3R - 97

REPORTS

DATE:

FEB 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: Shephard & Kelsey #1
Unit L, Sec. 29, T29N, R11W, NMPM, San Juan Co., NM

FEB 27 1998

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:

During March 1997, ***On Site*** installed a monitoring well at a location estimated to be down gradient of the ground water contaminate plume. The well was developed by removing approximately ten (10) well volumes. Initial water samples were taken on March 20, 1997. Refer to the attached site map.

Results of the initial ground water sampling were previously documented in the following correspondence:

On Site Technologies, Ltd., March 21, 1997. letter to Mr. C. John Coy, SHEAR Specialist, Conoco, Inc. Midland Division, regarding: *Monitoring Well Installation & Status of sampling, Conoco Location, Shephard & Kelsey #1, Unit L, Sec. 29, T29N, R11W, NMPM, San Juan Co., NM.*

SAMPLING:

Following the approved Conoco plan, during each sampling event, water levels were measured on the monitoring well 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 Shephard and Kelsey #1 well location:

1. BTEX contamination, appears to be below the New Mexico Water Quality Control Commission (NMWQCC) standards.
2. No or limited down gradient movement of BTEX contamination has occurred.
3. API water analysis indicates high TDS (i.e., 3,173 mg/L), with high sulfate concentrations. This water quality is typical for shallow ground water at similar sites along the San Juan River and is not suspected to have been a result of the ongoing oil and gas production at the site.
4. BTEX contamination of ground water has remained below NMWQCC standards, for all constituents and has been for two sample events (i.e., June and August, 1997). The September 1997, sampling event was not done , due to high surface water at the location.

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 (March,1997 only)
Laboratory Results, QA/QC, Chain of Custody

Acknowledgment:
CONOCO, Inc.

Shirley L. Ebert STEMM Spec.
(Name/Title)

2/19/98
(Date)

MKL/mkl: 41429-96.doc.doc

On Site Technologies, Ltd.
Table 1
Groundwater Level Summary
Shephard & Kelsey #1
Unit L, Sec. 29, T29N, R11W

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	100.0	5.42		4.0	06/12/96	2.54	97.46
					09/16/97	NM	
					12/02/97	2.31	97.69

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

gwl1362.doc

On Site Technologies
Table 2
BTEX Analytical Summary
Shephard & Kelsey #1
Unit L, Sec. 29, T29N, R11W

Sample Date	Sample ID#	Monitor Well	Remarks	BTEX per EPA 8020 (ppb)				
				Benzene	Toluene	Ethylbenzene	Total Xylene	Total BTEX
07/18/97	0396G01420	DG#1	IML	10.5	36.3	280.0	1077.6	1405.4
07/18/96	0369G01419	MW#1	IML	191.0	BDL	77.9	100.0	368.9
03/20/97	14002	MW#1	On Site Lab.	< 0.2	< 0.2	< 0.2	0.2	0.2
06/12/97	14941	MW#1	On Site Lab.	BDL	BDL	BDL	0.2	0.2
09/16/97	*		NOT SAMPLED					
12/05/97	17002	MW#1	On Site Lab.	BDL	BDL	0.2	0.2	0.4
WQCC	ACTION	LEVELS		10.0	750.0	750.0	620.0	

* Well not sampled 9/16/97 due to area around well flooded.
BDL Below Detection Limits

On Site Technologies
Table 3
Other Constituent Analytical Summary
Shephard & Kelsey #1
Unit L, Sec. 29, T29N, R11W

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	576	mg/L			Chloride	Cl	61	mg/L	250.0	mg/L
Calcium	Ca	268	mg/L			Sulfate	SO_4	1356	mg/L	600.0	mg/L
Magnesium	Mg	55.2	mg/L			Carbonate	CO_3	<1	mg/L		
Potassium	K	4.79	mg/L			Bicarbonate	HCO_3	852	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		3173	mg/L	1000.0	mg/L
						Total Naphthalene		0.1	mg/l	0.03	mg/l
						benzo-a-pyrene		<0.001	mg/L	0.0007	mg/L
						pH		7.24		between 6 and 9	
						Resistivity		2.9586		ohm-m	
						Specific Gravity		1.0030			
						Total hardness of $CaCO_3$		897		mg/L	

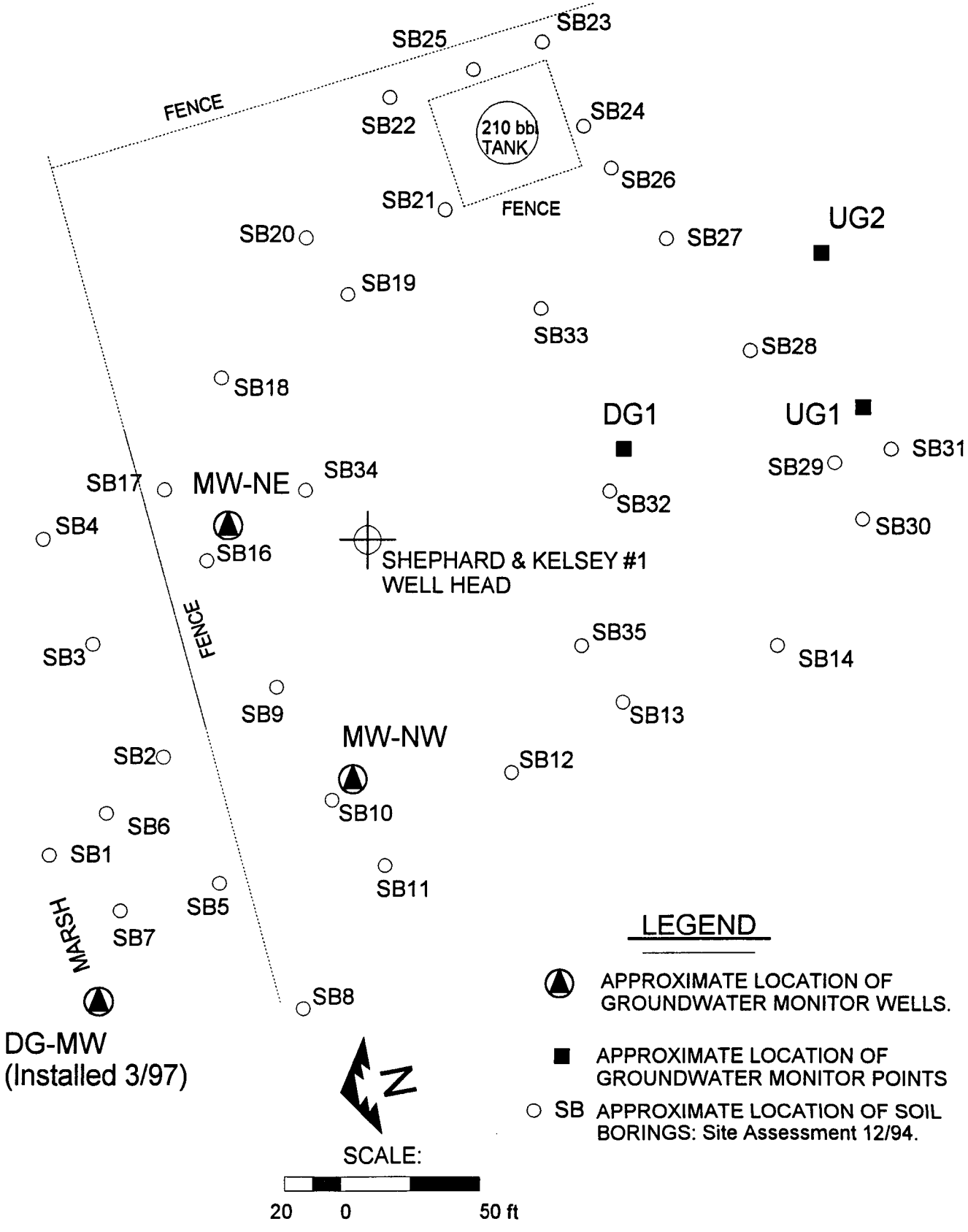
Sample Date: December 5, 1997

Cation-Anion Balance	
Difference Cation-Anion me/L	0.82
Total Cation-Anion me/L	87.01
Difference Cation-Anion	0.9%

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	0.16	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

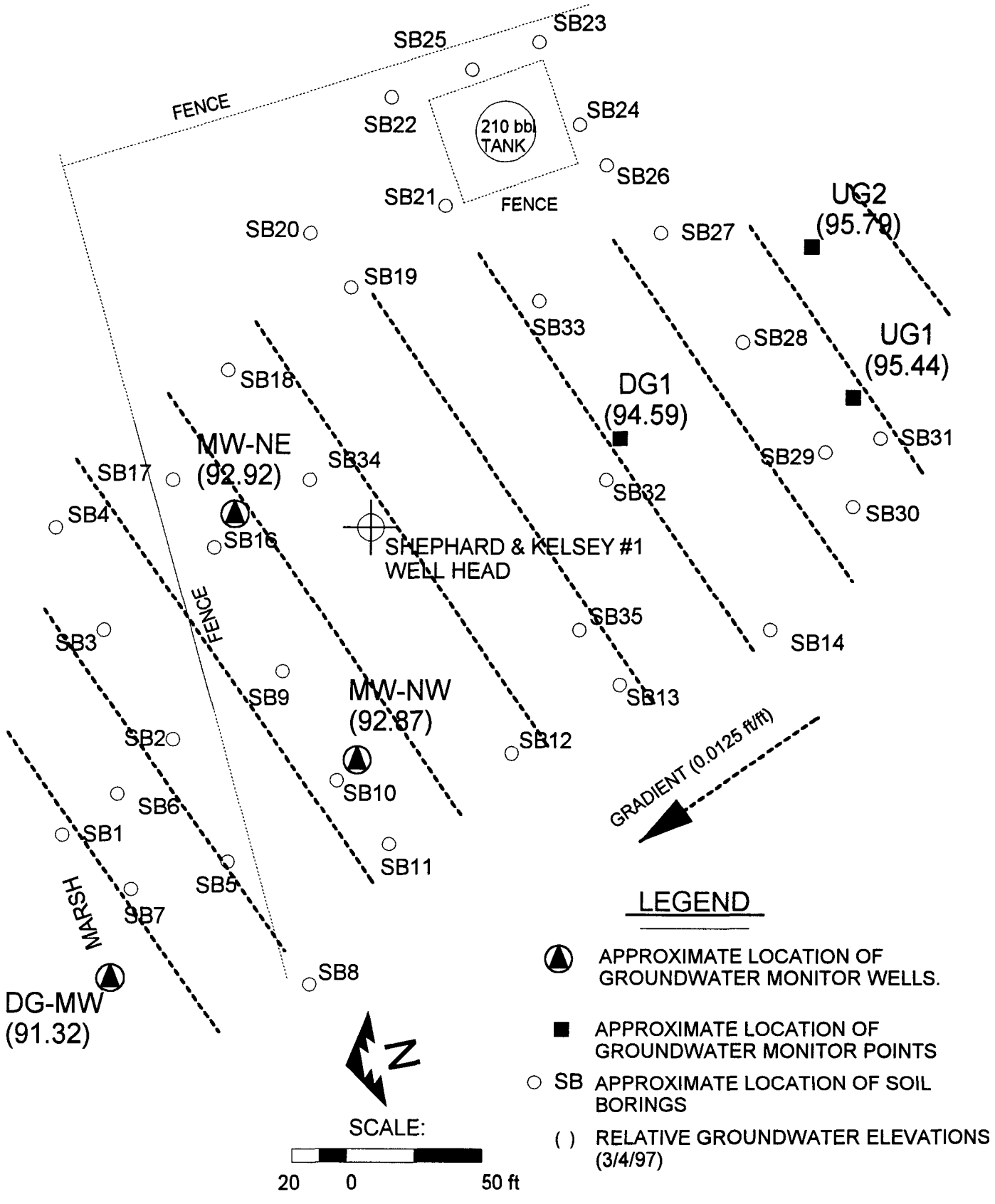
CONOCO INC. SHEPHARD & KELSEY #1 SAN JUAN BASIN, NM		SITE SKETCH	ON SITE TECHNOLOGIES, LTD. P.O. BOX 2606, FARMINGTON, NM 87499 (505) 325-5667
PROJECT: 1997 Ground Water Report		DRWN: DEC 20, 1994	
PROJECT NO: 4-1429		DRWN BY: MKL	
SHEET: 1	FILE: 41140SK1	REVISED: Feb. 10, 98	



CONOCO INC. SHEPHARD & KELSEY #1 SAN JUAN BASIN, NM		Ground Water Potentiometric Map March 4, 1997
PROJECT: 1997 Ground Water Report		DRWN: DEC 20, 1994
PROJECT NO: 4-1429		DRWN BY: MKL
SHEET: 2	FILE: 41140SK2	REVISED: Feb. 10, 1998

ON SITE TECHNOLOGIES, LTD.
P.O. BOX 2606, FARMINGTON, NM 87499
(505) 325-5667

Ground water levels measured as part effort to locate a monitoring well down-gradient. Well DG-MW installed March 4, 1997. As DG-MW only well requiring sampling, water levels on other wells has not been completed since March, 1997.



LEGEND

- APPROXIMATE LOCATION OF GROUNDWATER MONITOR WELLS.
- APPROXIMATE LOCATION OF GROUNDWATER MONITOR POINTS
- SB APPROXIMATE LOCATION OF SOIL BORINGS
- ( ) RELATIVE GROUNDWATER ELEVATIONS (3/4/97)

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Larry Trujillo*	Date:	5-Dec-97
Company:	*On Site Technologies, Ltd. c/o Conoco, Inc.*	COC No.:	*6751*
Address:	*612 E. Murray Drive*	Sample No.:	*17002*
City, State:	*Farmington, NM 87401*	Job No.:	*2-1362*

Project Name:	***Conoco, Inc. - Shepard & Kelsey #1***				
Project Location:	***S&K #1***				
Sampled by:	LT	Date:	2-Dec-97	Time:	NR
Analyzed by:	HR	Date:	3-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	0.2	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	0.4	ug/L		

ND - Not Detected at Limit of Quantitation

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

Approved By:
Date: 12/5/97

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.:	*6751*
Address:	*612 E. Murray Drive*	Sample ID.:	*17002*
City, State:	*Farmington, NM 87401*	Job No.:	*2-1362*

Project Name:	***Conoco, Inc. - Shepard and Kelsey #1***				
Project Location:	***S&K #1***				
Sampled by:	LT	Date:	2-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*	576	mg/L		25.05	me/L	
Calcium	*Ca*	268	mg/L		13.37	me/L	
Magnesium	*Mg*	55.2	mg/L		4.54	me/L	
Potassium	*K*	4.79	mg/L		0.12	me/L	
Anions							
Chloride	*Cl*	61	mg/L		1.72	me/L	
Sulfate	*SO4*	1356	mg/L		28.23	me/L	
Carbonate	*CO3*	<1	mg/L		<0.01	me/L	
Bicarbonate	*HCO3*	852	mg/L		13.96	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		3173	mg/L				
pH		7.24					
Resistivity		2.9586	ohm-m				
Specific Gravity		1.0030					
Total Hardness as CaCO3		897	mg/L				

Cation-Anion Balance

0.82 *Difference Cation-Anion, me/L*

87.01 *Total Cation-Anion, me/L*

0.9 *% 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

QUALITY ASSURANCE REPORT

for EPA Method 8020

Date Analyzed: 3-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	19.3	3	15%
Toluene	ppb	20.0	20.2	1	15%
Ethylbenzene	ppb	20.0	20.4	2	15%
m,p-Xylene	ppb	40.0	39.6	1	15%
o-Xylene	ppb	20.0	20.3	1	15%

Matrix Spike

Parameter	*1- Percent Recovered*	*2 - Percent Recovered*	*Limit*	*RPD*	*Limit*
Benzene	131	100	(39-150)	2	20%
Toluene	106	101	(46-148)	2	20%
Ethylbenzene	102	91	(32-160)	2	20%
m,p-Xylene	93	89	(35-145)	2	20%
o-Xylene	98	95	(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)	
17002-6751	94				
				12/11/97	12/5/97

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

(DL) 12/11/97 DK 12/11/97

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

December 18, 1997

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

The following report contains analytical results for the sample received at Southern Petroleum Laboratories (SPL) on December 4, 1997. The sample was assigned to Certificate of Analysis No.(s) 9712231 and analyzed for all parameters as listed on the chain of custody.

Any data flag or quality control exception associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s).

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

for/ Bernadette G. Tri

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: 97-12-231

Approved for Release by:

for: Bernadette A. Sini
Sonia West, Client Services Representative

12-18-97
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. H9-9712231-01

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

P.O.# 6751
12/18/97

PROJECT: PAH Anal./Lab ID: 17002-6751
SITE: Shepard & Kelsey #1
SAMPLED BY: On Site Technologies
SAMPLE ID: S & K #1

PROJECT NO:
MATRIX: WATER
DATE SAMPLED: 12/02/97 10:09:00
DATE RECEIVED: 12/04/97

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Naphthalene	0.1	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	85	50	150
Phenanthrene d-10	0.20 ug/L	107	50	150

ANALYZED BY: KA_ DATE/TIME: 12/09/97 17:51:36
EXTRACTED BY: PC DATE/TIME: 12/05/97 08:00:00
METHOD: 8310 Polynuclear Aromatic Hydrocarbons
NOTES: * - Practical Quantitation Limit ND - Not Detected
NA - Not Analyzed

COMMENTS: Lab ID: 17002-6751

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: 1971210010500

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	ND	0.50	0.37	74.0	0.39	78.0	5.26	30	33 - 122
ACENAPHTHYLENE	ND	0.50	0.35	70.0	0.38	76.0	8.22	30	42 - 138
ACENAPHTHENE	ND	0.50	0.37	74.0	0.37	74.0	0	30	25 - 123
FLUORENE	ND	0.50	0.38	76.0	0.37	74.0	2.67	30	19 - 142
PHENANTHRENE	ND	0.50	0.39	78.0	0.41	82.0	5.00	30	40 - 121
ANTHRACENE	ND	0.50	0.34	68.0	0.35	70.0	2.90	30	32 - 121
FLUORANTHENE	ND	0.50	0.39	78.0	0.41	82.0	5.00	30	51 - 115
PYRENE	ND	0.50	0.41	82.0	0.44	88.0	7.06	30	45 - 117
CHRYSENE	ND	0.50	0.44	88.0	0.47	94.0	6.59	30	44 - 122
BENZO (A) ANTHRACENE	ND	0.50	0.39	78.0	0.41	82.0	5.00	30	57 - 118
BENZO (B) FLUORANTHENE	ND	0.50	0.42	84.0	0.44	88.0	4.65	30	62 - 121
BENZO (K) FLUORANTHENE	ND	0.50	0.41	82.0	0.43	86.0	4.76	30	63 - 117
BENZO (A) PYRENE	ND	0.50	0.42	84.0	0.44	88.0	4.65	30	42 - 120
DIBENZO (A,H) ANTHRACENE	ND	0.50	0.40	80.0	0.43	86.0	7.23	30	53 - 118
BENZO (G,H,I) PERYLENE	ND	0.50	0.44	88.0	0.46	92.0	4.44	30	51 - 116
INDENO (1,2,3-CD) PYRENE	ND	0.50	0.42	84.0	0.44	88.0	4.65	30	60 - 116

Analyst: KA/
Sequence Date: 12/08/97
Method Blank File ID:
Sample File ID:
Blank Spike File ID: 971208A\010-1001
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):

9712274-01C 9712274-03C 9712274-07C 9712231-01A
9712274-02C 9712273-01A 9712189-01A 9712198-04D
9712274-04C 9712274-05C 9712274-06C

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

CHAIN OF CUSTODY RECORD

6755

ON SITE TECHNOLOGIES, LTD.

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

Date: 12/3/97

Page _____ of _____

9712231

Purchase Order No.: 6751	Job No.		
SEND INVOICE TO Name: ACCOUNTS REC.		**REPORT RESULTS TO** Name: DAVID COX	Title
Company: ON SITE	Dept.	Company: ON SITE TECH	
Address		Mailing Address: 612 E. MURRAY DR.	
City, State, Zip		City, State, Zip: FARMINGTON, NM 87401	
		Telephone No.: (505) 325-5667	Telefax No.: 325-6256

Sampling Location: SHEPARD & KELSEY #1

Sampler: LT

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	ANALYSIS REQUESTED: PAH 8310	LAB ID
S & K #1	12/2/97	1009	H_2O	COOL	1		17002-6751

Relinquished by: Heidi Reese	Date/Time 12/3/97 1430	Received by:	Date/Time 12/4/97 0930
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment: UPS: 1Z66E5850110005804

Authorized by: Heidi Reese Date 12/3/97
(Client Signature Must Accompany Request)

Rush	24-48 Hours	10 Working Days	Special Instructions:
			5°C PRI

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

SPL Houston Environmental Laboratory

Sample Login Checklist

Date:	Time:
12-4-97	1320

SPL Sample ID:
9712231

			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:		5 C	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #)		
		Other: UPS	1Z 66E 58 01 1000 5804	
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name:	Date:
[signature]	12-4-97

Mountain States Analytical, Inc.

The Quality Solution

December 23, 1997

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

Reference:
Project: Shepard & Kelsey #1
MSAI Group: 18937

Dear Mr. Cox:

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

17002-6751

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

10 Years of Quality Service

Corporate Office
1645 West 2200 South, Salt Lake City, Utah 84119
801-973-0050 ◦ 1-800-973-6724(MSAI) ◦ FAX 801-972-3278
e-mail: service@msallabs.com

Southwest States Region
3223 Bayonne, Spring, Texas 77388
281-320-2842 ◦ FAX 281-320-0909
e-mail: gbrewer@msallabs.com

Mountain States Analytical, Inc.
The Quality Solution

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

Attn: Mr. David Cox
Project: Shepard & Kelsey #1

MSAI Sample: 72401
MSAI Group: 18937
Date Reported: 12/23/97
Discard Date: 01/22/98
Date Submitted: 12/05/97
Date Sampled: 12/02/97
Collected by: DC
Purchase Order: 6751
Project No.:

Sample ID: 17002-6751
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. w888		
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	0.16	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: 72401
MSAI Group: 18937

Sample ID: 17002-6751

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

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

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

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

12/23/97
13:57:48
Group: 18937

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

BLANK#	ANALYTE	CONC FOUND #	CONC LIMIT
PBW1-914	Mercury	-0.0600	0.1000
PBW2-914-2	Mercury	-0.0700	0.1000

SPIKE

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

MSD

SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	RESULT 2	%REC2 #	QC LIMITS LOWER	QC LIMITS UPPER	RPD #	LIMIT
18931-72394	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
18931-72394	Mercury	-0.0100	0.0000	200.0(11)	20.0	1.00

CONTROL

SAMPLE#	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

CCV #	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
CCV--3	Mercury	5.0000	5.0200	100.4	80.0	120.0
CCV--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
CCV--6	Mercury	5.0000	5.0400	100.8	80.0	120.0

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

12/23/97
13:57:54
Group: 18937

Analysis Batch Number: ICPWA-12/09/97-001 -1
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 8
Batch Data-Date/Time : 12/09/97 / 09:39:12

Sequence : DATA343

BLANK#	ANALYTE	CONC FOUND #	CONC LIMIT
PBW1-888	Silver	ND	0.0060
	Arsenic	ND	0.0300
	Barium	ND	0.0030
	Cadmium	ND	0.0040
	Chromium	ND	0.0100
	Copper	ND	0.0100
	Iron	ND	0.2000
	Potassium	ND	0.1000
	Sodium	0.0529	0.2000
	Lead	0.0155	0.0400
	Selenium	ND	0.0700

SPIKE

SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	CONC SPIKE	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
18939-72404	Silver	0.0500	0.0008	0.0394	77.2(2c)	80.0	120.0
	Arsenic	2.0000	0.0368	1.8569	91.0	80.0	120.0
	Barium	2.0000	0.8804	2.6055	86.3	80.0	120.0
	Cadmium	0.0500	0.0025	0.0461	87.2	80.0	120.0
	Chromium	0.2000	0.0296	0.2139	92.2	80.0	120.0
	Copper	0.2500	0.0332	0.3005	106.9	80.0	120.0
	Iron	1.0000	37.1703	41.8240	465.4(2h)	80.0	120.0
	Potassium	10.0000	9.6779	19.1392	94.6	80.0	120.0
	Sodium	3.0000	69.6395	70.5408	30.0(2k)	80.0	120.0
	Lead	0.5000	0.0361	0.4775	88.3	80.0	120.0
	Selenium	2.0000	-0.0028	1.8509	92.7	80.0	120.0

MSD

SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	RESULT 2	%REC2 #	QC LIMITS LOWER	QC LIMITS UPPER	RPD #	LIMIT
18939-72404	Silver	0.0500	0.0008	0.0435	85.4	80.0	120.0	9.9	20.0
	Arsenic	2.0000	0.0368	1.9067	93.5	80.0	120.0	2.6	20.0
	Barium	2.0000	0.8804	2.7097	91.5	80.0	120.0	3.9	20.0
	Cadmium	0.0500	0.0025	0.0487	92.4	80.0	120.0	5.5	20.0
	Chromium	0.2000	0.0296	0.2189	94.7	80.0	120.0	2.3	20.0
	Copper	0.2500	0.0332	0.4618	171.4(8a)	80.0	120.0	42.3(8a)	20.0
	Iron	1.0000	37.1703	45.4810	831.1(2h)	80.0	120.0	8.4	20.0
	Potassium	10.0000	9.6779	19.5268	98.5	80.0	120.0	2.0	20.0
	Sodium	3.0000	69.6395	73.8377	139.9(2k)	80.0	120.0	4.6	20.0
	Lead	0.5000	0.0361	0.4792	88.6	80.0	120.0	0.4	20.0
	Selenium	2.0000	-0.0028	1.8464	92.5	80.0	120.0	0.2	20.0

DUPLICATE

SAMPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
18939-72404	Silver	0.0008	0.0005	46.2(11)	20.0	1.00
	Arsenic	0.0368	0.0297	21.4(5a)	20.0	1.00
	Barium	0.8804	0.9046	2.7	20.0	1.00
	Cadmium	0.0025	0.0008	103.0(11)	20.0	1.00
	Chromium	0.0296	0.0347	15.9	20.0	1.00
	Copper	0.0332	0.0346	4.1	20.0	1.00
	Iron	37.1703	39.5153	6.1	20.0	1.00
	Potassium	9.6779	11.1058	13.7	20.0	1.00

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

12/23/97
13:57:56
Group: 18937

Analysis Batch Number: ICPWA-12/09/97-001 -1
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 8
Batch Data-Date/Time : 12/09/97 / 09:39:12

Sequence : DATA343

DUPLICATE

SAMPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
18939-72404	Sodium	69.6395	70.5298	1.3	20.0	1.00
	Lead	0.0361	0.0410	12.7	20.0	1.00
	Selenium	-0.0028	0.0000	200.0(11)	20.0	1.00

CONTROL

SAMPLE#	ANALYTE	CONC FOUND	CONC KNOWN	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
LCSW-888	Silver	0.0481	0.0500	96.2	80.0	120.0
	Arsenic	2.0390	2.0000	102.0	80.0	120.0
	Barium	1.9274	2.0000	96.4	80.0	120.0
	Cadmium	0.0506	0.0500	101.2	80.0	120.0
	Chromium	0.1972	0.2000	98.6	80.0	120.0
	Copper	0.2396	0.2500	95.8	80.0	120.0
	Iron	1.0288	1.0000	102.9	80.0	120.0
	Potassium	9.3915	10.0000	93.9	80.0	120.0
	Sodium	3.0086	3.0000	100.3	80.0	120.0
	Lead	0.5036	0.5000	100.7	80.0	120.0
	Selenium	2.0259	2.0000	101.3	80.0	120.0

CV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	QC LIMITS LOWER	QC LIMITS UPPER
ICV-	Silver	0.4000	0.3845	96.1	90.0	110.0
	Arsenic	1.6000	1.5795	98.7	90.0	110.0
	Barium	4.0000	3.7879	94.7	90.0	110.0
	Cadmium	4.0000	3.8186	95.5	90.0	110.0
	Chromium	4.0000	3.8788	97.0	90.0	110.0
	Copper	4.0000	3.7883	94.7	90.0	110.0
	Iron	4.0000	3.8900	97.3	90.0	110.0
	Potassium	40.0000	38.1580	95.4	90.0	110.0
	Sodium	40.0000	38.7827	97.0	90.0	110.0
	Lead	20.0000	19.1229	95.6	90.0	110.0
	Selenium	1.6000	1.5844	99.0	90.0	110.0
CCV1--2	Silver	0.4000	0.3891	97.3	90.0	110.0
	Arsenic	1.6000	1.5880	99.3	90.0	110.0
	Barium	4.0000	3.8181	95.5	90.0	110.0
	Cadmium	4.0000	3.8079	95.2	90.0	110.0
	Chromium	4.0000	3.8808	97.0	90.0	110.0
	Copper	4.0000	3.8149	95.4	90.0	110.0
	Iron	4.0000	3.8646	96.6	90.0	110.0
	Potassium	40.0000	38.3698	95.9	90.0	110.0
	Sodium	40.0000	39.1866	98.0	90.0	110.0
	Lead	20.0000	19.0686	95.3	90.0	110.0
	Selenium	1.6000	1.5942	99.6	90.0	110.0
CV2--3	Silver	0.4000	0.3903	97.6	90.0	110.0
	Arsenic	1.6000	1.6172	101.1	90.0	110.0
	Barium	4.0000	3.8639	96.6	90.0	110.0
	Cadmium	4.0000	3.8562	96.4	90.0	110.0
	Chromium	4.0000	3.9314	98.3	90.0	110.0
	Copper	4.0000	3.8609	96.5	90.0	110.0
	Iron	4.0000	3.9211	98.0	90.0	110.0

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

12/23/97
13:57:59
Group: 18937

Analysis Batch Number: ICPWA-12/09/97-001 -1
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 8
Batch Data-Date/Time : 12/09/97 / 09:39:12

Sequence : DATA343

CCV #	ANALYTE	TRUE VALUE	BATCH READ	% REC	#	QC LIMITS LOWER	QC LIMITS UPPER
CCV2--3	Potassium	40.0000	38.6067	96.5		90.0	110.0
	Sodium	40.0000	39.6614	99.2		90.0	110.0
	Lead	20.0000	19.1933	96.0		90.0	110.0
	Selenium	1.6000	1.6093	100.6		90.0	110.0
CCV3--4	Silver	0.4000	0.3892	97.3		90.0	110.0
	Arsenic	1.6000	1.6231	101.4		90.0	110.0
	Barium	4.0000	3.8289	95.7		90.0	110.0
	Cadmium	4.0000	3.9185	98.0		90.0	110.0
	Chromium	4.0000	3.9643	99.1		90.0	110.0
	Copper	4.0000	3.8421	96.1		90.0	110.0
	Iron	4.0000	3.9318	98.3		90.0	110.0
	Potassium	40.0000	38.3325	95.8		90.0	110.0
	Sodium	40.0000	39.0494	97.6		90.0	110.0
	Lead	20.0000	19.5156	97.6		90.0	110.0
	Selenium	1.6000	1.6455	102.8		90.0	110.0

ICB#	ANALYTE	CONC FOUND	#	CONC LIMIT
ICB-	Silver	0.0001		0.0060
	Arsenic	ND		0.0300
	Barium	ND		0.0030
	Cadmium	0.0021		0.0040
	Chromium	0.0015		0.0100
	Copper	ND		0.0100
	Iron	ND		0.2000
	Potassium	ND		0.1000
	Sodium	0.0118		0.2000
	Lead	0.0026		0.0400
	Selenium	ND		0.0700
ICB1-	Silver	0.0019		0.0060
	Arsenic	ND		0.0300
	Barium	ND		0.0030
	Cadmium	0.0001		0.0040
	Chromium	0.0037		0.0100
	Copper	0.0024		0.0100
	Iron	0.0280		0.2000
	Potassium	0.0623		0.1000
	Sodium	0.0267		0.2000
	Lead	ND		0.0400
	Selenium	0.0173		0.0700
ICB2-	Silver	0.0004		0.0060
	Arsenic	ND		0.0300
	Barium	ND		0.0030
	Cadmium	ND		0.0040
	Chromium	ND		0.0100
	Copper	ND		0.0100
	Iron	0.0090		0.2000
	Potassium	ND		0.1000
	Sodium	ND		0.2000
	Lead	ND		0.0400

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

12/23/97
13:58:01
Group: 18937

Analysis Batch Number: ICPWA-12/09/97-001 -1
Test Identification : ICPWA-*Metals by ICP
Number of Samples : 8
Batch Data-Date/Time : 12/09/97 / 09:39:12

Sequence : DATA343

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
CCB2-	Selenium	ND	0.0700
CCB3-	Silver	0.0029	0.0060
	Arsenic	ND	0.0300
	Barium	ND	0.0030
	Cadmium	0.0005	0.0040
	Chromium	0.0005	0.0100
	Copper	0.0001	0.0100
	Iron	0.0311	0.2000
	Potassium	0.0124	0.1000
	Sodium	0.0020	0.2000
	Lead	0.0161	0.0400
	Selenium	ND	0.0700

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

(2c) - Spike result outside limits. PDS is within acceptance limits.
(2h) - Sample concentration >4X spk added. PDS was recovered within limits.
(2k) - Sample concentration >4X spk added. Serial dillution was recovered within 10% limits.
(8a) - See comments below.
(11) - The duplicate results cannot be evaluated because both results are <MDL.
(15a) - Duplicates not evaluated: Results are <10x detection limit

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

It appears that the matrix spike duplicate sample may have picked up some contamination for copper. It is clear that the sample result is correct because the sample, the duplicate, the matrix spike, the serial dilution and post digestion spike are all consistent.

The batch does not appear to have any general copper contamination, as all of the samples are fairly low in copper, and most are below detection limits. The method blank is also below detection.

The sample result is below the clients regulatory limit, so there should be no impact on the data usability.
jdb

Groups & Samples

18671-71486 18924-72376 18937-72401 18939-72403 18939-72404 18953-72481 18953-72482 18953-72483

1-HO

CHAIN OF CUSTODY RECORD

S 7505

ON SITE TECHNOLOGIES, LTD.

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

Date: 12/4/97

Page 1 of 1

Purchase Order No.: 6751	Job No.		
SEND INVOICE TO: Name	ACCOUNTS PAY.		
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.	325-6256

Sampling Location: SHEPARD & KELSEY #1

Sampler: LT

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	RCRA METALS, TDT	LAB ID
SHEPARD + KELSEY #1	12/4/97	1013	WW	HNO_3	1	✓	A7002-6751 pH=7 added 2ml HNO_3 pH≤2

Relinquished by:	Date/Time 12/4/97 1600	Received by: Pam Olsen MSAI	Date/Time 12/05/97 1100
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

Authorized by: _____ Date 12/4/97
(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

6751

ON SITE TECHNOLOGIES, LTD.

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

Date: 12-[illegible]-91

Page 1 of 1

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

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	LAB ID
[illegible]	[illegible]	[illegible]	[illegible]		1	

ANALYSIS REQUESTED

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

6751

ON SITE TECHNOLOGIES, LTD.

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

Date: _____ Page _____ of _____

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

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	LAB ID

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

Method of Shipment:

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

Rush	24-48 Hours	10 Working Days	Special Instructions:

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

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Larry Trujillo*	Date:	17-Jun-97
Company:	*On Site Technologies, Ltd. c/o Conoco*	COC No.:	*6424*
Address:	*612 E. Murray Drive*	Sample No.:	*14941*
City, State:	*Farmington, NM 87401*	Job No.:	*4-1362*

Project Name:	***Conoco - Shepard & Kelsey 1***				
Project Location:	***S & K 1***				
Sampled by:	LT	Date:	12-Jun-97	Time:	10:44
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	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: 6/17/97

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)	
14941-6424	98				
				DHR	BR
				6/17/97	6/17/97

S1: Flourobenzene

5424

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

Purchase Order No.:

Job No. 4 1502

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: Shoup & Kelsey 1

Sampler: Larry Trujillo

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	ANALYSIS REQUESTED: BTEX									LAB ID
Cek 1	6/12/97	1:40	H_2O	HCl	2	✓									K9411-6474

Relinquished by:	Date/Time 12:52/6/12/97	Received by: [signature]	Date/Time 6/12/97 1125
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

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

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

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

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:	*Michael Lane*	Date:	26-Mar-97
Company:	*On Site Technologies, Ltd. c/o Conoco*	COC No.:	*5062*
Address:	*612 E. Murray Drive*	Sample No.:	*14002*
City, State:	*Farmington, NM 87401*	Job No.:	*2-1362*

Project Name:	***Conoco - Shepherd & Kelsey #1***				
Project Location:	***MW-DG***				
Sampled by:	MKL	Date:	20-Mar-97	Time:	8:30
Analyzed by:	DC	Date:	24-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	<0.2	ug/L	0.2	ug/L
Ethylbenzene	<0.2	ug/L	0.2	ug/L
m,p-Xylene	0.2	ug/L	0.2	ug/L
o-Xylene	<0.2	ug/L	0.2	ug/L
TOTAL	0.2	ug/L		

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

Approved By:

Date: 3/26/97

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

QUALITY ASSURANCE REPORT

for EPA Method 8020

Date Analyzed: 24-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	18.6	7	15%
Toluene	ppb	20.0	19.4	3	15%
Ethylbenzene	ppb	20.0	19.8	1	15%
m,p-Xylene	ppb	40.0	38.2	4	15%
o-Xylene	ppb	20.0	19.5	2	15%

Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Benzene	89	88	(39-150)	1	20%
Toluene	92	92	(46-148)	0	20%
Ethylbenzene	94	94	(32-160)	0	20%
m,p-Xylene	90	90	(35-145)	0	20%
o-Xylene	93	93	(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)	
14002-5062	95				

S1: Flourobenzene

3/26/97

CHAIN OF CUSTODY RECORD

5062

ON SITE TECHNOLOGIES, LTD.

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

Date: 3/20/97

Page 1 of

Purchase Order No.: | Job No. 2-1362

SEND INVOICE TO

Name % Michael Lane - On Site
Company Conoco | Dept.
Address
City, State, Zip

REPORT RESULTS TO

Name Michael Lane | Title Jamrier
Company On Site
Mailing Address
City, State, Zip
Telephone No. | Telefax No.

Sampling Location: Emmick #Kelly #1

Sampler: Michael K. Lane

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	ANALYSIS REQUESTED: 8020	LAB ID
MW-DG	3/20	830	Wtr	H_2SO_4	2	✓	HW07-5017

Relinquished by:	Date/Time 3/20 1430	Received by:	Date/Time 3/21 1650
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

Authorized by: Date 3/20/97
(Client Signature Must Accompany Request)

Rush	24-48 Hours	10 Working Days	Special Instructions:

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