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REPORTS

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ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION



February 26, 2001

Conoco, Inc., San Juan/Lobo Business Unit
Attn.: Mr. Gary Ledbetter, Field SHEAR Specialist
3315 Bloomfield Hwy.
Farmington, NM 87401

RE: 2000 Annual Ground Water Report
Conoco Location: Farmington C Com 1
Unit L, Sec. 15, T29N, R13W, NMPM, San Juan Co., NM

Project No.: 4-1373

Dear Mr. Ledbetter:

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. *Comprehensive Ground Water Remediation and Long-Term Monitoring Plan for Conoco Locations in the San Juan Basin, New Mexico* (hereafter known as the monitoring plan) submitted to the New Mexico Oil Conservation Division on October 15, 1997.

SUMMARY OF 2000 ACTIVITIES:

Ground water sampling was conducted during March, 2000, June, 2000, September, 2000 and January, 2001. Water levels were measured in each ground water monitoring well and the piezometer. Groundwater samples were taken from MW#1 laboratory analyzes.

Laboratory analysis indicates that the BTEX levels are consistent with previously reported laboratory results.

SAMPLING:

Following the approved monitoring 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. Laboratory analyses ordered followed the monitoring 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.

Copies of all laboratory reports for the calendar year 2000, along with all laboratory QA/QC documentation and chain-of-custody, are attached with this report.

SUMMARY AND CONCLUSIONS:

The following conclusions are based on the 2000 ground water monitoring results and trends associated with a former production pit at the Farmington C Com #1 well location:

1. MW-1 continues to have contamination from BTEX constituents above New Mexico Water Quality Control Commission (NMWQCC) standards.
2. BTEX contamination of ground water appears to fluctuate with the level of ground water.

PO Box 2606
Farmington, NM 87499

505-325-5667

FAX: 505-327-1496

RECOMMENDATIONS:

1. Ground water monitoring to continue for MW#1, in accordance with Conoco's Comprehensive Ground Water Remediation and Long-Term Monitoring Plan.
2. Once groundwater sampling indicates contamination is below the NMWQC water quality standards, all monitoring wells will be sampled to access overall status of groundwater quality at the site.

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 2000. This report follows the monitoring plan, dated October 15, 1997.

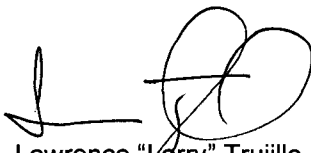
The scope of On Site Technologies' services consisted of project management, periodic water sampling and measurement of water levels, laboratory testing for ground water quality, and preparation of the annual report. All work has been performed in accordance with generally accepted professional practices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

Reviewed by;



Lawrence "Larry" Trujillo, C.H.M.M./
Project Manager



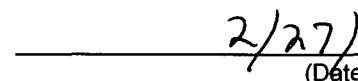
Michael K. Lane, P.E.
Senior Engineer

ON SITE TECHNOLOGIES LIMITED PARTNERSHIP

Attachments: Table 1: Monitoring Well Details and Ground Water Levels Summary
Table 2: Ground Water BTEX Analytical Summary
Figure 1: Site Sketch
Figure 2,3,4, and 5: Ground Water Potentiometric Map
Laboratory results, QA/QC, Chain of Custody

Acknowledgment:
CONOCO, Inc.

 Shear Specialist
(Name/Title)

 2/27/01
(Date)

REFERENCES:

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

On Site Technologies, Ltd., November 26, 1997: Letter to Mr. Neal Goates, Senior Environmental Specialist, Conoco, Inc. Midland Division, regarding: Remediation Summary, Conoco Location, Farmington C Com #1, Unit L, Sec. 15, T29N, R13W, NMPM, San Juan Co., NM.

On Site Technologies, Ltd., February 1, 1997: Letter to Ms. Shirley Ebert, Field SHEAR Specialist Conoco, Inc. Midland Division, regarding: 1997 Annual Ground Water Report, Conoco Location, Farmington C Com #1, Unit L, Sec. 15, T29N, R13W, NMPM, San Juan Co., NM.

On Site Technologies, Ltd., January 5, 1999: Letter to Ms. Shirley Ebert, Field SHEAR Specialist Conoco, Inc. Midland Division, regarding: 1997 Annual Ground Water Report, Conoco Location, Farmington C Com #1, Unit L, Sec. 15, T29N, R13W, NMPM, San Juan Co., NM

Table 1

BBGS - approximate measurements taken as Below Ground Surface
BTOTC - Below Top of Casing
NM - Not Measured

Table 1
Groundwater Elevation Summary
Farmington C-Com 1
Unit L, Sec. 15, T29N, R13W

Well Number	Top of Casing Elevation* (ft)	Total Depth of Well (ft)*	Well Type	Screen Interval (ft) (SGS) *	Sample Date	Depth to Groundwater (ft) (BTOC)*	Relative Groundwater Elevation (ft)
MW#3	101.11	8.90	2" PVC	3.9 to 8.9	12/5/97	6.58	94.53
					3/12/98	6.86	94.25
					6/11/98	7.03	94.08
					9/17/98	7.99	93.22
					12/21/98	6.37	94.74
					3/2/99	6.67	94.44
					6/16/99	7.36	93.75
					9/14/99	7.47	93.64
					3/13/00	6.93	94.18
					6/5/00	7.48	93.63
					9/11/00	NMW	
					01/23/01	6.41	94.70
MW#4	99.69	8.51	2" PVC	3.51 to 8.51	12/5/97	6.43	93.26
					3/12/98	6.59	93.10
					6/11/98	7.32	92.37
					9/17/98	8.11	91.58
					12/21/98	6.32	93.37
					3/2/99	6.61	93.35
					6/16/99	7.59	92.37
					9/14/99	7.69	92.27
					12/14/99	6.60	93.36
					3/13/00	6.64	93.32
					6/5/00	7.72	92.24
					9/11/00	NMW	
					01/23/01	6.32	93.64

* BGS - approximate measurements taken as Below Ground Surface

BTOC - Below Top of Casing

NM - Not Measured

Table 1
Groundwater Elevation Summary
Farmington C-Com 1
Unit L, Sec. 15, T29N, R13W

Well Number	Top of Casing Elevation* (ft)	Total Depth of Well (ft)*	Well Type	Screen Interval (ft) (BGS) *	Sample Date	Depth to Groundwater (ft) (BTOC)*	Relative Groundwater Elevation (ft)
Piezometer		9.35	2" PVC	9.35 to 3.35	12/21/98	5.96	91.82
					3/2/99	6.39	91.40
					6/16/99	7.31	90.48
					9/14/99	7.34	90.45
					12/14/99	6.32	91.47
					3/13/00	6.37	91.42
					6/5/00	7.48	90.31
					9/11/00	NMW	
					01/23/01	6.01	93.34

BGS - approximate measurements taken as Below Ground Surface

BTOC - Below Top of Casing

NM - Not Measured

Table 2
BTEX Analytical Summary
Farmington C-COM 1
Unit L, Sec. 15, T29N, R13W

Sample Date	Sample ID#	Monitor Well	Remarks	BTEX per EPA 8020 (ppb)			
				Benzene	Toluene	Ethylbenzene	Total Xylene
12/4/97	17043	#1	On Site Lab.	109.1	1.0	91.0	77.7
3/12/98	9803039-01A			67.0	1.2	150.0	25.0
6/11/98	9806041-01A			51.0	0.7	25.0	1.4
9/18/98	9809051-02A			74.0	BDL	13.0	86
12/21/98	9812047-01A			76.0	BDL	78.0	120.0
3/2/99	990310-01A			92.0	1.2	82.0	30.0
6/16/99	9906060-01A			110.0	1.6	110.0	2.7
9/14/99	9909046-01A			41.0	1.1	BDL	20.4
12/14/99	9912017-01A			46.0	1.3	70.0	51.5
3/13/00	0003020-01A			64.0	1.4	94.0	81.0
6/5/00	0006008-01A			BDL	BDL	BDL	24.0
9/11/00			No Measurable	Water			
01/23/01	0101030-01A			93.0	1.2	92.0	121.1
12/4/97	17044	#2	On Site Lab.	0.4	BDL	BDL	BDL
3/12/98	9803039-02A			BDL	BDL	BDL	BDL
6/11/98				BDL	BDL	BDL	BDL
			insufficient	water	to	sample	
12/5/97	17046	#3	On Site Lab.	BDL	0.3	BDL	0.2
3/12/98	9803039-03A			BDL	BDL	BDL	BDL
6/11/98	9806040-01A			BDL	BDL	BDL	BDL
9/18/98	9809051-03A			BDL	BDL	BDL	BDL
WQCC	ACTION	LEVELS		10.0	750.0	750.0	620.0

Table 2
 BTEX Analytical Summary
 Farmington C-COM 1
 Unit L, Sec. 15, T29N, R13W

Sample Date	Sample ID#	Monitor Well	Remarks	BTEX per EPA 8020 (ppb)				
12/5/97	17047	#4	On Site Lab.	0.7	1.5	2.2	3.7	
03/12/98	9803039-04A			BDL	BDL	1.8	8.1	
6/11/98	9806041-03A			BDL	0.8	1.2	BDL	
9/18/98	9809051-01A			BDL	BDL	BDL	BDL	
12/21/98		Piezometer	On Site Lab.	BDL	BDL	BDL	BDL	
WQCC	ACTION	LEVELS		10.0	750.0	750.0	620.0	

BDL Below Detection Levels



NTS

LEGEND

- 93 — GROUND WATER CONTOUR (1' INTERVALS)
- GRADIENT
- FENCE
- SPILL EXTENTS (APPROXIMATE)



612 E. MURRAY DR. PH. (505) 325-5667
FARMINGTON, NM 87401 FAX (505) 327-1490

APPROVED:

DATE:

DRWN BY: MED

DATE: 2/14/01

CHK'D BY:

DATE:

PROJECT NO: 4-1373

SHEET: 1 OF 4

GROUND WATER POTENTIOMETRIC MAP
MARCH, 2000

FARMINGTON "C" COM #1
UNIT 1, SEC. 15, T29N, R13W, NMPM
SAN JUAN BASIN, NEW MEXICO



- LEGEND**
- 93 ——— GROUND WATER CONTOUR 1' INTERVALS)
 - > GRADIENT
 - x— FENCE
 - SPILL EXTENTS (APPROXIMATE)

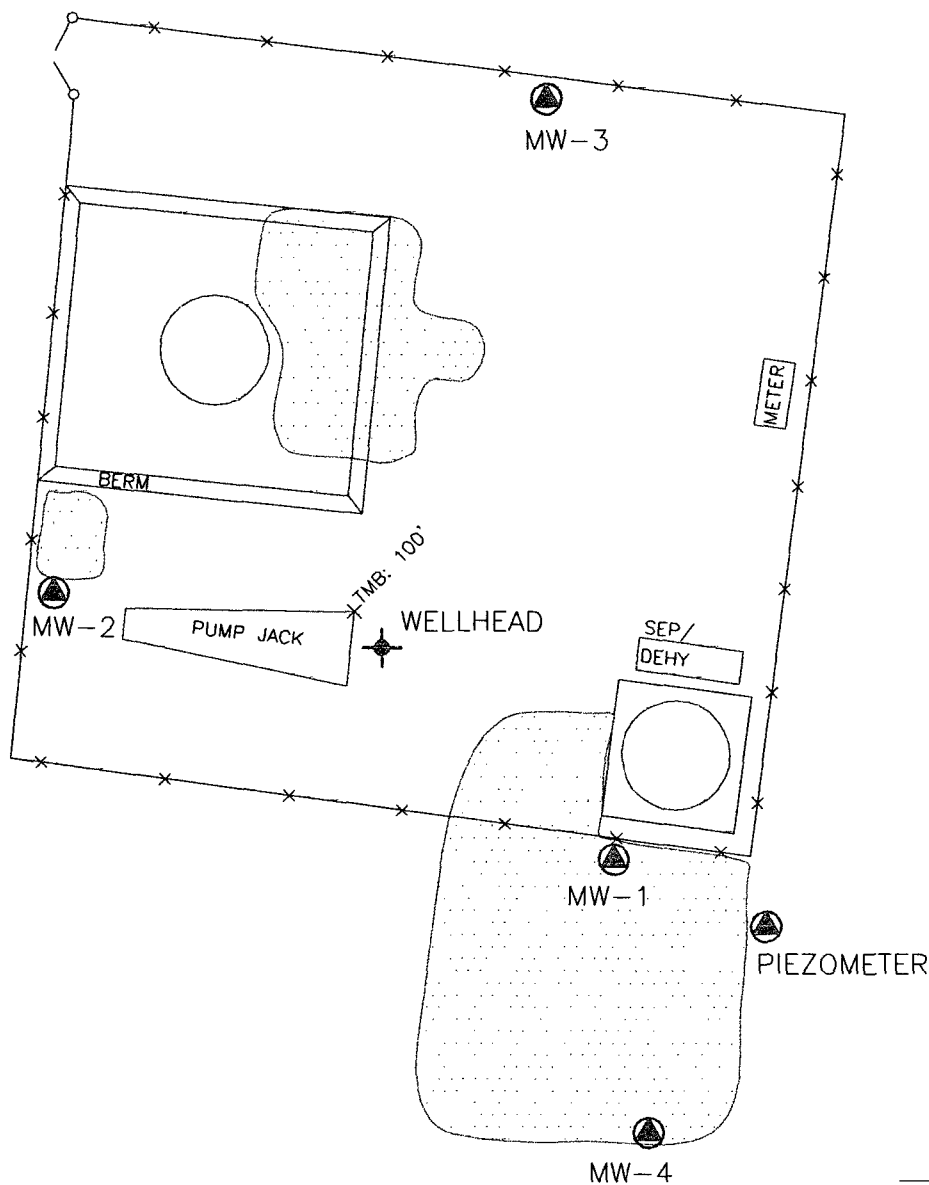


810 E. MURRAY DR. PH. (505) 825-5867
FARMINGTON, NM 87401 FAX (505) 827-1496

APPROVED:	DATE:
DRWN BY: MED	DATE: 2/14/01
CHK'D BY:	DATE:
PROJECT NO: 4-1373	SHEET: 2 OF 4

GROUND WATER POTENTIOMETRIC MAP
JUNE, 2000

FARMINGTON "C" COM #1
UNIT 1, SEC. 15, T28N, R13W, NMPM
SAN JUAN BASIN, NEW MEXICO



LEGEND

— x — FENCE

○ SPILL EXTENTS (APPROXIMATE)

NOTE: NO MEASURABLE WATER IN ANY MONITORING WELL.



612 E. MURRAY DR. PH. (505) 325-5667
FARMINGTON, NM 87401 FAX (505) 327-1498

APPROVED:

DRWN BY: MED

CHK'D BY:

PROJECT NO: 4-1373

DATE:

DATE: 2/14/01

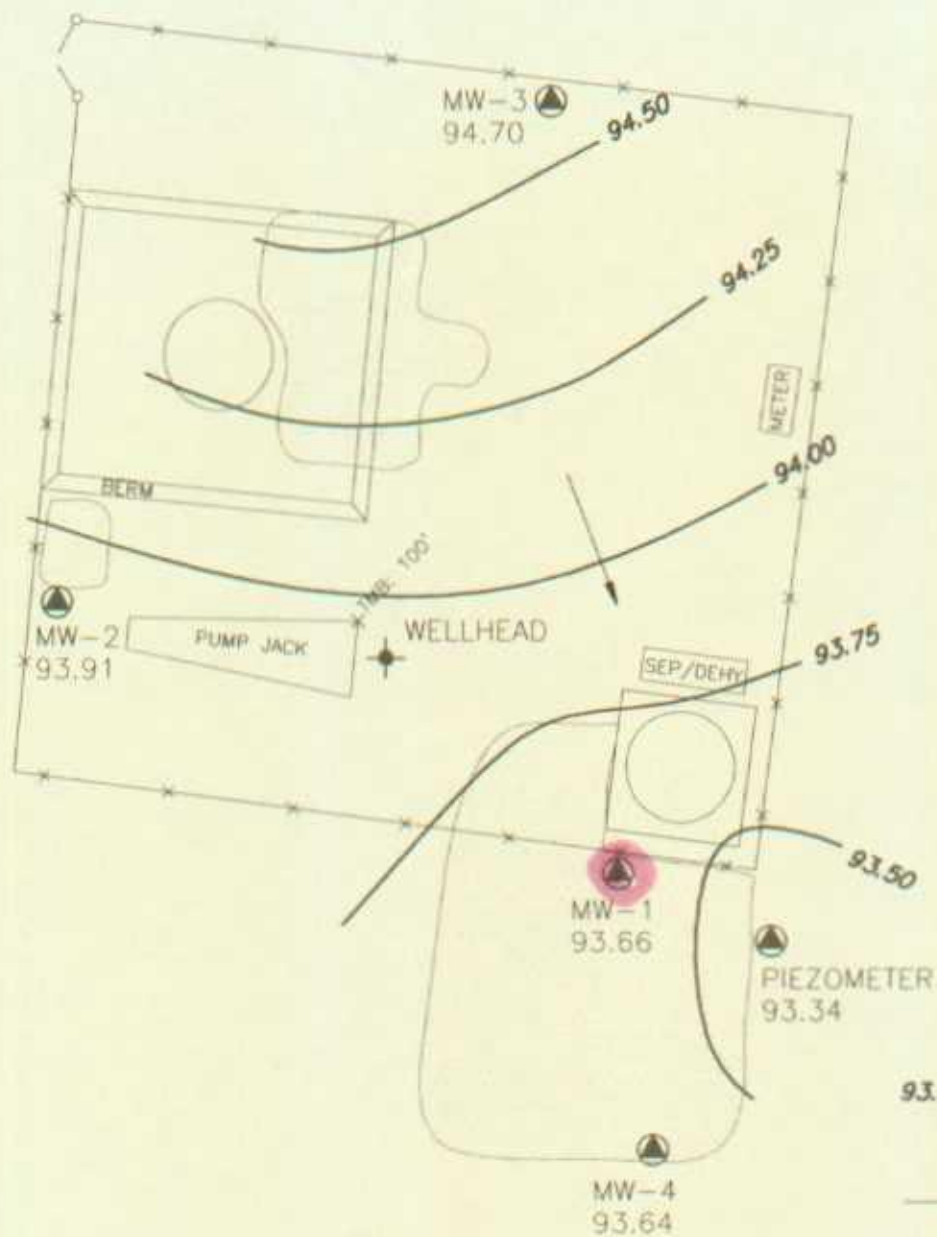
DATE:

SHEET: 3 OF 4

GROUND WATER POTENTIOMETRIC MAP
SEPTEMBER, 2000

FARMINGTON "C" COM #1
UNIT 1, SEC. 15, T29N, R13W, NMPM
SAN JUAN BASIN, NEW MEXICO

41373/cca3.dwg



- LEGEND**
- 93.50 — GROUND WATER CONTOUR (.25' INTERVALS)
 - GRADIENT
 - FENCE
 - SPILL EXTENTS (APPROXIMATE)



612 E. MURRAY DR. PH. (505) 326-6687
FARMINGTON, NM 87401 FAX (505) 327-1498

APPROVED:

DATE:

DRAWN BY: MED

DATE: 2/14/01

CHK'D BY:

DATE:

PROJECT NO: 4-1373

SHEET: 4 OF 4

GROUND WATER POTENTIOMETRIC MAP
JANUARY, 2001

FARMINGTON "C" COM #1
UNIT 1, SEC. 15, T29N, R13W, NMPW
SAN JUAN BASIN, NEW MEXICO

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



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

January 31, 2001

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

RE: 4-1373; Farmington C-Com-1

Order No.: 0101030

Dear Larry Trujillo,

On Site Technologies, LTD. received 1 sample on 1/23/2001 for the analyses presented in the following report.

The Samples were analyzed for the following tests:
Aromatic Volatiles by GC/PID (SW8021B)

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

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

Sincerely,

A handwritten signature in black ink, appearing to be 'David Cox', written over a horizontal line.

David Cox

P.O. BOX 2606 • FARMINGTON, NM 87499

EMAIL: ONSITE@ONSITELTD.COM

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

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



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

On Site Technologies, LTD.

Date: 31-Jan-01

CLIENT: On Site Technologies Limited
Project: 4-1373; Farmington C-Com-1
Lab Order: 0101030

CASE NARRATIVE

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

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

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

Any quality control and/or data qualifiers associated with this laboratory order will be flagged in the analytical result page(s) or the quality control summary report(s).

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



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

ANALYTICAL REPORT

Date: 31-Jan-01

Client:	On Site Technologies Limited	Client Sample Info:	Farmington C-Com-1
Work Order:	0101030	Client Sample ID:	MW-1
Lab ID:	0101030-01A	Matrix:	AQUEOUS
Project:	4-1373; Farmington C-Com-1	Collection Date:	1/23/2001 8:05:00 AM
		COC Record:	11099

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	93	0.5		µg/L	1	1/29/2001
Toluene	1.2	0.5		µg/L	1	1/29/2001
Ethylbenzene	92	0.5		µg/L	1	1/29/2001
m,p-Xylene	120	1		µg/L	1	1/29/2001
o-Xylene	1.1	0.5		µg/L	1	1/29/2001

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

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

EMAIL: ONSITE@ONSITELTD.COM

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

On Site Technologies, LTD.

Date: 31-Jan-01

CLIENT: On Site Technologies Limited
Work Order: 0101030
Project: 4-1373; Farmington C-Com-1

QC SUMMARY REPORT

Method Blank

Sample ID: MB1	Batch ID: GC-1_010129	Test Code: SW8021B	Units: µg/L	Analysis Date: 1/29/2001	Prep Date:
Client ID:	0101030	Run ID: GC-1_010129A		SeqNo: 34779	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Benzene	ND	0.5			
Ethylbenzene	ND	0.5			
m,p-Xylene	ND	1			
Methyl tert-Butyl Ether	ND	1			
o-Xylene	ND	0.5			
Toluene	ND	0.5			

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits	B - Analyte detected in the associated Method Blank
	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits	

On Site Technologies, LTD.

Date: 31-Jan-01

CLIENT: On Site Technologies Limited
Work Order: 0101030
Project: 4-1373; Farmington C-Com-1

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0101031-01AMS		Batch ID: GC-1_010129	Test Code: SW8021B	Units: µg/L	Analysis Date 1/29/2001		Prep Date:	
Client ID: 0101030		Run ID: GC-1_010129A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit
Analyte		Result					RPD Ref Val	%RPD
							RPDLimit	Qual
Benzene		200	2.5	200	24	88.0%	84	111
Ethylbenzene		217.3	2.5	200	31	93.2%	84	111
m,p-Xylene		642.2	5	400	270	93.1%	84	108
Methyl tert-Butyl Ether		194	5	200	30	82.0%	80	117
o-Xylene		232.5	2.5	200	42	95.2%	89	107
Toluene		199.6	2.5	200	0	99.8%	90	107

Sample ID: 0101031-01AMSD		Batch ID: GC-1_010129	Test Code: SW8021B	Units: µg/L	Analysis Date 1/29/2001		Prep Date:	
Client ID: 0101030		Run ID: GC-1_010129A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit
Analyte		Result					RPD Ref Val	%RPD
							RPDLimit	Qual
Benzene		213.6	2.5	200	24	94.8%	84	111
Ethylbenzene		232.6	2.5	200	31	100.8%	84	111
m,p-Xylene		686.1	5	400	270	104.0%	84	108
Methyl tert-Butyl Ether		192.7	5	200	30	81.4%	80	117
o-Xylene		245.5	2.5	200	42	101.8%	89	107
Toluene		213.3	2.5	200	0	106.7%	90	107

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 31-Jan-01

CLIENT: On Site Technologies Limited
Work Order: 0101030
Project: 4-1373; Farmington C-Com-1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS WATER		Batch ID: GC-1_010129		Test Code: SW8021B		Units: µg/L		Analysis Date 1/29/2001		Prep Date:	
Client ID:		0101030		Run ID:		GC-1_010129A		SeqNo: 34778			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	39.81	0.5	40	0	99.5%	92	109				
Ethylbenzene	39.57	0.5	40	0	98.9%	92	112				
m,p-Xylene	78.34	1	80	0	97.9%	91	108				
Methyl tert-Butyl Ether	36.59	1	40	0	91.5%	89	116				
o-Xylene	39.72	0.5	40	0	99.3%	93	109				
Toluene	39.64	0.5	40	0	99.1%	93	108				

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits	B - Analyte detected in the associated Method Blank
	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits	

On Site Technologies, LTD.

Date: 31-Jan-01

CLIENT: On Site Technologies Limited
Work Order: 0101030
Project: 4-1373; Farmington C-Com-1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 BTEX_0012		Batch ID: GC-1_010129		Test Code: SW8021B		Units: µg/L		Analysis Date 1/29/2001		Prep Date:	
Client ID:		0101030		Run ID:		GC-1_010129A		SeqNo: 34776			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.08	0.5	20	0	100.4%	85	115				
Ethylbenzene	20.08	0.5	20	0	100.4%	85	115				
m,p-Xylene	39.87	1	40	0	99.7%	85	115				
Methyl tert-Butyl Ether	18.37	1	20	0	91.9%	85	115				
o-Xylene	20.14	0.5	20	0	100.7%	85	115				
Toluene	19.9	0.5	20	0	99.5%	85	115				
1,4-Difluorobenzene	75.21	0	80	0	94.0%	85	103				
4-Bromochlorobenzene	80.44	0	80	0	100.6%	93	108				
Fluorobenzene	76.86	0	80	0	96.1%	88	103				

Sample ID: CCV2 BTEX_0012		Batch ID: GC-1_010129		Test Code: SW8021B		Units: µg/L		Analysis Date 1/29/2001		Prep Date:	
Client ID:		0101030		Run ID:		GC-1_010129A		SeqNo: 34777			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.05	0.5	20	0	100.2%	85	115				
Ethylbenzene	20.14	0.5	20	0	100.7%	85	115				
m,p-Xylene	40.04	1	40	0	100.1%	85	115				
Methyl tert-Butyl Ether	19.1	1	20	0	95.5%	85	115				
o-Xylene	20.34	0.5	20	0	101.7%	85	115				
Toluene	20.01	0.5	20	0	100.1%	85	115				
1,4-Difluorobenzene	75.61	0	80	0	94.5%	85	103				
4-Bromochlorobenzene	79.1	0	80	0	98.9%	93	108				
Fluorobenzene	76.24	0	80	0	95.3%	88	103				

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

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

B - Analyte detected in the associated Method Blank

CLIENT: On Site Technologies Limited

Work Order: 0101030

Project: 4-1373; Farmington C-Com-1

Test No: SW8021B

**QC SUMMARY REPORT
SURROGATE RECOVERIES****Aromatic Volatiles by GC/PID**

Sample ID	14FBZ	4BCBZ	FLBZ					
0101024-05A	94.4	96.6	96.2					
0101024-10A	94.3	101	96.4					
0101024-12A	93.9	100	96.2					
0101024-13A	94.4	100	95.9					
0101029-01A	94.3	98.2	95.8					
0101030-01A	94.2	98.1	95					
0101031-01A	91.1	96.2	95.5					
0101031-01AMS	87.8	98.7	90.1					
0101031-01AMSD	90.3	102	93.2					
0101032-01A	94.8	100	95.9					
0101036-01A	95.3	103	96.9					
0101036-02A	93.9	100	96.8					
CCV1 BTEX_00121	94	100	96.1					
CCV2 BTEX_00121	94.5	98.9	95.3					
LCS WATER	94.5	101	95.7					
MB1	94.4	100	97.1					

Acronym	Surrogate	QC Limits
14FBZ	= 1,4-Difluorobenzene	85-103
4BCBZ	= 4-Bromochlorobenzene	93-108
FLBZ	= Fluorobenzene	88-103

* Surrogate recovery outside acceptance limits



CHAIN OF CUSTODY RECORD

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

Date: _____ of _____

Page: _____ of _____

Purchase Order No.:		Project No.:		Name		Title	
SEND INVOICE TO		Name		Company		Company	
Address		Dept.		Mailing Address		Mailing Address	
City, State, Zip		City, State, Zip		City, State, Zip		City, State, Zip	
Telephone No.		Telephone No.		Telephone No.		Telephone No.	
PROJECT LOCATION:		PROJECT LOCATION:		PROJECT LOCATION:		PROJECT LOCATION:	
SAMPLER'S SIGNATURE:		SAMPLER'S SIGNATURE:		SAMPLER'S SIGNATURE:		SAMPLER'S SIGNATURE:	
SAMPLE IDENTIFICATION		SAMPLE IDENTIFICATION		SAMPLE IDENTIFICATION		SAMPLE IDENTIFICATION	
DATE		TIME		MATRIX		PRES.	
LAB ID		LAB ID		LAB ID		LAB ID	
ANALYSIS REQUESTED		ANALYSIS REQUESTED		ANALYSIS REQUESTED		ANALYSIS REQUESTED	
RESULTS TO		RESULTS TO		RESULTS TO		RESULTS TO	
Number of Containers		Number of Containers		Number of Containers		Number of Containers	
Received by:		Received by:		Received by:		Received by:	
Date/Time		Date/Time		Date/Time		Date/Time	
Relinquished by:		Relinquished by:		Relinquished by:		Relinquished by:	
Date/Time		Date/Time		Date/Time		Date/Time	
Relinquished by:		Relinquished by:		Relinquished by:		Relinquished by:	
Date/Time		Date/Time		Date/Time		Date/Time	
Method of Shipment:		Method of Shipment:		Method of Shipment:		Method of Shipment:	
Rush		24-48 Hours		10 Working Days		By Date	
Special Instructions / Remarks:		Special Instructions / Remarks:		Special Instructions / Remarks:		Special Instructions / Remarks:	
Authorized by:		Authorized by:		Authorized by:		Authorized by:	
Date		Date		Date		Date	
(Client Signature <u>Must</u> Accompany Request)		(Client Signature <u>Must</u> Accompany Request)		(Client Signature <u>Must</u> Accompany Request)		(Client Signature <u>Must</u> Accompany Request)	

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



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

June 13, 2000

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

RE: 4-1373; Farmington C-Com 1

Order No.: 0006008

Dear Larry Trujillo,

On Site Technologies, LTD. received 1 sample on 6/5/2000 for the analyses presented in the following report.

The Samples were analyzed for the following tests:
Aromatic Volatiles by GC/PID (SW8021B)

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

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

Sincerely,

A handwritten signature in black ink, appearing to be 'D. Cox'.

David Cox

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



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

On Site Technologies, LTD.

Date: 13-Jun-00

CLIENT: On Site Technologies Limited
Project: 4-1373; Farmington C-Com 1
Lab Order: 0006008

CASE NARRATIVE

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

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

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

Any quality control and/or data qualifiers associated with this laboratory order will be flagged in the analytical result page(s) or the quality control summary report(s).

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



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

ANALYTICAL REPORT

Date: 13-Jun-00

Client:	On Site Technologies Limited	Client Sample Info:	Farmington C-Com 1
Work Order:	0006008	Client Sample ID:	MW #1
Lab ID:	0006008-01A	Matrix:	AQUEOUS
Project:	4-1373; Farmington C-Com 1	Collection Date:	6/5/2000 8:05:00 AM
		COC Record:	10726

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	6/9/2000
Toluene	ND	0.5		µg/L	1	6/9/2000
Ethylbenzene	ND	0.5		µg/L	1	6/9/2000
m,p-Xylene	24	1		µg/L	1	6/9/2000
o-Xylene	ND	0.5		µg/L	1	6/9/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

On Site Technologies, LTD.

Date: 13-Jun-00

CLIENT: On Site Technologies Limited
Work Order: 0006008
Project: 4-1373; Farmington C-Com 1

QC SUMMARY REPORT

Method Blank

Sample ID: MB1	Batch ID: GC-1_000609	Test Code: SW8021B	Units: µg/L	Analysis Date: 6/7/2000	Prep Date:						
Client ID:	0006008	Run ID: GC-1_000609A		SeqNo: 28420							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.0382	0.5									J
Ethylbenzene	ND	0.5									
Methyl tert-Butyl Ether	ND	1									
Toluene	.0696	0.5									J

Sample ID: MB1	Batch ID: GC-1_000609	Test Code: SW8021B	Units: µg/L	Analysis Date: 6/9/2000		Prep Date:					
Client ID:	0006008	Run ID: GC-1_000609A		SeqNo: 28421							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.0452	0.5									J
Ethylbenzene	.0537	0.5									J
m,p-Xylene	ND	1									
o-Xylene	ND	0.5									
Toluene	.0762	0.5									J

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

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

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 13-Jun-00

CLIENT: On Site Technologies Limited
Work Order: 0006008
Project: 4-1373; Farmington C-Com 1

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0006005-11AMS		Batch ID: GC-1_000609	Test Code: SW8021B	Units: µg/L	Analysis Date: 6/9/2000		Prep Date:					
Client ID: 0006008		Run ID: GC-1_000609A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte	Result											
Benzene	402		5	400	0.423	100.4%	73	126				
Ethylbenzene	399.2		5	400	1.056	99.5%	88	113				
m,p-Xylene	789.7		10	800	0	98.7%	83	112				
Methyl tert-Butyl Ether	795.7		10	400	406.2	97.4%	81	125				
o-Xylene	401.8		5	400	0	100.5%	93	110				
Toluene	404.1		5	400	1.459	100.7%	76	126				

Sample ID: 0006005-11AMSD		Batch ID: GC-1_000609		Test Code: SW8021B		Units: µg/L		Analysis Date: 6/9/2000		Prep Date:												
Client ID:		0006008		Run ID:		GC-1_000609A		SeqNo: 28423														
Analyte		Result		PQL		SPK value		SPK Ref Val		%REC		LowLimit		HighLimit		RPD Ref Val		%RPD		RPDLimit		Qual
Benzene		392.2		5		400		0.423		97.9%		73		126		402		2.5%		6		
Ethylbenzene		387.2		5		400		1.056		96.5%		88		113		399.2		3.1%		5		
m,p-Xylene		769		10		800		0		96.1%		83		112		789.7		2.6%		7		
Methyl tert-Butyl Ether		795.7		10		400		406.2		97.4%		81		125		795.7		0.0%		9		
o-Xylene		392		5		400		0		98.0%		93		110		401.8		2.5%		6		
Toluene		393.7		5		400		1.459		98.1%		76		126		404.1		2.6%		6		

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

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

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 13-Jun-00

CLIENT: On Site Technologies Limited
Work Order: 0006008
Project: 4-1373; Farmington C-Com 1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS WATER		Batch ID: GC-1_000609	Test Code: SW8021B	Units: µg/L	Analysis Date: 6/9/2000		Prep Date:	
Client ID:		0006008	Run ID: GC-1_000609A		SeqNo: 28418			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val
Benzene	41.36	0.5	40	0.0382	103.3%	89	112	
Ethylbenzene	41.94	0.5	40	0	104.9%	93	112	
m,p-Xylene	79.07	1	80	0	98.8%	88	108	
Methyl tert-Butyl Ether	40.94	1	40	0	102.4%	87	115	
o-Xylene	41.7	0.5	40	0	104.3%	93	112	
Toluene	41.72	0.5	40	0.0696	104.1%	92	111	

Sample ID: LCS WATER		Batch ID: GC-1_000609	Test Code: SW8021B	Units: µg/L	Analysis Date: 6/9/2000		Prep Date:	
Client ID:		0006008	Run ID: GC-1_000609A		SeqNo: 28419			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val
Benzene	41.01	0.5	40	0.0452	102.4%	89	112	
Ethylbenzene	41.12	0.5	40	0.0537	102.7%	93	112	
m,p-Xylene	81.2	1	80	0	101.5%	88	108	
Methyl tert-Butyl Ether	36.59	1	40	0	91.5%	87	115	
o-Xylene	41.27	0.5	40	0	103.2%	93	112	
Toluene	41.13	0.5	40	0.0762	102.6%	92	111	

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

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

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 13-Jun-00

CLIENT: On Site Technologies Limited
Work Order: 0006008
Project: 4-1373; Farmington C-Com 1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 BTEX_0004		Batch ID: GC-1_000609		Test Code: SW8021B		Units: µg/L		Analysis Date: 6/9/2000		Prep Date:	
Client ID: 0006008		Run ID: GC-1_000609A		SeqNo: 28414							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.38	0.5	20	0	101.9%	85	115				
Ethylbenzene	20.94	0.5	20	0	104.7%	85	115				
m,p-Xylene	39.2	1	40	0	98.0%	85	115				
Methyl tert-Butyl Ether	19.75	1	20	0	98.7%	85	115				
o-Xylene	20.78	0.5	20	0	103.9%	85	115				
Toluene	20.49	0.5	20	0	102.5%	85	115				
1,4-Difluorobenzene	89.52	0	100	0	89.5%	80	105				
4-Bromochlorobenzene	88.03	0	100	0	88.0%	78	108				
Fluorobenzene	89.11	0	100	0	89.1%	78	108				

Sample ID: CCV1 BTEX_0004		Batch ID: GC-1_000609		Test Code: SW8021B		Units: µg/L		Analysis Date: 6/9/2000		Prep Date:	
Client ID: 0006008		Run ID: GC-1_000609A		SeqNo: 28415							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	40.49	0.5	40	0	101.2%	85	115				
Ethylbenzene	40.7	0.5	40	0	101.7%	85	115				
m,p-Xylene	80.29	1	80	0	100.4%	85	115				
Methyl tert-Butyl Ether	37.36	1	40	0	93.4%	85	115				
o-Xylene	40.97	0.5	40	0	102.4%	85	115				
Toluene	40.72	0.5	40	0	101.8%	85	115				
1,4-Difluorobenzene	90.94	0	100	0	90.9%	80	105				
4-Bromochlorobenzene	88.49	0	100	0	88.5%	78	108				
Fluorobenzene	90.86	0	100	0	90.9%	78	108				

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

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

B - Analyte detected in the associated Method Blank

CLIENT: On Site Technologies Limited
Work Order: 0006008
Project: 4-1373; Farmington C-Com 1

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID: CCV2 BTEX_0004		Batch ID: GC-1_000609		Test Code: SW8021B		Units: µg/L		Analysis Date: 6/9/2000			Prep Date:	
Client ID:		0006008		Run ID:		GC-1_000609A		SeqNo: 28416				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	19.48	0.5	20	0	97.4%	85	115					
Ethylbenzene	19.41	0.5	20	0	97.1%	85	115					
m,p-Xylene	38.05	1	40	0	95.1%	85	115					
Methyl tert-Butyl Ether	19.34	1	20	0	96.7%	85	115					
o-Xylene	19.73	0.5	20	0	98.6%	85	115					
Toluene	19.5	0.5	20	0	97.5%	85	115					
1,4-Difluorobenzene	90.97	0	100	0	91.0%	80	105					
4-Bromochlorobenzene	88.56	0	100	0	88.6%	78	108					
Fluorobenzene	91.78	0	100	0	91.8%	78	108					

Sample ID: CCV3 BTEX_0004		Batch ID: GC-1_000609		Test Code: SW8021B		Units: µg/L		Analysis Date: 6/9/2000		Prep Date:	
Client ID:		0006008		Run ID:		GC-1_000609A		SeqNo: 28417			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	39.88	0.5	40	0	99.7%	85	115				
Ethylbenzene	39.16	0.5	40	0	97.9%	85	115				
m,p-Xylene	77.51	1	80	0	96.9%	85	115				
Methyl tert-Butyl Ether	40.58	1	40	0	101.5%	85	115				
o-Xylene	39.83	0.5	40	0	99.6%	85	115				
Toluene	39.73	0.5	40	0	99.3%	85	115				
1,4-Difluorobenzene	90.96	0	100	0	91.0%	80	105				
4-Bromochlorobenzene	86.32	0	100	0	86.3%	78	108				
Fluorobenzene	91.76	0	100	0	91.8%	78	108				

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 13-Jun-00

CLIENT: On Site Technologies Limited
Work Order: 0006008
Project: 4-1373; Farmington C-Com 1
Test No: SW8021B

QC SUMMARY REPORT SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ					
0006002-07A	102	87.6	93					
0006004-04A	91.4	90.1	91.7					
0006005-03A	91.1	87.9	91.6					
0006005-04A	68.6 *	90.4	34 *					
0006005-05A	91.8	86.7	92					
0006005-06A	92.4	86.6	92.6					
0006005-07A	91.2	86.8	92.2					
0006005-08A	91.8	86.8	92.6					
0006005-09A	90.2	86.6	91.2					
0006005-10A	90.4	85.2	91.2					
0006005-11A	91.4	87.2	97.6					
0006005-11AMS	90	88.2	96					
0006005-11AMSD	90.4	88.6	96.4					
0006005-12A	90.6	85.6	91.8					
0006005-13A	79.4 *	90.9	33.3 *					
0006005-14A	90	90.1	34.1 *					
0006008-01A	89.4	85.7	90.7					
0006009-01A	92.5	86.4	92.8					
0006009-02A	91.2	86.5	92.5					
0006010-01A	90.2	86	91.9					
0006011-01A	89.5	85.8	91.2					
CCV1 BTEX_00040	90.9	88.5	90.8					
CCV2 BTEX_00040	91	88.6	91.8					
CCV3 BTEX_00040	91	86.3	91.8					
LCS WATER	91.1	89.6	91.1					
MBI	90.8	88.4	91.1					

Acronym

Surrogate

QC Limits

14FBZ

= 1,4-Difluorobenzene

80-105

4BCBZ

= 4-Bromochlorobenzene

78-108

FLBZ

= Fluorobenzene

78-108

* Surrogate recovery outside acceptance limits



Page:

[illegible]

OFF: (505) 325-5667



LAB: (505) 325-1556

March 17, 2000

Larry Trujillo
Conoco, Inc.
3315 Bloomfield Hwy
Farmington, NM 87401
TEL: (505) 327-9557
FAX (505) 324-5825

RE: 4-1373; Farmington C-Com-1

Order No.: 0003020

Dear Larry Trujillo,

On Site Technologies, LTD. received 1 sample on 3/13/2000 for the analyses presented in the following report.

The Samples were analyzed for the following tests:
Aromatic Volatiles by GC/PID (SW8021B)

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "David Cox", with a stylized, cursive-like flourish at the end.

David Cox

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 17-Mar-00

CLIENT: Conoco, Inc.
Project: 4-1373; Farmington C-Com-1
Lab Order: 0003020

CASE NARRATIVE

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

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

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

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 17-Mar-00

Client:	Conoco, Inc.	Client Sample Info:	Farmington C-Com-1
Work Order:	0003020	Client Sample ID:	MW-1
Lab ID:	0003020-01A	Matrix:	AQUEOUS
Project:	4-1373; Farmington C-Com-1	Collection Date:	3/13/2000 1:20:00 PM
		COC Record:	10573

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DC		
Benzene	64	0.5		µg/L	1	3/14/2000
Toluene	1.4	0.5		µg/L	1	3/14/2000
Ethylbenzene	94	0.5		µg/L	1	3/14/2000
m,p-Xylene	70	1		µg/L	1	3/14/2000
o-Xylene	11	0.5		µg/L	1	3/14/2000

Qualifiers:

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

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

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

On Site Technologies, LTD.

Date: 17-Mar-00

CLIENT: Conoco, Inc.
Work Order: 0003020
Project: 4-1373; Farmington C-Com-1

QC SUMMARY REPORT

Method Blank

Sample ID: MB1	Batch ID: GC-1_000314	Test Code: SW8021B	Units: µg/L	Analysis Date 3/14/2000	Prep Date:
Client ID:	0003020	Run ID: GC-1_000314A		SeqNo: 25646	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Benzene	.0396	0.5			J
Ethylbenzene	.065	0.5			J
m,p-Xylene	.1824	1			J
Methyl tert-Butyl Ether	ND	1			
o-Xylene	.1453	0.5			J
Toluene	.2372	0.5			J

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 17-Mar-00

CLIENT: Conoco, Inc.

Work Order: 0003020

Project: 4-1373; Farmington C-Com-1

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0003019-01AMS		Batch ID: GC-1_000314	Test Code: SW8021B	Units: µg/L	Analysis Date 3/14/2000		Prep Date:	
Client ID:		Run ID: 0003020	PQL	SPK value	GC-1_000314A	SeqNo: 25647		
Analyte	Result					LowLimit	HighLimit	RPD Ref Val
Benzene	235.3	2.5	200	44	95.7%	73	126	
Ethylbenzene	333.9	2.5	200	140	96.9%	88	113	
m,p-Xylene	1218	5	400	800	104.6%	83	112	
Methyl tert-Butyl Ether	205.3	5	200	16	94.6%	81	125	
o-Xylene	310.7	2.5	200	110	100.3%	93	110	
Toluene	208.1	2.5	200	0	104.0%	76	126	

Sample ID: 0003019-01AMSD		Batch ID: GC-1_000314	Test Code: SW8021B	Units: µg/L	Analysis Date 3/14/2000		Prep Date:	
Client ID:		Run ID: 0003020	PQL	SPK value	GC-1_000314A	SeqNo: 25648		
Analyte	Result					LowLimit	HighLimit	RPD Ref Val
Benzene	224.8	2.5	200	44	90.4%	73	126	235.3
Ethylbenzene	320.1	2.5	200	140	90.1%	88	113	333.9
m,p-Xylene	1168	5	400	800	92.1%	83	112	1218
Methyl tert-Butyl Ether	200.2	5	200	16	92.1%	81	125	205.3
o-Xylene	302	2.5	200	110	96.0%	93	110	310.7
Toluene	200.2	2.5	200	0	100.1%	76	126	208.1

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 17-Mar-00

CLIENT: Conoco, Inc.
Work Order: 0003020
Project: 4-1373; Farmington C-Com-1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS WATER		Batch ID: GC-1_000314	Test Code: SW8021B	Units: µg/L	Analysis Date 3/14/2000		Prep Date:
Client ID:		0003020	Run ID: GC-1_000314A		SeqNo: 25645		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit
Benzene	38.31	0.5	40	0.0396	95.7%	89	112
Ethylbenzene	39.42	0.5	40	0.065	98.4%	93	112
m,p-Xylene	74.86	1	80	0.1824	93.3%	88	108
Methyl tert-Butyl Ether	38.63	1	40	0	96.6%	87	115
o-Xylene	39.41	0.5	40	0.1453	98.2%	93	112
Toluene	39.19	0.5	40	0.2372	97.4%	92	111

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

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

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 17-Mar-00

CLIENT: Conoco, Inc.
Work Order: 0003020
Project: 4-1373; Farmington C-Com-1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 BTEX_0001		Batch ID: GC-1_000314		Test Code: SW8021B		Units: µg/L		Analysis Date 3/14/2000		Prep Date:	
Client ID: 0003020		Run ID: 0003020		GC-1_000314A				SeqNo: 25642			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.67	0.5	20	0	103.4%	85	115				
Ethylbenzene	21.4	0.5	20	0	107.0%	85	115				
m,p-Xylene	40.35	1	40	0	100.9%	85	115				
Methyl tert-Butyl Ether	20.84	1	20	0	104.2%	85	115				
o-Xylene	21.37	0.5	20	0	106.9%	85	115				
Toluene	21.11	0.5	20	0	105.6%	85	115				
1,4-Difluorobenzene	89.09	0	100	0	89.1%	80	105				
4-Bromochlorobenzene	89.47	0	100	0	89.5%	78	108				
Fluorobenzene	86.62	0	100	0	86.6%	78	108				

Sample ID: CCV2 BTEX_0001		Batch ID: GC-1_000314		Test Code: SW8021B		Units: µg/L		Analysis Date 3/14/2000		Prep Date:	
Client ID: 0003020		Run ID: 0003020		GC-1_000314A				SeqNo: 25643			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.59	0.5	20	0	98.0%	85	115				
Ethylbenzene	20.23	0.5	20	0	101.2%	85	115				
m,p-Xylene	38.08	1	40	0	95.2%	85	115				
Methyl tert-Butyl Ether	20.17	1	20	0	100.8%	85	115				
o-Xylene	20.22	0.5	20	0	101.1%	85	115				
Toluene	19.94	0.5	20	0	99.7%	85	115				
1,4-Difluorobenzene	88.71	0	100	0	88.7%	80	105				
4-Bromochlorobenzene	90.52	0	100	0	90.5%	78	108				
Fluorobenzene	86.87	0	100	0	86.9%	78	108				

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

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

B - Analyte detected in the associated Method Blank

CLIENT: Conoco, Inc.
Work Order: 0003020
Project: 4-1373; Farmington C-Com-1

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID: CCV3 BTEX_0001		Batch ID: GC-1_000314	Test Code: SW8021B	Units: µg/L		Analysis Date: 3/14/2000		Prep Date:			
Client ID:		0003020	Run ID:	GC-1_000314A		SeqNo: 25644					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.76	0.5	40	0	96.9%	85	115				
Ethylbenzene	39.61	0.5	40	0	99.0%	85	115				
m,p-Xylene	74.89	1	80	0	93.6%	85	115				
Methyl tert-Butyl Ether	38.99	1	40	0	97.5%	85	115				
o-Xylene	39.58	0.5	40	0	99.0%	85	115				
Toluene	39.39	0.5	40	0	98.5%	85	115				
1,4-Difluorobenzene	88.62	0	100	0	88.6%	80	105				
4-Bromochlorobenzene	89.92	0	100	0	89.9%	78	108				
Fluorobenzene	86.49	0	100	0	86.5%	78	108				

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank

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On Site Technologies, LTD.

Date: 17-Mar-00

CLIENT: Conoco, Inc.
Work Order: 0003020
Project: 4-1373; Farmington C-Com-1
Test No: SW8021B

QC SUMMARY REPORT SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ					
0003009-01A	89.8	90.3	87.4					
0003009-02A	85.6	83.5	87.2					
0003009-03A	90.1	89.4	87.6					
0003009-04A	89.6	91.4	87.6					
0003009-05A	89.9	90	87.5					
0003009-06A	89.4	90.4	87.9					
0003010-01A	89.4	90.2	87.2					
0003010-02A	89.3	90.3	87.4					
0003010-03A	89.2	89.8	87.4					
0003012-03A	90.1	89.9	87.3					
0003012-04A	88.8	88.6	87.3					
0003012-05A	86.8	89	85.4					
0003012-06A	87	88.9	85.4					
0003013-07A	89.8	90	87					
0003016-01A	88.1	89.9	86.8					
0003017-01A	90.2	91.1	87.3					
0003018-01A	86.6	88.6	84.2					
0003019-01A	90.2	90.6	91.5					
0003019-01AMS	85.9	88.6	88.4					
0003019-01AMSD	86.2	89.7	88.7					
0003020-01A	86.9	87.8	84.9					
CCV1 BTEX_00010	89.1	89.5	86.6					
CCV2 BTEX_00010	88.7	90.5	86.9					
CCV3 BTEX_00010	88.6	89.9	86.5					
LCS WATER	88.1	90.2	85.8					
MBI	89.2	89.6	87					

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

* Surrogate recovery outside acceptance limits



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

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