3R - 96

REPORTS

DATE:

1997

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: San Juan 28-7-219
Unit N, Sec. 20, T28N, R7W, 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:

This report will only cover the sampling events conducted during 1997. Due to non-detectable levels of contamination New Mexico Oil Conservation Division (NMOCD), has granted an exemption to this location. The exemption allows Conoco to consider water quality monitoring complete, when four (4) consecutive quarters of sampling shows water quality levels below New Mexico Water Quality Control Commission (NMWQCC) standards. Refer to the following correspondence.

New Mexico Oil Conservation Division , January 31, 1997. letter to Mr. Neal. Goates, Senior Environmental Specialist, Conoco, Inc. Midland Division, regarding: *Ground Water Contamination Assessment San Juan Unit Wells #219, #47, #19, #126., Conoco Location, San Juan 28-7-#219, Unit N, Sec. 20, T28N, R7W, NMPM, San Juan Co., NM.*

SAMPLING:

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 a former production pit at the San Juan 28-7-219 well location:

1. BTEX contamination has been below the NMWQCC standards during the last five (5) sampling events.
2. API water analysis indicated high TDS (i.e., 2,694 mg/L), with high sulfate concentrations. This water quality is typical for ground water at similar sites in the Largo Canyon and is not suspected to have been a result of the ongoing oil and gas production at the site.
3. This site should be considered closed, due to BTEX contamination levels below NMWQCC standards, and no further remedial action taken.

RECOMMENDATION:

1. BTEX contamination levels have remained below NMWQCC standard for the last five (5) sampling events. Monitoring well should be plugged and abandoned in accordance with appropriate regulations.
1. No further remedial action will need to be taken.
2. Upon completion of ground water monitoring action, a Final Pit Closure Report will have to be submitted to NMOCD for approval.

LIMITATIONS AND CLOSURE:

This annual groundwater 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 (Not Applicable)
Boring Logs and Monitoring Well Diagrams (Not Available)
Laboratory Results, QA/QC, Chain of Custody

Acknowledgment:
CONOCO, Inc.

Shirley A. Ebert Staff Spec.
(Name/Title)

2/19/98
(Date)

MKL/mkl: 41360-97.doc

On Site Technologies
Table 1
Ground Water Level Summary
San Juan 28-7-219
Unit N, Sec. 20, T28N, R7W

Well Number	Top of Casing Elevation* (ft)	Total Depth of Well (ft)*	Well Type	Screen Interval (ft) (BGS) *	Sample Date	Depth to Groundwater (ft) (BTOC)*	Relative Groundwater Elevation (ft)
MW#1		75.6			06/10/97	69.7	
					10/09/97	55.02	

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

gwl1361

On Site Technologies
Table 2
BTEX Analytical Summary
San Juan 28-7-219
Unit N, Sec. 20, T28N, R7W

Sample Date	Sample ID#	Monitor Well	Remarks	BTEX per EPA 8020 (ppb)				
				Benzene	Toluene	Ethylbenzene	m,p-Xylene	Total BTEX
08/11/95	0396G01375	MW#1	IML	170.0	993.0	165.0	54.1	1382.1
03/12/96	0396G0350	MW#1	IML	0.10	0.27	BDL	BDL	0.4
07/15/96	0396G01343	MW#1	IML	5.0	10.1	BDL	3.5	18.6
03/26/97	14049	MW#1	On Site Lab.	8.4	19.2	0.6	6.0	34.2
06/10/97	14897	MW#1	On Site Lab.	0.3	0.5	BDL	0.3	1.1
10/09/97	16560	MW#1	On Site Lab.	0.3	BDL	BDL	BDL	0.3
WQCC	ACTION	LEVELS		10.0	750.0	750.0	620.0	

BDL, Below Detection Levels

On Site Technologies
Table 3
Other Constitutes Analytical Summary
San Juan 28-7-219
Unit N, Sec. 20, T28N, R7w

API Results

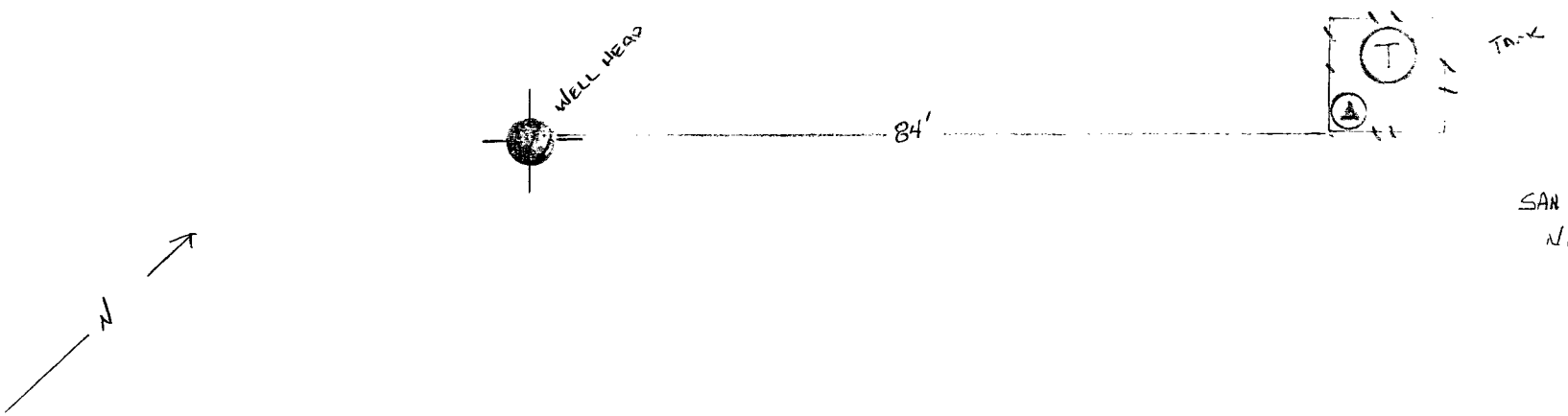
CATIONs						ANIONs				
PARAMETER		RESULTS	UNIT of MEASURE	WQCC Standards	UNIT OF MEASURE	PARAMETER		RESULTS	UNIT OF MEASURE	WQCC Standards	UNIT OF MEASURE
Sodium	Na	205.0	mg/L			Chloride	Cl	12.0	mg/L	250.0	mg/L
Calcium	Ca	478.0	mg/L			Sulfate	SO_4	1710.0	mg/L	600.0	mg/L
Magnesium	Mg	34.2	mg/L			Carbonate	CO_3	<1	mg/L		
Potassium	K	5.4	mg/L			Bicarbonate	HCO_3	250.0	mg/L		
						Hydroxide	HO	<1	mg/L		
						Sulfide	S_2	NA	mg/L		
						Iron	Fe	0.07	mg/L	1.0	mg/L
						Total Dissolved Solids		2694.0	mg/L	1000.0	mg/L
						pH		6.92		between 6 and 9	
						Resistivity		3.4602		ohm-m	
						Specific Gravity		1.0030			
						Total hardness of $CaCO_3$		1334.0		mg/L	

Sample Date: October 9, 1997

Cation-Anion Balance	
Difference Cation-Anion me/L	4.30
Total Cation-Anion me/L	75.75
Difference Cation-Anion	5.7%

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	0.27	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



SAN Juan 28-7-219
NOT TO SCALE

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Larry Trujillo*	Date:	22-Oct-97
Company:	*On Site Technologies, Ltd. c/o Conoco, Inc.*	*COC No.:*	*6515*
Address:	*612 E. Murray Drive*	*Sample ID:*	*16560*
City, State:	*Farmington, NM 87401*	*Job No.:*	*2-1361*

Project Name:	***Conoco, Inc. - 28-7-219***				
Project Location:	***28-7-219***				
Sampled by:	LT	Date:	9-Oct-97	Time:	13:12
Analyzed by:	HR	Date:	20-Oct-97		

API RP-45 Laboratory Analysis

Parameter		*Result*	*Unit of Measure*		*Result*	*Unit of Measure*	
Cations							
Sodium	*Na*	205	mg/L		8.92	me/L	
Calcium	*Ca*	478	mg/L		23.85	me/L	
Magnesium	*Mg*	34.2	mg/L		2.81	me/L	
Potassium	*K*	5.4	mg/L		0.14	me/L	
Anions							
Chloride	*Cl*	12	mg/L		0.33	me/L	
Sulfate	*SO4*	1710	mg/L		35.60	me/L	
Carbonate	*CO3*	<1	mg/L		<0.01	me/L	
Bicarbonate	*HCO3*	250	mg/L		4.10	me/L	
Hydroxide	*OH*	<1	mg/L		<0.01	me/L	
Sulfide	*S2*	NA	mg/L		NA	me/L	
Iron	*Fe*	0.07	mg/L		<0.01	me/L	
Total Dissolved Solids							
Calculated, Sum of Cation/Anion		2694	mg/L				
pH		6.92					
Resistivity		3.4602	ohm-m				
Specific Gravity		1.0030					
Total Hardness as CaCO3		1334	mg/L				

Cation-Anion Balance

4.30 *Difference Cation-Anion, me/L*

75.75 *Total Cation-Anion, me/L*

5.7 *% Difference Cation-Anion*

Comments

NA: *Not Analyzed*

Approved by:

Date: 10/22/97

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

QUALITY ASSURANCE REPORT

API RP-45 Water Analysis

Date: 20-Oct-97

Quality Control Sample

Parameter	*Laboratory Identification*	*True Value*	*Analyzed Value*	*Unit of Measure*	*% Diff*	*Limit % Diff*
Sodium, Na	0541-QC	2.32	2.23	mg/L	-4	10
Calcium, Ca	0465-QC	2.18	2.12	mg/L	-3	10
Magnesium, Mg	0465-QC	1.14	1.18	mg/L	4	10
Potassium, K	0541-QC	1.33	1.35	mg/L	2	10
Chloride, Cl	0560-QC	85	91	mg/L	6	10
Sulfate, SO4	0560-QC	96	84	mg/L	-13	10
Alkalinity	1560-QC	163	180	mg/L	10	10
Iron, Fe	0495-QC	1.00	0.93	mg/L	-7	10
pH	0560-qc	9.14	9.28		1	10
Conductivity	0560-QC	900	891	uS/cm	-1	15

Matrix Spike

Parameter	*Laboratory Identification*	*Analyzed Value*	*Matrix Spike*	*Spike Value*	*Unit of Measure*	*Spike Recovery*
Sodium, Na	16560-6515	1.02	0.50	1.54	mg/L	101%
Calcium, Ca	16560-6515	2.39	0.50	3.10	mg/L	107%
Magnesium, Mg	16560-6515	0.86	0.50	1.35	mg/L	99%
Potassium, K	16560-6515	1.34	0.50	1.88	mg/L	102%
Iron, Fe	16560-6515	0.04	0.50	0.46	mg/L	85%

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

(ne) 10/22/97 10/22/97

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Larry Trujillo*	Date:	22-Oct-97
Company:	*On Site Technologies, Ltd. C/o Conoco, Inc.*	COC No.:	*6515*
Address:	*612 E. Murray Drive*	Sample No.:	*16560*
City, State:	*Farmington, NM 87401*	Job No.:	*2-1361*

Project Name:	***Conoco, Inc. - 28-7-219***				
Project Location:	***28-7-219***				
Sampled by:	LT	Date:	9-Oct-97	Time:	13:12
Analyzed by:	DC	Date:	20-Oct-97		
Sample Matrix:	*Liquid*				

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene	0.3	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	0.3	ug/L		

ND - Not Detected at Limit of Quantitation

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

Approved By:
Date: 10/22/97

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

QUALITY ASSURANCE REPORT

for EPA Method 8020

Date Analyzed: 20-Oct-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	18.5	8	15%
Toluene	ppb	20.0	19.2	4	15%
Ethylbenzene	ppb	20.0	19.2	4	15%
m,p-Xylene	ppb	40.0	37.2	7	15%
o-Xylene	ppb	20.0	19.1	5	15%

Matrix Spike

Parameter	*1- Percent Recovered*	*2 - Percent Recovered*	*Limit*	*RPD*	*Limit*
Benzene	91	90	(39-150)	0	20%
Toluene	94	93	(46-148)	1	20%
Ethylbenzene	95	93	(32-160)	2	20%
m,p-Xylene	92	91	(35-145)	1	20%
o-Xylene	94	94	(35-145)	0	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)	
16560-6515	95				
				JHR	(DL)
				10/22/97	10/22/97

S1: *Flourobenzene*

Mountain States Analytical, Inc.

October 24, 1997

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

Reference:
Project: 28-7-219
Project No.: 2-1361
MSAI Group: 18231

Dear Mr. Cox:

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

16560-6515

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

Mountain States Analytical, Inc.
The Quality Solution

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

Attn: Mr. David Cox
Project: 28-7-219

Sample ID: 16560-6515
Matrix: Waste Water

MSAI Sample: 69548
MSAI Group: 18231
Date Reported: 10/24/97
Discard Date: 11/23/97
Date Submitted: 10/15/97
Date Sampled: 10/09/97
Collected by: LT
Purchase Order: 6515
Project No.: 2-1361

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
0391F	Mercury Re-digest, ww, 7470 Method: SW-846 7470	Batch. w-742		
0392I	Flame/ICP Prep, w/ww, 3005A Method: SW-846 3005A	W 729		
0392M	Mercury Prep CVAA, w/ww, 7470 Method: SW-846 7470	W 731		
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	0.27	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: 69548
MSAI Group: 18231

Sample ID: 16560-6515

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

10/24/97
11:17:29
Group: 18231

Analysis Batch Number: 0259B-10/21/97-107 -1
Test Identification : 0259B-Mercury by CVAA, w/ww, 7470 Sequence : 0259B-1
Number of Samples : 4
Batch Data-Date/Time : 10/22/97 / 08:47:56

BLANK#	ANALYTE	CONC FOUND #	CONC LIMIT
18171-69418	Mercury	0.0900	0.1000

SPIKE SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	CONC SPIKE	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
18172-69421	Mercury	2.0000	0.1100	2.1100	100.0	80.0	120.0

SD SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	RESULT 2	%REC2 #	QC LIMITS LOWER	QC LIMITS UPPER	RPD #	LIMIT
18172-69421	Mercury	2.0000	0.1100	2.0400	96.5	80.0	120.0	3.4	20.0

DUPLICATE SAMPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
18172-69421	Mercury	0.1100	0.1300	16.7	20.0	1.00

CONTROL SAMPLE#	ANALYTE	CONC FOUND	CONC KNOWN	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
18171-69419	Mercury	2.5200	2.5000	100.8	80.0	120.0

CV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
CCV-	Mercury	3.0000	2.9900	99.7	90.0	110.0
CCV--2	Mercury	5.0000	4.9900	99.8	80.0	120.0
CCV--3	Mercury	5.0000	5.1000	102.0	80.0	120.0

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
ICB-	Mercury	0.0100	0.1000
ICB-	Mercury	0.0200	0.1000
ICB-	Mercury	0.0600	0.1000

Groups & Samples

18171-69417 18171-69418 18171-69419 18172-69421 18231-69548 18236-69559

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

10/24/97
11:17:32
Group: 18231

Analysis Batch Number: ICPWA-10/17/97-001 -2
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 6
Batch Data-Date/Time : 10/20/97 / 07:44:59

Sequence : DATE290

BLANK#	ANALYTE	CONC FOUND #	CONC LIMIT
BW1-729	Silver	0.0013	0.0060
	Arsenic	0.0015	0.0300
	Boron	0.2336(M1)	0.0400
	Barium	0.0002	0.0030
	Cadmium	0.0002	0.0040
	Chromium	0.0016	0.0100
	Copper	0.0037	0.0100
	Potassium	ND	0.1000
	Magnesium	0.0134	0.0500
	Sodium	0.0155	0.2000
	Lead	0.0158	0.0400
	Selenium	ND	0.0700

SPIKE

SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	CONC SPIKE	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
18226-69539	Silver	0.0500	0.0100	0.0562	92.4	80.0	120.0
	Arsenic	2.0000	0.0071	1.8294	91.1	80.0	120.0
	Boron	0.5000	0.3002	0.7491	89.8	80.0	120.0
	Barium	2.0000	0.0480	1.7872	87.0	80.0	120.0
	Cadmium	0.0500	0.0010	0.0465	91.0	80.0	120.0
	Chromium	0.2000	0.0082	0.1902	91.0	80.0	120.0
	Copper	0.2500	0.0453	0.2703	90.0	80.0	120.0
	Potassium	10.0000	11.2285	20.9424	97.1	80.0	120.0
	Magnesium	2.0000	9.5572	11.6844	106.4	80.0	120.0
	Sodium	3.0000	106.8546	112.3882	184.5(2a)	80.0	120.0
	Lead	0.5000	0.0011	0.4531	90.4	80.0	120.0
	Selenium	2.0000	0.0512	1.7546	85.2	80.0	120.0

MSD

SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	RESULT 2	%REC2 #	QC LIMITS LOWER	QC LIMITS UPPER	RPD #	LIMIT
18226-69539	Silver	0.0500	0.0100	0.0556	91.2	80.0	120.0	1.1	20.0
	Arsenic	2.0000	0.0071	1.7893	89.1	80.0	120.0	2.2	20.0
	Boron	0.5000	0.3002	0.7692	93.8	80.0	120.0	2.6	20.0
	Barium	2.0000	0.0480	1.7785	86.5	80.0	120.0	0.5	20.0
	Cadmium	0.0500	0.0010	0.0426	83.2	80.0	120.0	8.8	20.0
	Chromium	0.2000	0.0082	0.1841	87.9	80.0	120.0	3.3	20.0
	Copper	0.2500	0.0453	0.2618	86.6	80.0	120.0	3.2	20.0
	Potassium	10.0000	11.2285	20.5742	93.5	80.0	120.0	1.8	20.0
	Magnesium	2.0000	9.5572	11.5492	99.6	80.0	120.0	1.2	20.0
	Sodium	3.0000	106.8546	112.1873	177.8(2a)	80.0	120.0	0.2	20.0
	Lead	0.5000	0.0011	0.4298	85.7	80.0	120.0	5.3	20.0
	Selenium	2.0000	0.0512	1.7541	85.1	80.0	120.0	0.0	20.0

DUPLICATE

SAMPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
18226-69539	Silver	0.0100	0.0099	1.0	20.0	1.00
	Arsenic	0.0071	0.0081	13.2	20.0	1.00
	Boron	0.3002	0.2599	14.4	20.0	1.00
	Barium	0.0480	0.0489	1.9	20.0	1.00
	Cadmium	0.0010	0.0005	66.7(11)	20.0	1.00

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

10/24/97
11:17:35
Group: 18231

Analysis Batch Number: ICPWA-10/17/97-001 -2
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 6
Batch Data-Date/Time : 10/20/97 / 07:44:59

Sequence : DATE290

DUPLICATE

SAMPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
18226-69539	Chromium	0.0082	0.0067	20.1(11)	20.0	1.00
	Copper	0.0453	0.0472	4.1	20.0	1.00
	Potassium	11.2285	11.9357	6.1	20.0	1.00
	Magnesium	9.5572	10.0518	5.0	20.0	1.00
	Sodium	106.8546	111.1993	4.0	20.0	1.00
	Lead	0.0011	0.0102	161.1(11)	20.0	1.00
	Selenium	0.0512	0.0000	200.0(11)	20.0	1.00

CONTROL

SAMPLE#	ANALYTE	CONC FOUND	CONC KNOWN	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
LCSW-729	Silver	0.0525	0.0500	105.0	80.0	120.0
	Arsenic	1.9718	2.0000	98.6	80.0	120.0
	Boron	0.7570	0.5000	151.4(8a)	80.0	120.0
	Barium	1.9272	2.0000	96.4	80.0	120.0
	Cadmium	0.0496	0.0500	99.2	80.0	120.0
	Chromium	0.1994	0.2000	99.7	80.0	120.0
	Copper	0.2427	0.2500	97.1	80.0	120.0
	Potassium	9.5806	10.0000	95.8	80.0	120.0
	Magnesium	2.0190	2.0000	101.0	80.0	120.0
	Sodium	3.0902	3.0000	103.0	80.0	120.0
	Lead	0.4841	0.5000	96.8	80.0	120.0
	Selenium	1.9744	2.0000	98.7	80.0	120.0

CCV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
CCV-	Silver	0.4000	0.3861	96.5	90.0	110.0
	Arsenic	1.6000	1.5778	98.6	90.0	110.0
	Boron	0.8000	0.8088	101.1	90.0	110.0
	Barium	4.0000	3.8223	95.6	90.0	110.0
	Cadmium	4.0000	3.8509	96.3	90.0	110.0
	Chromium	4.0000	3.9009	97.5	90.0	110.0
	Copper	4.0000	3.8159	95.4	90.0	110.0
	Potassium	40.0000	39.6864	99.2	90.0	110.0
	Magnesium	20.0000	19.6604	98.3	90.0	110.0
	Sodium	40.0000	39.6225	99.1	90.0	110.0
	Lead	20.0000	18.3786	91.9	90.0	110.0
	Selenium	1.6000	1.5794	98.7	90.0	110.0
CCV1--2	Silver	0.4000	0.3845	96.1	90.0	110.0
	Arsenic	1.6000	1.5840	99.0	90.0	110.0
	Boron	0.8000	0.8000	100.0	90.0	110.0
	Barium	4.0000	3.8216	95.5	90.0	110.0
	Cadmium	4.0000	3.8218	95.5	90.0	110.0
	Chromium	4.0000	3.8822	97.1	90.0	110.0
	Copper	4.0000	3.8172	95.4	90.0	110.0
	Potassium	40.0000	39.5111	98.8	90.0	110.0
	Magnesium	20.0000	19.6097	98.0	90.0	110.0
	Sodium	40.0000	40.2091	100.5	90.0	110.0
	Lead	20.0000	18.2793	91.4	90.0	110.0
	Selenium	1.6000	1.5600	97.5	90.0	110.0

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

10/24/97
11:17:37
Group: 18231

Analysis Batch Number: ICPWA-10/17/97-001 -2
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 6
Batch Data-Date/Time : 10/20/97 / 07:44:59

Sequence : DATE290

CCV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
CCV2--3	Silver	0.4000	0.3837	95.9	90.0	110.0
	Arsenic	1.6000	1.5763	98.5	90.0	110.0
	Boron	0.8000	0.7995	99.9	90.0	110.0
	Barium	4.0000	3.7439	93.6	90.0	110.0
	Cadmium	4.0000	3.8573	96.4	90.0	110.0
	Chromium	4.0000	3.8877	97.2	90.0	110.0
	Copper	4.0000	3.7554	93.9	90.0	110.0
	Potassium	40.0000	38.8623	97.2	90.0	110.0
	Magnesium	20.0000	19.5251	97.6	90.0	110.0
	Sodium	40.0000	38.8458	97.1	90.0	110.0
	Lead	20.0000	18.4115	92.1	90.0	110.0
	Selenium	1.6000	1.5354	96.0	90.0	110.0
CCV3--4	Silver	0.4000	0.3775	94.4	90.0	110.0
	Arsenic	1.6000	1.5645	97.8	90.0	110.0
	Boron	0.8000	0.7952	99.4	90.0	110.0
	Barium	4.0000	3.7368	93.4	90.0	110.0
	Cadmium	4.0000	3.8350	95.9	90.0	110.0
	Chromium	4.0000	3.8828	97.1	90.0	110.0
	Copper	4.0000	3.7522	93.8	90.0	110.0
	Potassium	40.0000	38.7104	96.8	90.0	110.0
	Magnesium	20.0000	19.5379	97.7	90.0	110.0
	Sodium	40.0000	38.7372	96.8	90.0	110.0
	Lead	20.0000	18.4212	92.1	90.0	110.0
	Selenium	1.6000	1.5166	94.8	90.0	110.0

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
CCB-	Silver	ND	0.0060
	Arsenic	0.0070	0.0300
	Boron	ND	0.0400
	Barium	ND	0.0030
	Cadmium	ND	0.0040
	Chromium	0.0008	0.0100
	Copper	ND	0.0100
	Potassium	ND	0.1000
	Magnesium	ND	0.0500
	Sodium	0.0571	0.2000
	Lead	ND	0.0400
	Selenium	0.0238	0.0700
CCB1-	Silver	ND	0.0060
	Arsenic	0.0053	0.0300
	Boron	0.0003	0.0400
	Barium	0.0002	0.0030
	Cadmium	0.0005	0.0040
	Chromium	0.0029	0.0100
	Copper	0.0005	0.0100
	Potassium	0.0128	0.1000
	Magnesium	ND	0.0500
	Sodium	0.0548	0.2000
	Lead	0.0075	0.0400

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

10/24/97
11:17:39
Group: 18231

Analysis Batch Number: ICPWA-10/17/97-001 -2
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 6
Batch Data-Date/Time : 10/20/97 / 07:44:59

Sequence : DATE290

CB#	ANALYTE	CONC FOUND #	CONC LIMIT
CB1-	Selenium	0.0102	0.0700
CCB2-	Silver	ND	0.0060
	Arsenic	ND	0.0300
	Boron	ND	0.0400
	Barium	ND	0.0030
	Cadmium	0.0003	0.0040
	Chromium	ND	0.0100
	Copper	ND	0.0100
	Potassium	ND	0.1000
	Magnesium	0.0076	0.0500
	Sodium	0.0283	0.2000
	Lead	0.0111	0.0400
	Selenium	0.0235	0.0700
CB3-	Silver	ND	0.0060
	Arsenic	ND	0.0300
	Boron	0.0001	0.0400
	Barium	0.0002	0.0030
	Cadmium	0.0004	0.0040
	Chromium	0.0015	0.0100
	Copper	0.0005	0.0100
	Potassium	ND	0.1000
	Magnesium	0.0037	0.0500
	Sodium	0.0106	0.2000
	Lead	ND	0.0400
	Selenium	0.0200	0.0700

---------- Result Footnotes ----------
1) - Blank is less than 1/2 the PQL (project specific)
(2a) - Recovery is insignificant because sample conc. is >4x spike added.
1) - Both Duplicate results are less than the MDL.
a) - See comments below.

---------- Batch Notes ----------
Small amounts of Boron are picked up during the digestion process from the borosilica glassware. Boron results could be biased high. jkw

Groups & Samples

18221-69531 18221-69532 18226-69539 18231-69548 18236-69559 18236-69560

3T

CHAIN OF CUSTODY RECORD

6525

ON SITE
TECHNOLOGIES, LTD.

Date: 10/14/97

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.: 6515 | Job No. 2-1361

SEND INVOICE TO
Name: ACCOUNTS PAY
Company: ON SITE | Dept.
Address:
City, State, Zip:

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

Sampling Location: 28-7-219

Sampler: LT

Number of Containers

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	RCRA METALS TOTAL, pH 4 added, Ind HNO3 pH ≤ 2	LAB ID
28-7-219	10/9/97	1312	W/W	HNO3	1	✓	16560-6525

Relinquished by: [signature] Date/Time 10/14/97 1600 | Received by: Nicole Dirks Date/Time 1035 10/15/97

Relinquished by: Date/Time | Received by: Date/Time

Relinquished by: Date/Time | Received by: Date/Time

Method of Shipment:

Authorized by: [signature] Date 10/14/97
(Client Signature Must Accompany Request)

Rush | 24-48 Hours | 10 Working Days | Special Instructions:

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

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

October 29, 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 October 15, 1997. The samples were assigned to Certificate of Analysis No.(s) 9710721 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

Southern Petroleum Laboratories, Inc.

Certificate of Analysis Number: 97-10-721

Approved for Release by:

Sonia West
Sonia West, Client Services Representative

10-29-97
Date

Greg Grandits
Laboratory Director

Idelis Williams
Quality Assurance Officer

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

Certificate of Analysis No. H9-9710721-01

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

P.O.# 6515
10/29/97

PROJECT: 28-7-219
SITE:
SAMPLED BY: On Site Technologies
SAMPLE ID: 28-7-219

PROJECT NO: 2-1361
MATRIX: WATER
DATE SAMPLED: 10/09/97 13:12:00
DATE RECEIVED: 10/15/97

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Naphthalene	ND	0.1	ug/L
Acenaphthylene	ND	0.1	ug/L
Acenaphthene	ND	0.3	ug/L
Fluorene	ND	0.3	ug/L
Phenanthrene	ND	0.1	ug/L
Anthracene	ND	0.1	ug/L
Fluoranthene	ND	0.1	ug/L
Pyrene	ND	0.1	ug/L
Chrysene	ND	0.1	ug/L
Benzo (a) anthracene	ND	0.1	ug/L
Benzo (b) fluoranthene	ND	0.1	ug/L
Benzo (k) fluoranthene	ND	0.1	ug/L
Benzo (a) pyrene	ND	0.1	ug/L
Dibenzo (a,h) anthracene	ND	0.1	ug/L
Benzo (g,h,i) perylene	ND	0.1	ug/L
Indeno (1,2,3-cd) pyrene	ND	0.1	ug/L

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1-Fluoronaphthalene	0.20 ug/L	60	50	150
Phenanthrene d-10	0.20 ug/L	30 MI	50	150

ANALYZED BY: KA
DATE/TIME: 10/23/97 02:16:50
EXTRACTED BY: PC
DATE/TIME: 10/16/97 08:00:00
METHOD: 8310 Polynuclear Aromatic Hydrocarbons
NOTES: * - Practical Quantitation Limit ND - Not Detected
NA - Not Analyzed
MI - Matrix Interference.

COMMENTS:

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

QUALITY CONTROL

DOCUMENTATION

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: 2971022155800

B L A N K S P I K E S

S P I K E C O M P O U N D S	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	0.10	0.50	0.61	102	0.65	110	7.55	30	33 - 122
ACENAPHTHYLENE	ND	0.50	0.57	114	0.66	132	14.6	30	42 - 138
ACENAPHTHENE	ND	0.50	0.43	86.0	0.49	98.0	13.0	30	25 - 123
FLUORENE	ND	0.50	0.44	88.0	0.42	84.0	4.65	30	19 - 142
PHENANTHRENE	0.19	0.50	0.68	98.0	0.71	104	5.94	30	40 - 121
ANTHRACENE	ND	0.50	0.42	84.0	0.44	88.0	4.65	30	32 - 121
FLUORANTHENE	ND	0.50	0.50	100	0.50	100	0	30	51 - 115
PYRENE	ND	0.50	0.50	100	0.54	108	7.69	30	45 - 117
CHRYSENE	ND	0.50	0.42	84.0	0.47	94.0	11.2	30	44 - 122
BENZO (A) ANTHRACENE	ND	0.50	0.42	84.0	0.46	92.0	9.09	30	57 - 118
BENZO (B) FLUORANTHENE	ND	0.50	0.43	86.0	0.49	98.0	13.0	30	62 - 121
BENZO (K) FLUORANTHENE	ND	0.50	0.43	86.0	0.48	96.0	11.0	30	63 - 117
BENZO (A) PYRENE	ND	0.50	0.37	74.0	0.41	82.0	10.3	30	42 - 120
DIBENZO (A,H) ANTHRACENE	ND	0.50	0.39	78.0	0.45	90.0	14.3	30	53 - 118
BENZO (G,H,I) PERYLENE	ND	0.50	0.38	76.0	0.43	86.0	12.3	30	51 - 116
INDENO (1,2,3-CD) PYRENE	ND	0.50	0.44	88.0	0.50	100	12.8	30	60 - 116

Analyst: KA
Sequence Date: 10/19/97
Method Blank File ID:
Sample File ID:
Blank Spike File ID: 971019A\012-1201
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): 9710529-01C 9710529-03C 9710529-05C 9710721-01A

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

CHAIN OF CUSTODY RECORD

6524

ON SITE TECHNOLOGIES, LTD.

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

Date: 10/14/97

Page 1 of 1

Purchase Order No.: 6515	Job No. 2-1361		
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	612 E. MURRAY DR.	
City, State, Zip	FARMINGTON, NM 87401	
Telephone No.	505 325 2432	Telefax No: 6256

Sampling Location: 28-7-219

Sampler: LT

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	PAH 8310	LAB ID
28-7-219	10/9/97	1312	WW	cool	1	✓	16560-6515

ANALYSIS REQUESTED

Relinquished by:	Date/Time 10/14/97 1600	Received by:	Date/Time 10/15/97 0900
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

Authorized by: _____ Date 10/14/97
(Client Signature Must Accompany Request)

Rush	24-48 Hours	10 Working Days	Special Instructions:
			UPS: 1Z 66E 585 01 0005 251

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

SPL Houston Environmental Laboratory

Sample Login Checklist

Date:	Time:
10-15-97	0900

SPL Sample ID:
9710721

			Yes	No
1	Chain-of-Custody (COC) form is present.		✓	
2	COC is properly completed.		✓	
3	If no, Non-Conformance Worksheet has been completed.			
4	Custody seals are present on the shipping container.		✓	
5	If yes, custody seals are intact.		✓	
6	All samples are tagged or labeled.		✓	
7	If no, Non-Conformance Worksheet has been completed.			
8	Sample containers arrived intact		✓	
9	Temperature of samples upon arrival:		6° C	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #)		
		Other: UPS	1Z0E585011000525 1	
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name:	Date:
[signature]	10-15-97

CHAIN OF CUSTODY RECORD

6515

ON SITE TECHNOLOGIES, LTD.

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

Date: 10-7-1997

Page 1 of 1

Purchase Order No.:	Job No. 2-1361		
SEND INVOICE TO: Name	Larry Trujillo	REPORT RESULTS TO: Name	Larry Trujillo — Title
Company	Conoco	Company	Conoco
Dept.		Mailing Address	
Address		City, State, Zip	
City, State, Zip		Telephone No.	Telefax No.
Sampling Location:	28-7-219		
Sampler:	Larry Trujillo		

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	LAB ID
28-7-219- N-E 24H	10/7/97	1216	H2O		4	16560-6515

Relinquished by:	Date/Time 10/7/97 1545	Received by:	Date/Time 10/7/97 1515
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

6515

ON SITE TECHNOLOGIES, LTD.

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

Date: [illegible]

Page 1 of 1

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

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	LAB ID
[illegible]					[illegible]

Relinquished by: [illegible]	Date/Time [illegible]	Received by: [illegible]	Date/Time [illegible]
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

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

6515

ON SITE TECHNOLOGIES, LTD.

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

Date: 10-9-1997

Page 1 of 1

Purchase Order No.: | Job No. 2-1361

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: 28-7-219

Sampler: Larry Trujillo

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	PAH	API	RCRA Total Metals	BTEX	LAB ID
28-7-219 - API, PAH, RCRA Metal, BTEX	10-9-97	1312	H2O		4	✓	✓	✓	✓	16560-6515

Relinquished by: [signature] Date/Time 10/9/97 1515 | Received by: [signature] Date/Time 10/9/97 1515
Relinquished by: | Date/Time | Received by: | Date/Time
Relinquished by: | Date/Time | Received by: | Date/Time

Method of Shipment:

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

Rush	24-48 Hours	10 Working Days	Special Instructions:

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

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Larry Trujillo*	Date:	17-Jun-97
Company:	*On Site Technologies, Ltd. c/o Conoco*	COC No.:	*6419*
Address:	*612 E. Murray Drive*	Sample No.:	*14897*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1361*

Project Name:	***Conoco - San Juan 28-7-219***			
Project Location:	***San Juan 28-7-219***			
Sampled by:	LT	Date:	10-Jun-97 Time:	15:45
Analyzed by:	DC	Date:	12-Jun-97	
Sample Matrix:	*Liquid*			

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene	0.3	ug/L	0.2	ug/L
Toluene	0.5	ug/L	0.2	ug/L
Ethylbenzene	ND	ug/L	0.2	ug/L
m,p-Xylene	0.3	ug/L	0.2	ug/L
o-Xylene	ND	ug/L	0.2	ug/L
TOTAL	1.0	ug/L		

ND - Not Detected at Limit of Quantitation

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

Approved By:
Date: 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)	
14897-6419	96				
				DR 6/17/97	RW 6/17/97

S1: *Flourobenzene*

CHAIN OF CUSTODY RECORD

0419

ON SITE TECHNOLOGIES, LTD.

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

Date: 6/10/97

Page 1 of 1

Purchase Order No.:	Job No. 4-1361		
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: SAN JUAN 28-7-219

Sampler:

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	BTEX	LAB ID
San Juan 28-7-219 Sample #1	6/10/97	1515	H2O	HCl	2	✓	706117-6-117
San Juan 28-7-219 Sample #2	6/10/97	1515	H2O	HCl	2	✓	

Relinquished by:	Date/Time 6/11/16:15	Received by:	Date/Time 6/12/97 14:45
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

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

Rush	24-48 Hours	10 Working Days	Special Instructions:

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

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Michael Lane*	Date:	1-Apr-97
Company:	*On Site Technologies, Ltd. c/o Conoco*	COC No.:	*5102*
Address:	*612 E. Murray Drive*	Sample No.:	*14049*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1361*

Project Name:	***Conoco - 28-7 #219***				
Project Location:	***MW-1***				
Sampled by:	HR	Date:	26-Mar-97	Time:	13:40
Analyzed by:	DC	Date:	31-Mar-97		
Sample Matrix:	*Liquid*				

Parameter	*Result*	*Unit of Measure*	*Detection Limit*	*Unit of Measure*
Benzene	8.4	ug/L	0.2	ug/L
Toluene	19.2	ug/L	0.2	ug/L
Ethylbenzene	0.6	ug/L	0.2	ug/L
m,p-Xylene	2.9	ug/L	0.2	ug/L
o-Xylene	3.1	ug/L	0.2	ug/L
TOTAL	34.2	ug/L		

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

Approved By: DaG

Date: 4/1/97

CHAIN OF CUSTODY RECORD

5102

ON SITE TECHNOLOGIES, LTD.

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

Date: 3/16/17

Page _____ of _____

Purchase Order No.:	Job No. 21561		
SEND INVOICE TO: Name		REPORT RESULTS TO: Name	Title
Company	Dept.	Company	
Address		Mailing Address	
City, State, Zip		City, State, Zip	
Sampling Location:		Telephone No.	Telefax No.
Sampler:		Number of Containers	ANALYSIS REQUESTED: TEX

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

Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

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

Rush	24-48 Hours	10 Working Days	Special Instructions:

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