0	110.0
	Beryllium	0.4000	0.3929	98.2		90.0	110.0
	Calcium	40.0000	40.5814	101.5		90.0	110.0
	Cadmium	4.0000	3.9254	98.1		90.0	110.0
	Chromium	4.0000	4.0540	101.4		90.0	110.0
	Copper	4.0000	3.7990	95.0		90.0	110.0
	Iron	4.0000	3.9559	98.9		90.0	110.0
	Potassium	40.0000	39.4701	98.7		90.0	110.0
	Magnesium	20.0000	19.9198	99.6		90.0	110.0
	Manganese	4.0000	3.9365	98.4		90.0	110.0
	Molybdenum	20.0000	19.9715	99.9		90.0	110.0
	Sodium	40.0000	39.4913	98.7		90.0	110.0
	Nickel	8.0000	7.8848	98.6		90.0	110.0
	Lead	20.0000	20.0248	100.1		90.0	110.0
	Antimony	4.0000	3.9634	99.1		90.0	110.0
	Selenium	1.6000	1.5651	97.8		90.0	110.0
	Silicon	1.6000	1.6585	103.7		90.0	110.0
	Thallium	4.0000	3.9366	98.4		90.0	110.0
	Vanadium	1.6000	1.5663	97.9		90.0	110.0
	Zinc	4.0000	3.9044	97.6		90.0	110.0
CCV4--4	Silver	0.4000	0.4034	100.9		90.0	110.0
	Aluminum	20.0000	19.7115	98.6		90.0	110.0
	Arsenic	1.6000	1.6084	100.5		90.0	110.0
	Barium	4.0000	3.7167	92.9		90.0	110.0
	Beryllium	0.4000	0.3944	98.6		90.0	110.0
	Calcium	40.0000	41.0179	102.5		90.0	110.0
	Cadmium	4.0000	3.9885	99.7		90.0	110.0
	Chromium	4.0000	4.0841	102.1		90.0	110.0
	Copper	4.0000	3.7672	94.2		90.0	110.0
	Iron	4.0000	4.0335	100.8		90.0	110.0
	Potassium	40.0000	39.3301	98.3		90.0	110.0
	Magnesium	20.0000	19.8714	99.4		90.0	110.0
	Manganese	4.0000	3.9529	98.8		90.0	110.0
	Molybdenum	20.0000	20.1712	100.9		90.0	110.0
	Sodium	40.0000	38.6626	96.7		90.0	110.0
	Nickel	8.0000	7.9696	99.6		90.0	110.0
	Lead	20.0000	20.4132	102.1		90.0	110.0
	Antimony	4.0000	4.0318	100.8		90.0	110.0
	Selenium	1.6000	1.5555	97.2		90.0	110.0
	Silicon	1.6000	1.6630	103.9		90.0	110.0
	Thallium	4.0000	4.0951	102.4		90.0	110.0
	Vanadium	1.6000	1.5737	98.4		90.0	110.0
	Zinc	4.0000	3.9076	97.7		90.0	110.0
CV5--5	Silver	0.4000	0.4048	101.2		90.0	110.0
	Aluminum	20.0000	19.9291	99.6		90.0	110.0
	Arsenic	1.6000	1.6115	100.7		90.0	110.0
	Barium	4.0000	3.7499	93.7		90.0	110.0
	Beryllium	0.4000	0.3969	99.2		90.0	110.0
	Calcium	40.0000	41.0726	102.7		90.0	110.0

CHAIN OF CUSTODY RECORD

6478

ON SITE TECHNOLOGIES, LTD.

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

Date: 9-14-97

Page 1 of 1

Purchase Order No.:	Job No. 4-1325		
SEND INVOICE TO: Name	Larry Trujillo	REPORT RESULTS TO: Name	Larry Trujillo / Title
Company	Conoco / Dept.	Company	Conoco
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No.	Telefax No.
Sampling Location:	FAIM R-Com-1		
Sampler:			

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	BTEX	PAH	API	TOTAL Metals	LAB ID
4-1325-SP0-BTEX	9/12/97	1457	H2O	HCl	2	✓				
4-1325-SP1-~~API~~ PAH	"	1516	H2O		2		✓			
4-1325-SP-1 BTEX	"	0941	H2O	HCl	2	✓				
4-1325-SP-2 API	"	1603	H2O	~~HNO3~~	1			✓		
4-1325-SP2 MET	"	1602	H2O	HNO_3	2				✓	
4-1325-SP2 - BTEX		1610	H2O	HCl	2	✓				

Relinquished by:	Date/Time 9/16/97 1754	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

CHAIN OF CUSTODY RECORD

6478

ON SITE TECHNOLOGIES, LTD.

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

Date: 9-16-97

Page 1 of 1

Purchase Order No.:	Job No. 4-1325		
SEND INVOICE TO: Name	Larry Trujillo	REPORT RESULTS TO: Name	Larry Trujillo / Title
Company	Conoco / Dept.	Company	Conoco
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No.	Telefax No.
Sampling Location:	FMTN B-COM-1		
Sampler:			

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	BTEX	PAH	Total Metals	API	TOTAL Metals	LAB ID
4-1325-SP Ø-BTEX	9/16/97	1437	H2O	HCl	2	✓					16205-6478
4-1325-SP 1- ~~API~~ PAH	"	1516	H2O		2		✓				16206
4-1325-SP-4 BTEX	"	1541	H2O	HCl	2	✓					16207
4-1325-SP-2 API	"	1558	H2O	~~HNO3~~	1			✓			16208-6478
4-1325-SP2 MET	"	1602	H2O	HNO3	2				✓		
4-1325-SP2 - BTEX		1610	H2O	HCl	2	✓					

Relinquished by: Larry Trujillo	Date/Time 9/16/97 1704	Received by: Heidi Reese	Date/Time 9/16/97 1705
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

CHAIN OF CUSTODY RECORD

6479

ON SITE
TECHNOLOGIES, LTD.

Date: 9-17-97

Page 1 of 1

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

Purchase Order No.: | Job No. 4-1325

SEND INVOICE TO
Name Larry Trujillo
Company Conoco | Dept.
Address
City, State, Zip

REPORT RESULTS TO
Name Larry Trujillo | Title
Company Conoco
Mailing Address
City, State, Zip
Telephone No. | Telefax No.

Sampling Location: Fmtn B-Com-1

Sampler: Larry Trujillo

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	ADT	Total Metals	BTEX	LAB ID
4-1325-AP SP#3 - API - Metals - BTEX	9-17-97	0844	H2O		5	✓	✓	✓	16211-6479
4-1325-SP#1 - API - METALS - BTEX	9-17-97	0947	H2O		5	✓	✓	✓	16212- V

Relinquished by: Larry Trujillo	Date/Time 9-17-97 / 0903	Received by:	Date/Time 9/17/97 0908
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

ON SITE
TECHNOLOGIES, LTD.

P.O. Box 2606 Farmington, NM 87499 (505) 325-5667

LABORATORY INVOICE

Attention: Larry Trujillo
On Site Technologies, Ltd. c/o Conoco, Inc.
612 E. Murray Drive
Farmington, NM 87401

Invoice No.: 6478
COC No.: 6478
Job No.: 4-1325
Customer No.: 4-1000

Subject: Water Analysis

Invoice Date: 17-Oct-97
Location: NM
Analysis Completion: 9-Oct-97

Laboratory Analysis	Sample Identification	Quantity	Unit Price	Total
Cation/Anion Balance - API RP-45, w/ww	*Farmington B-Com-1*	1	$100.00	$100.00
RCRA Metals - EPA 6010A/7470, w/ww	*Farmington B-Com-1*	1	$180.00	$180.00
BTEX - EPA 8020, w/ww	*Farmington B-Com-1*	3	$75.00	$225.00
Flame/ICP Prep - EPA 3005A, w/ww	*Farmington B-Com-1*	1	$15.00	$15.00
PAH - EPA 8310, w/ww	*Farmington B-Com-1*	1	$160.00	$160.00
			Sub-Total	$680.00
			NM Sales Tax 0.05938	$40.38
			TOTAL	$720.38

FILE COPY

Terms: Net 15 days

Mountain States Analytical, Inc.

October 9, 1997

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

Reference:
Project: Farmington B-COM-1
MSAI Group: 17959

Dear Mr. Cox:

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

16208-6478

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

If the report is acceptable, please approve the enclosed 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

RECEIVED OCT 1 6 1997

Mountain States Analytical, Inc.

October 9, 1997

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

Reference:
Project: Farmington B-COM-1
MSAI Group: 17956

Dear Mr. Cox:

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

16211-6479 16212-6479

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

If the report is acceptable, please approve the enclosed 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

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Larry Trujillo*	Date:	17-Jun-97
Company:	*On Site Technologies, Ltd. c/o Conoco*	COC No.:	*6421*
Address:	*612 E. Murray Drive*	Sample No.:	*14902*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1325*

Project Name:	***Conoco - Farmington B Com 1***				
Project Location:	***WSP #0***				
Sampled by:	LT	Date:	11-Jun-97	Time:	14:47
Analyzed by:	DC	Date:	12-Jun-97		
Sample Matrix:	*Liquid*				

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene	ND	ug/L	0.2	ug/L
Toluene	0.2	ug/L	0.2	ug/L
Ethylbenzene	ND	ug/L	0.2	ug/L
m,p-Xylene	ND	ug/L	0.2	ug/L
o-Xylene	ND	ug/L	0.2	ug/L
TOTAL	0.2	ug/L		

ND - Not Detected at Limit of Quantitation

Method - *SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography*

Approved By:
Date: 6/17/97

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Larry Trujillo*	Date:	17-Jun-97
Company:	*On Site Technologies, Ltd. c/o Conoco*	COC No.:	*6421*
Address:	*612 E. Murray Drive*	Sample No.:	*14903*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1325*

Project Name:	***Conoco - Farmington B Com 1***				
Project Location:	***WSP #1***				
Sampled by:	LT	Date:	11-Jun-97	Time:	15:10
Analyzed by:	DC	Date:	13-Jun-97		
Sample Matrix:	*Liquid*				

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene	155	ug/L	2	ug/L
Toluene	22	ug/L	2	ug/L
Ethylbenzene	184	ug/L	2	ug/L
m,p-Xylene	1137	ug/L	2	ug/L
o-Xylene	320	ug/L	2	ug/L
TOTAL	1817	ug/L		

ND - Not Detected at Limit of Quantitation

Method - *SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography*

Approved By:
Date: 6/12/97

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Larry Trujillo*	Date:	17-Jun-97
Company:	*On Site Technologies, Ltd. c/o Conoco*	COC No.:	*6421*
Address:	*612 E. Murray Drive*	Sample No.:	*14904*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1325*

Project Name:	***Conoco - Farmington B Com 1***				
Project Location:	***WSP #2***				
Sampled by:	LT	Date:	11-Jun-97	Time:	15:53
Analyzed by:	DC	Date:	13-Jun-97		
Sample Matrix:	*Liquid*				

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene	10.1	ug/L	0.2	ug/L
Toluene	5.3	ug/L	0.2	ug/L
Ethylbenzene	9.2	ug/L	0.2	ug/L
m,p-Xylene	19.3	ug/L	0.2	ug/L
o-Xylene	3.4	ug/L	0.2	ug/L
TOTAL	47.3	ug/L		

ND - Not Detected at Limit of Quantitation

Method - *SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography*

Approved By:
Date: 6/17/97

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Larry Trujillo*	Date:	17-Jun-97
Company:	*On Site Technologies, Ltd. c/o Conoco*	COC No.:	*6421*
Address:	*612 E. Murray Drive*	Sample No.:	*14905*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1325*

Project Name:	***Conoco - Farmington B Com 1***				
Project Location:	***WSP #4***				
Sampled by:	LT	Date:	11-Jun-97	Time:	16:12
Analyzed by:	DC	Date:	13-Jun-97		
Sample Matrix:	*Liquid*				

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene	ND	ug/L	0.2	ug/L
Toluene	0.2	ug/L	0.2	ug/L
Ethylbenzene	0.4	ug/L	0.2	ug/L
m,p-Xylene	0.4	ug/L	0.2	ug/L
o-Xylene	ND	ug/L	0.2	ug/L
TOTAL	1.1	ug/L		

ND - Not Detected at Limit of Quantitation

Method - *SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography*

Approved By: CAC

Date: 6/17/97

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

QUALITY ASSURANCE REPORT

for EPA Method 8020

Date Analyzed: 12-Jun-97

Internal QC No.: 0527-STD
Surrogate QC No.: 0528-STD
Reference Standard QC No.: 0529/30-QC

Method Blank

Parameter	*Result*	*Unit of Measure*
Average Amount of All Analytes In Blank	<0.2	ppb

Calibration Check

Parameter	*Unit of Measure*	*True Value*	*Analyzed Value*	*% Diff*	*Limit*
Benzene	ppb	20.0	20.0	0	15%
Toluene	ppb	20.0	20.6	3	15%
Ethylbenzene	ppb	20.0	21.2	6	15%
m,p-Xylene	ppb	40.0	39.5	1	15%
o-Xylene	ppb	20.0	20.6	3	15%

Matrix Spike

Parameter	*1- Percent Recovered*	*2 - Percent Recovered*	*Limit*	*%RSD*	*Limit*
Benzene	89	86	(39-150)	2	20%
Toluene	94	88	(46-148)	2	20%
Ethylbenzene	97	94	(32-160)	2	20%
m,p-Xylene	90	86	(35-145)	2	20%
o-Xylene	95	91	(35-145)	2	20%

Surrogate Recoveries

Laboratory Identification	*S1 Percent Recovered*	*S2 Percent Recovered*	*Laboratory Identification*	*S1 Percent Recovered*	*S2 Percent Recovered*
Limit Percent Recovered	(70-130)		*Limit Percent Recovered*	(70-130)	
14902-6421	96				
				THR	(pc)
				6/17/97	6/17/97

S1: Flourobenzene

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

QUALITY ASSURANCE REPORT

for EPA Method 8020

Date Analyzed: 13-Jun-97

Internal QC No.: 0527-STD
Surrogate QC No.: 0528-STD
Reference Standard QC No.: 0529/30-QC

Method Blank

Parameter	Result	Unit of Measure
Average Amount of All Analytes In Blank	<0.2	ppb

Calibration Check

Parameter	Unit of Measure	True Value	Analyzed Value	% Diff	Limit
Benzene	ppb	20.0	18.9	6	15%
Toluene	ppb	20.0	19.6	2	15%
Ethylbenzene	ppb	20.0	19.7	2	15%
m,p-Xylene	ppb	40.0	37.9	5	15%
o-Xylene	ppb	20.0	19.8	1	15%

Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Benzene	85	82	(39-150)	2	20%
Toluene	95	95	(46-148)	0	20%
Ethylbenzene	96	93	(32-160)	1	20%
m,p-Xylene	111	106	(35-145)	1	20%
o-Xylene	99	96	(35-145)	1	20%

Surrogate Recoveries

Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered	Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered
Limit Percent Recovered	(70-130)		Limit Percent Recovered	(70-130)	
14903-6421	94				
14904-6421	94				
14905-6421	97				
				JHR	
				6/17/97	6/17/97

S1: Flourobenzene

CHAIN OF CUSTODY RECORD

6421

ON SITE TECHNOLOGIES, LTD.

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

Date: 6/11/97

Page 1 of 1

Purchase Order No.:	Job No. 4-1325		
SEND INVOICE TO: Name	Larry Trujillo	REPORT RESULTS TO: Name	Larry Trujillo / Title
Company	Conoco / Dept.	Company	Conoco
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No. / Telefax No.	

Sampling Location: Farmington B Com 1

Sampler: Larry Trujillo

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	BTEX	LAB ID
WSP # 0	6/11/97	1417	H_2O	HCl	2	✓	1-1502 - 6121
WSP # 1	6/11/97	1510	H_2O	HCl	2	✓	1-1503
WSP # 2	6/11/97	1553	H_2O	HCl	2	✓	1-1504
WSP #4	6/11/97	1612	H_2O	HCl	2	✓	1-1505

Relinquished by: Larry Trujillo	Date/Time 1621 / 6/11/97	Received by: Brenda Adcock	Date/Time 6/11/97 1621
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

CHAIN OF CUSTODY RECORD

6421

ON SITE TECHNOLOGIES, LTD.

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

Date: 6/11/97

Page 1 of 1

Purchase Order No.:	Job No. 4-1255
SEND INVOICE TO — Name	Larry Trujillo
Company	Conoco
Dept.	
Address	
City, State, Zip	
REPORT RESULTS TO — Name	Larry Trujillo
Title	
Company	Conoco
Mailing Address	
City, State, Zip	
Telephone No.	
Telefax No.	
Sampling Location:	Farmington R Coal
Sampler:	Larry Trujillo

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	BTEX								LAB ID
WSP #3	6/11/97	1427	H_2O	HCl	2	✓								[illegible]
WSP #1	6/11/97	1510	H_2O	HCl	2	✓								[illegible]
WSP #2	6/11/97	1552	H_2O	HCl	2	✓								[illegible]
WSP #4	6/11/97	1612	H_2O	HCl	2	✓								[illegible]

Relinquished by: [signature]	Date/Time 1621 / 6/11/97	Received by: [signature]	Date/Time 6/11/97 [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)

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Larry Trujillo*	Date:	17-Jun-97
Company:	*On Site Technologies, Ltd. c/o Conoco*	COC No.:	*6423*
Address:	*612 E. Murray Drive*	Sample No.:	*14906*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1325*

Project Name:	***Conoco - Farmington B Com 1***				
Project Location:	***WSP #3***				
Sampled by:	LT	Date:	12-Jun-97	Time:	7:43
Analyzed by:	DC	Date:	12-Jun-97		
Sample Matrix:	*Liquid*				

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene	8.5	ug/L	0.2	ug/L
Toluene	0.5	ug/L	0.2	ug/L
Ethylbenzene	1.5	ug/L	0.2	ug/L
m,p-Xylene	1.4	ug/L	0.2	ug/L
o-Xylene	ND	ug/L	0.2	ug/L
TOTAL	11.9	ug/L		

ND - Not Detected at Limit of Quantitation

Method - *SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography*

Approved By: CAC

Date: 6/17/97

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

QUALITY ASSURANCE REPORT

for EPA Method 8020

Date Analyzed: 12-Jun-97

Internal QC No.: 0527-STD
Surrogate QC No.: 0528-STD
Reference Standard QC No.: 0529/30-QC

Method Blank

Parameter	*Result*	*Unit of Measure*
Average Amount of All Analytes In Blank	<0.2	ppb

Calibration Check

Parameter	*Unit of Measure*	*True Value*	*Analyzed Value*	*% Diff*	*Limit*
Benzene	ppb	20.0	20.0	0	15%
Toluene	ppb	20.0	20.6	3	15%
Ethylbenzene	ppb	20.0	21.2	6	15%
m,p-Xylene	ppb	40.0	39.5	1	15%
o-Xylene	ppb	20.0	20.6	3	15%

Matrix Spike

Parameter	*1- Percent Recovered*	*2 - Percent Recovered*	*Limit*	*%RSD*	*Limit*
Benzene	89	86	(39-150)	2	20%
Toluene	94	88	(46-148)	2	20%
Ethylbenzene	97	94	(32-160)	2	20%
m,p-Xylene	90	86	(35-145)	2	20%
o-Xylene	95	91	(35-145)	2	20%

Surrogate Recoveries

Laboratory Identification	*S1 Percent Recovered*	*S2 Percent Recovered*	*Laboratory Identification*	*S1 Percent Recovered*	*S2 Percent Recovered*
Limit Percent Recovered	(70-130)		Limit Percent Recovered	(70-130)	
14906-6423	96				
				6/17/97	6/17/97

S1: Flourobenzene

CHAIN OF CUSTODY RECORD

0425

ON SITE TECHNOLOGIES, LTD.

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

Date: 6/12/97

Page 1 of 1

Purchase Order No.:	Job No. 4-1325		
SEND INVOICE TO: Name	Larry Trujillo	REPORT RESULTS TO: Name	Larry Trujillo — Title
Company	Conoco — Dept.	Company	Conoco
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No.	Telefax No.

Sampling Location: From C Com 1

Sampler: Larry Trujillo

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	ANALYSIS REQUESTED: BTEX	LAB ID
WSP # 3	6/12/97	0743	H2O	HCl	2	✓	14116-01

Relinquished by:	Date/Time 6/12/97 0907	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

6421

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: 6/11/97

Page 1 of 1

Purchase Order No.:	Job No. 4-1265		
SEND INVOICE TO: Name	Larry Trujillo		
Company	Conoco	Dept.	
Address			
City, State, Zip			

REPORT RESULTS TO: Name	Larry Trujillo	Title
Company	Conoco	
Mailing Address		
City, State, Zip		
Telephone No.		Telefax No.

Sampling Location: Farmington B Com 1

Sampler: Larry Trujillo

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	BTEX								LAB ID
WSP #3	6/11/97	1417	H_2O	HCl	2	✓								
WSP #1	6/11/97	1510	H_2O	HCl	2	✓								
WSP #2	6/11/97	1553	H_2O	HCl	2	✓								
WSP #4	6/11/97	1612	H_2O	HCl	2	✓								

Relinquished by:	Date/Time 6/11/97	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

6423

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: 6/12/97

Page 1 of 1

Purchase Order No.:	Job No. 4-1022
SEND INVOICE TO Name	Larry Trujillo
Company	Conoco — Dept.
Address	
City, State, Zip	

REPORT RESULTS TO	
Name	Larry Trujillo — Title
Company	Conoco
Mailing Address	
City, State, Zip	
Telephone No.	Telefax No.

Sampling Location: Farm C Com 1

Sampler: Larry Trujillo

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	ANALYSIS REQUESTED: BTEX									LAB ID
MW #3	6/12/97	0700	H2O	HCl	2	✓									[illegible]

Relinquished by: [signature]	Date/Time 6/12/97 [illegible]	Received by: [illegible]	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:

Di[redacted]on: W[redacted]n Site[redacted]llow – [redacted] Pink [redacted]ler [redacted]rod – [redacted]

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Michael Lane*	Date:	19-Mar-97
Company:	*On Site Technologies, Ltd.*	COC No.:	*5058*
Address:	*612 E. Murray Drive*	Sample No.:	*13939*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1325*

Project Name:	***Conoco - Farmington B Com #1***				
Project Location:	~~UL~~ WSP Ø				
Sampled by:	ML/CG	Date:	18-Mar-97	Time:	11:55
Analyzed by:	DC	Date:	18-Mar-97		
Sample Matrix:	*Liquid*				

Parameter	*Result*	*Unit of Measure*	*Detection Limit*	*Unit of Measure*
Benzene	0.3	ug/L	0.2	ug/L
Toluene	<0.2	ug/L	0.2	ug/L
Ethylbenzene	<0.2	ug/L	0.2	ug/L
m,p-Xylene	0.5	ug/L	0.2	ug/L
o-Xylene	<0.2	ug/L	0.2	ug/L
TOTAL	0.7	ug/L		

Method - *SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

Approved By: [signature]
Date: 3 '19 '97

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Michael Lane*	Date:	22-Mar-97
Company:	*On Site Technologies, Ltd. c/o Conoco*	COC No.:	*5058*
Address:	*612 E. Murray Drive*	Sample No.:	*13935*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1325*

Project Name:	***Conoco - Farmington B Com #1***				
Project Location:	***WSP #1***				
Sampled by:	ML/CG	Date:	18-Mar-97	Time:	11:35
Analyzed by:	DC	Date:	19-Mar-97		
Sample Matrix:	*Liquid*				

Parameter	*Result*	*Unit of Measure*	*Detection Limit*	*Unit of Measure*
Benzene	557.1	ug/L	0.2	ug/L
Toluene	146.3	ug/L	0.2	ug/L
Ethylbenzene	555.1	ug/L	0.2	ug/L
m,p-Xylene	2722.3	ug/L	0.2	ug/L
o-Xylene	849.8	ug/L	0.2	ug/L
TOTAL	4830.6	ug/L		

Method - *SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

Approved By:
Date: 3/24/97

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Michael Lane*	Date:	22-Mar-97
Company:	*On Site Technologies, Ltd. c/o Conoco*	COC No.:	*5058*
Address:	*612 E. Murray Drive*	Sample No.:	*13936*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1325*

Project Name:	***Conoco - Farmington B Com #1***				
Project Location:	***WSP #2***				
Sampled by:	ML/CG	Date:	18-Mar-97	Time:	11:50
Analyzed by:	DC	Date:	19-Mar-97		
Sample Matrix:	*Liquid*				

Parameter	*Result*	*Unit of Measure*	*Detection Limit*	*Unit of Measure*
Benzene	25.8	ug/L	0.2	ug/L
Toluene	13.4	ug/L	0.2	ug/L
Ethylbenzene	11.8	ug/L	0.2	ug/L
m,p-Xylene	51.1	ug/L	0.2	ug/L
o-Xylene	2.7	ug/L	0.2	ug/L
TOTAL	105.0	ug/L		

Method - *SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

Approved By:

Date: 3/24/97

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Michael Lane*	Date:	19-Mar-97
Company:	*On Site Technologies, Ltd.*	COC No.:	*5058*
Address:	*612 E. Murray Drive*	Sample No.:	*13937*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1325*

Project Name:	***Conoco - Farmington B Com #1***				
Project Location:	***WSP #3***				
Sampled by:	ML/CG	Date:	18-Mar-97	Time:	11:35
Analyzed by:	DC	Date:	18-Mar-97		
Sample Matrix:	*Liquid*				

Parameter	*Result*	*Unit of Measure*	*Detection Limit*	*Unit of Measure*
Benzene	35.8	ug/L	0.2	ug/L
Toluene	1.9	ug/L	0.2	ug/L
Ethylbenzene	1.1	ug/L	0.2	ug/L
m,p-Xylene	6.8	ug/L	0.2	ug/L
o-Xylene	0.4	ug/L	0.2	ug/L
TOTAL	45.9	ug/L		

Method - *SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

Approved By:
Date: 3/19/97

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Michael Lane*	Date:	19-Mar-97
Company:	*On Site Technologies, Ltd.*	COC No.:	*5058*
Address:	*612 E. Murray Drive*	Sample No.:	*13938*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1325*

Project Name:	***Conoco - Farmington B Com #1***				
Project Location:	***WSP #4***				
Sampled by:	ML/CG	Date:	18-Mar-97	Time:	11:45
Analyzed by:	DC	Date:	18-Mar-97		
Sample Matrix:	*Liquid*				

Parameter	*Result*	*Unit of Measure*	*Detection Limit*	*Unit of Measure*
Benzene	<0.2	ug/L	0.2	ug/L
Toluene	27.1	ug/L	0.2	ug/L
Ethylbenzene	<0.2	ug/L	0.2	ug/L
m,p-Xylene	0.7	ug/L	0.2	ug/L
o-Xylene	0.3	ug/L	0.2	ug/L
TOTAL	28.1	ug/L		

Method - *SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

Approved By:
Date: 3/19/97

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

QUALITY ASSURANCE REPORT

for EPA Method 8020

Date Analyzed: 18-Mar-97

Internal QC No.: 0527-STD
Surrogate QC No.: 0528-STD
Reference Standard QC No.: 0529/30-QC

Method Blank

Parameter	*Result*	*Unit of Measure*
Average Amount of All Analytes In Blank	<0.2	ppb

Calibration Check

Parameter	*Unit of Measure*	*True Value*	*Analyzed Value*	*% Diff*	*Limit*
Benzene	ppb	20.0	19.5	3	15%
Toluene	ppb	20.0	20.1	0	15%
Ethylbenzene	ppb	20.0	20.5	3	15%
m,p-Xylene	ppb	40.0	39.2	2	15%
o-Xylene	ppb	20.0	20.1	0	15%

Matrix Spike

Parameter	*1- Percent Recovered*	*2 - Percent Recovered*	*Limit*	*%RSD*	*Limit*
Benzene	77	91	(39-150)	4	20%
Toluene	94	100	(46-148)	4	20%
Ethylbenzene	94	86	(32-160)	5	20%
m,p-Xylene	82	94	(35-145)	4	20%
o-Xylene	96	101	(35-145)	4	20%

Surrogate Recoveries

Laboratory Identification	*S1 Percent Recovered*	*S2 Percent Recovered*	*Laboratory Identification*	*S1 Percent Recovered*	*S2 Percent Recovered*
Limit Percent Recovered	(70-130)		*Limit Percent Recovered*	(70-130)	
13937-5058	96				
13938-5058	97				
13939-5058	97				

S1: Flourobenzene

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

QUALITY ASSURANCE REPORT

for EPA Method 8020

Date Analyzed: 19-Mar-97

Internal QC No.: 0527-STD
Surrogate QC No.: 0528-STD
Reference Standard QC No.: 0529/30-QC

Method Blank

Parameter	*Result*	*Unit of Measure*
Average Amount of All Analytes In Blank	<0.2	ppb

Calibration Check

Parameter	*Unit of Measure*	*True Value*	*Analyzed Value*	*% Diff*	*Limit*
Benzene	ppb	20.0	20.0	0	15%
Toluene	ppb	20.0	20.7	3	15%
Ethylbenzene	ppb	20.0	21.2	6	15%
m,p-Xylene	ppb	40.0	40.6	1	15%
o-Xylene	ppb	20.0	20.7	4	15%

Matrix Spike

Parameter	*1- Percent Recovered*	*2 - Percent Recovered*	*Limit*	*%RSD*	*Limit*
Benzene	93	78	(39-150)	6	20%
Toluene	97	86	(46-148)	7	20%
Ethylbenzene	94	80	(32-160)	6	20%
m,p-Xylene	82	62	(35-145)	6	20%
o-Xylene	87	73	(35-145)	6	20%

Surrogate Recoveries

Laboratory Identification	*S1 Percent Recovered*	*S2 Percent Recovered*	*Laboratory Identification*	*S1 Percent Recovered*	*S2 Percent Recovered*
Limit Percent Recovered	(70-130)		Limit Percent Recovered	(70-130)	
13935-5058	94				
13936-5058	96				

S1: Flourobenzene

(pv)

5058

ON SITE TECHNOLOGIES, LTD.

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

CHAIN OF CUSTODY RECORD

Date: 7/18/97

Page 1 of ____

Purchase Order No.:	Job No. 4-1325		
SEND INVOICE TO	Name [illegible] Lane [illegible]		
	Company [illegible]	Dept.	
	Address		
	City, State, Zip		
REPORT RESULTS TO	Name [illegible]	Title [illegible]	
	Company [illegible]		
	Mailing Address		
	City, State, Zip		
	Telephone No.	Telefax No.	

Sampling Location: [illegible]

Sampler: [illegible]

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	BTEX									LAB ID
WSP #1	7/10	1125	[illegible]	H	2	✓									13935-9252
WSP #2		1130			2	✓									13936
WSP #3		1135			2	✓									13937
WSP #4		1145			2	✓									13938
~~5~~ WSP ∅		1155			2	✓									13939

Relinquished by: [signature]	Date/Time 7/18/97 [illegible]	Received by: [signature]	Date/Time 7/18/97 1330
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: [signature] Date 7/18/97
(Client Signature Must Accompany Request)

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