

3R - 83

REPORTS

DATE:

2/18/2002



February 18, 2002

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

RE: 2001 Annual Ground Water Report
Conoco Location: Farmington, B COM #1
Unit H, Sec. 12, T29N R12W, NMPM, San Juan Co., NM

Project No.: 4-1325

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. This report covers the calendar year of 2001, 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* (hereafter known as the monitoring plan), submitted to the New Mexico Oil Conservation Division on October 15, 1997.

SUMMARY OF 2001 ACTIVITIES:

Ground water sampling events were conducted in March, June, September and December of 2001. Water Sampling Point 1 (WSP1) continues to have BTEX contamination above New Mexico Water Quality Control Commission (NMWQCC) standards.

SAMPLING:

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

Table 1, summarizes the monitoring well data and water levels measured during previous and current sampling events. Table 2, summarizes the laboratory results for BTEX compounds from all water sampling completed at the referenced site.

Copies of all laboratory reports for the calendar year 2001, along with all laboratory QA/QC documentation and chains-of-custody, are attached with this report.

SUMMARY AND CONCLUSIONS:

The following conclusions are based on the 2001 ground water monitoring results and trends associated with the Farmington B Com #1 well location:

1. WSP #1 continues to show concentrations of BTEX contamination above NMWQCC standards (Benzene).
2. The 2001 ground water elevations and flow gradient fluctuated seasonally with changes in irrigation and flow in the Animas River.

PO Box 2606
Farmington, NM 87499

505-325-5667

FAX: 505-327-1496

Recommendation:

1. Continue to monitor WSP-1 until four (4) clean sampling events.
2. All other WSPs to be sampled during final round for closure.
3. When sampling requirements have been completed. Prepare a Final Pit Closure Form to be submitted to NMOCD for approval.
4. Following NMOCD's approval of closure, plug and abandoned all monitoring wells in accordance with NMOCD regulations.

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 2001. This report follows the Comprehensive Ground Water Remediation and Long-Term Monitoring Plan for Conoco Locations in the San Juan Basin, New Mexico, 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.

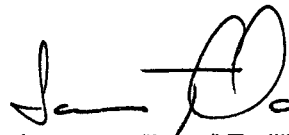
If there are any questions regarding this status report, please contact either John Hagstrom or Larry Trujillo at On Site Technologies, (505) 325-5667. Thank you for your consideration.

Respectfully submitted,

Reviewed by:



John Hagstrom.
Environmental Technician



Lawrence "Larry" Trujillo, CHMM
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, & 5: Ground Water Potentiometric Map
Laboratory Results, QA/QC, Chain-of Custody

Acknowledgment:
CONOCO, Inc.

Randy Teddlitz SHEAR Specialist
(Name/Title)
2/21/02
(Date)

JPH/jph: 41325-01.doc

REFERENCES:

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

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

On Site Technologies, Ltd., February 1, 1998, letter to Ms. Shirley Ebert, Field SHEAR Specialist Conoco, Inc. Midland Division, regarding: 1997 Annual Ground Water Report, Conoco Location, Farmington B Com #1, Unit H, Sec 12, T29N, R12W, NMPM, San Juan Co., NM.

On Site Technologies, Ltd., January 4, 1999, letter to Ms. Shirley Ebert, Field SHEAR Specialist Conoco, Inc. Midland Division, regarding: 1998 Annual Ground Water Report, Conoco Location, Farmington B Com #1, Unit H, Sec 12, T29N, R12W, NMPM, San Juan Co., NM.

On Site Technologies, Ltd., January 5, 2000, letter to Ms. Shirley Ebert, Field SHEAR Specialist Conoco, Inc. Midland Division, regarding: 1999 Annual Ground Water Report, Conoco Location, Farmington B Com #1, Unit H, Sec 12, T29N, R12W, NMPM, San Juan Co., NM.

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

Well Number	Top of Casing Elevation* (ft)	Total Depth of Well (ft)*	Well Type	Screen Interval (ft) (BGS) *	Sample Date	Depth to Groundwater (ft) (BTOC)*	Relative Groundwater Elevation (ft)
WSP-0	100.83	9.41	1" PVC	9.41	06/01/97	7.30	93.53
					09/16/97	7.21	93.62
					12/05/97	6.71	94.12
					3/12/98	6.97	93.86
					6/15/98	7.01	93.82
					9/15/98	6.82	94.01
					12/21/98	6.80	94.03
					3/2/99	7.21	93.62
					6/7/99	6.78	94.05
					9/14/99	6.98	93.85
					12/13/99	6.99	93.84
					3/13/00	6.99	93.84
					6/5/00	6.91	93.92
					9/11/00	6.86	93.97
					1/23/01	7.21	93.62
					3/20/01	No Measurement Taken	
					6/14/01	6.89	93.94
					9/18/01	5.7	95.13
					12/13/01	5.66	95.17

* Temporary Bench Mark (TBM); Flange of the wellhead, Relative Elevation 100'
BGS - approximate measurements taken as Below Ground Surface
BTOC - Below Top of Casing
NM - Not Measured

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

Well Number	Top of Casing Elevation* (ft)	Total Depth of Well (ft)*	Well Type	Screen Interval (ft) (BGS) *	Sample Date	Depth to Groundwater (ft) (BTOC)*	Relative Groundwater Elevation (ft)
WSP-1	98.01	9.73	2" PVC	4.73-9.73	06/01/97	5.43	92.58
					09/16/97	6.52	91.49
					12/05/97	4.07	93.94
					3/12/98	4.26	93.75
					6/15/98	4.32	93.69
					9/15/98	4.12	93.89
					12/21/98	4.18	93.83
					3/2/99	4.61	93.40
					6/7/99	4.17	93.84
					9/14/99	4.36	93.65
					12/13/99	4.34	93.67
					3/13/00	4.42	93.59
					6/5/00	4.39	93.62
					9/11/00	4.32	93.69
					1/23/01	4.71	93.30
					3/20/01	4.57	93.44
					6/14/01	4.37	93.64
					9/18/01	4.6	93.41
					12/13/01	4.56	93.45

* Temporary Bench Mark (TBM): Flange of the wellhead, Relative Elevation 100'

BGS - approximate measurements taken as Below Ground Surface

BTOC - Below Top of Casing

NM - Not Measured

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

Well Number	Top of Casing Elevation* (ft)	Total Depth of Well (ft)*	Well Type	Screen Interval (ft) (BGS) *	Sample Date	Depth to Groundwater (ft) (BTOC)*	Relative Groundwater Elevation (ft)
WSP-2	99.31	10.16	2" PVC	5.16-10.16			
					06/01/97	5.57	93.74
					09/16/97	6.37	92.94
					12/05/97	6.22	93.09
					3/12/98	6.35	92.96
					6/15/98	6.41	92.90
					9/15/98	6.31	93.00
					12/21/98	6.17	93.14
					3/2/99	6.52	92.79
					6/7/99	6.24	93.07
					9/14/99	6.51	92.80
					12/13/99	6.57	92.74
					3/13/00	6.52	92.79
					6/5/00	7.14	92.79
					9/11/00	6.64	92.67
					1/23/01	6.91	92.40
					3/20/01	6.29	93.02
					6/14/01	6.67	92.64
					9/18/01	6.89	92.42
					12/13/01	6.83	92.48

*
Temporary Bench Mark (TBM): Flange of the wellhead, Relative Elevation 100'
BGS - approximate measurements taken as Below Ground Surface
BTOC - Below Top of Casing
NM - Not Measured

Table 1

Groundwater Level Summary

Farmington B Com 1

Unit H, Sec. 12, T29N, R12W

Well Number	Top of Casing Elevation* (ft)	Total Depth of Well (ft)*	Well Type	Screen Interval (ft) (BGS) *	Sample Date	Depth to Groundwater (ft) (BTOC)*	Relative Groundwater Elevation (ft)
WSP-3	99.17	10.15	2" PVC	5.15-10.15			
					06/01/97	6.05	93.12
					09/16/97	6.17	93.00
					12/05/97	5.75	93.42
					3/12/98	5.90	93.27
					6/15/98	5.88	93.29
					9/15/98	6.02	93.15
					12/21/98	6.15	93.52
					3/2/99	6.14	93.03
					6/7/99	5.57	93.60
					9/14/99	5.99	93.18
					12/13/99	6.06	93.11
					3/13/00	6.12	93.05
					6/5/00	8.45	93.33
					9/11/00	6.15	93.02
					1/23/01	6.54	92.63
					3/20/01	6.13	93.04
					6/14/01	6.09	93.08
					9/18/01	6.38	92.79
					12/13/01	6.42	92.75

Temporary Bench Mark (TBM); Flange of the wellhead, Relative Elevation 100'

BGS - approximate measurements taken as Below Ground Surface

BTOC - Below Top of Casing NM - Not Measured

1; Resurveyed elevation as of 12/31/98

Water Elevation for WSP-4 correct for March, June September and December sampling events

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

Well Number	Top of Casing Elevation* (ft)	Total Depth of Well (ft)*	Well Type	Screen Interval (ft) (BGS) *	Sample Date	Depth to Groundwater (ft) (BTOC)*	Relative Groundwater Elevation (ft)
WSP-4	98.85	7.41	2" PVC	2.41-7.41	06/01/97	3.91	94.94
	96.85				09/16/97	3.98	94.87
					12/05/97	4.01	94.84
					3/12/98	4.10	92.75
					6/15/98	4.12	92.73
					9/15/98	4.20	92.65
					12/21/98	3.87	92.98
					3/2/99	4.31	94.54
					6/7/99	3.82	93.03
					9/14/99	4.12	94.73
					12/13/99	4.31	94.54
					3/13/00	4.42	92.43
					6/5/00	6.55	91.44
					9/11/00	4.28	92.57
					1/23/01	4.68	92.17
					3/20/01	4.43	94.2
					6/14/01	4.22	92.63
					9/18/01	4.48	92.37
					12/13/01	4.59	92.26

Temporary Bench Mark (TBM): Flange of the wellhead, Relative Elevation 100'
BGS - approximate measurements taken as Below Ground Surface
BTOC - Below Top of Casing
NM - Not Measured
1: Resurveyed elevation as of 12/31/98
Water Elevation for WSP-4 correct for March, June September and December sampling events

Table 1

Groundwater Level Summary
Farmington B Com 1
Unit H, Sec. 12, T29N, R12W

Well Number	Top of Casing Elevation* (ft)	Total Depth of Well (ft)*	Well Type	Screen Interval (ft) (BGS) *	Sample Date	Depth to Groundwater (ft) (BTOC)*	Relative Groundwater Elevation (ft)
Piezometer	99.16	9.55	2" PVC	9.55-4.55	12/21/98	5.31	93.85
					3/2/99	5.67	93.49
					6/7/99	5.24	93.92
					9/14/99	5.48	93.68
					12/13/99	5.52	93.64
					3/13/00	5.52	93.64
					6/5/00	8.12	93.75
					9/11/00	5.42	93.74
					1/23/01	5.82	93.34
					3/20/01	5.67	93.49
					6/14/01	5.45	93.71
					9/18/01	7.12	92.04
					12/13/01	7.4	91.76

Temporary Bench Mark (TBM); Flange of the wellhead, Relative Elevation 100'

BGS - approximate measurements taken as Below Ground Surface

BTOC - Below Top of Casing

NM - Not Measured

1: Resurveyed elevation as of 12/31/98

Water Elevation for WSP-4 correct for March, June September and December sampling events

Table 2

BTEX Analytical Summary

Farmington B Com 1

Unit H, Sec. 12, T29N, R12W

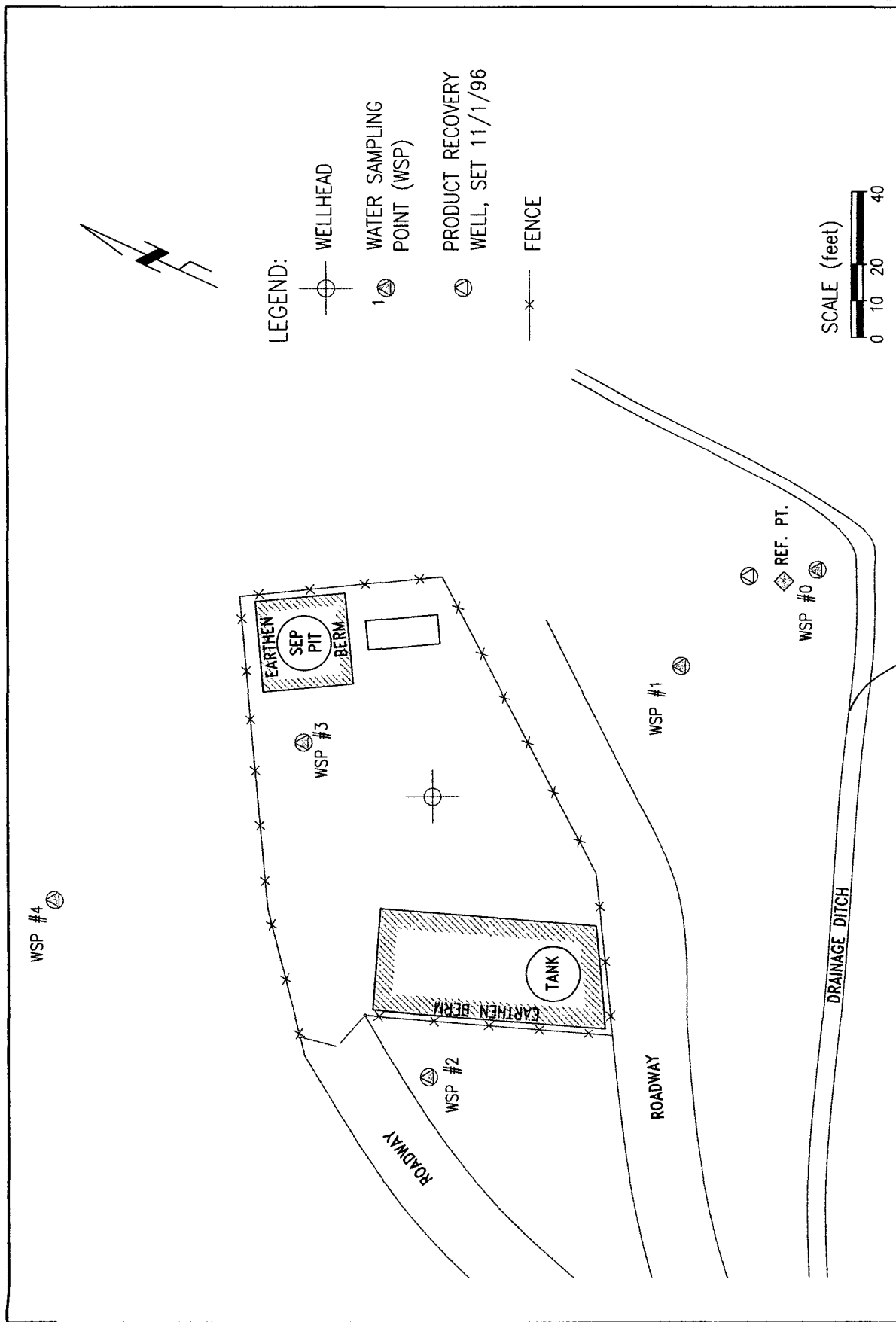
Sample Date	Sample ID#	Monitor Well	Remarks	BTEX per EPA 8020 (ppb)			
				Benzene	Toluene	Ethylbenzene	Total Xylene
03/18/97	13939	WSP-0	On Site Lab.	<0.3	<0.2	<0.2	0.5
06/11/97	14902			BDL	0.2	BDL	BDL
09/16/97	16205			BDL	BDL	BDL	BDL
12/5/97	17048			BDL	BDL	BDL	0.2
3/12/98	9803040-01A			BDL	BDL	BDL	BDL
6/15/98	9806057-01A			BDL	BDL	BDL	BDL
9/15/98	9809034-01A			BDL	BDL	BDL	BDL
03/18/97	13935	WSP-1	On Site Lab	557.1	146.3	555.1	3572.1
06/11/97	14903			155.0	22.0	184.0	1457.0
09/17/97	16206			175.0	23.0	179.0	1236.0
12/05/97	17049			202.0	22.0	164.0	1196.0
3/12/98	9803040-02A			110.0	25.0	150.0	1290.0
6/15/98	9806057-02A			110.0	12.0	170.0	1160.0
9/15/98	9809034-02A			69.0	13.0	150.0	1100.0
12/21/98	9812048-02A			86.0	55.0	170.0	1040.0
3/2/99	9903008-01A			45.0	BDL	130.0	720.0
6/7/99	9906022-01A			78.0	8.5	260.0	1670.0
9/14/99	9909047-01A			56.0	36.0	190.0	1170.0
12/13/99	9912016-01A			31.0	3.1	110.0	840.0
3/13/00	0003019-01A			44.0	BDL	140.0	910.0
6/5/00	0006010-01A			30.0	7.6	65.0	399.0
9/11/00	009018-01A			23.0	BDL	100.0	652.0
1/23/01	0101031-01A			24.0	BDL	31.0	312.0
3/20/01	0103017-01A			10.0	BDL	85.0	418.0
6/14/01	0106015-01A			24.0	BDL	78.0	434.0
9/18/01	0109020-01A			14.0	BDL	44.0	336.0
12/13/01	0112014-01A			3.6	BDL	24.0	231.0
WQCC	ACTION	LEVELS		10.0	750.0	750.0	620.0

BDL Below Detection Levels

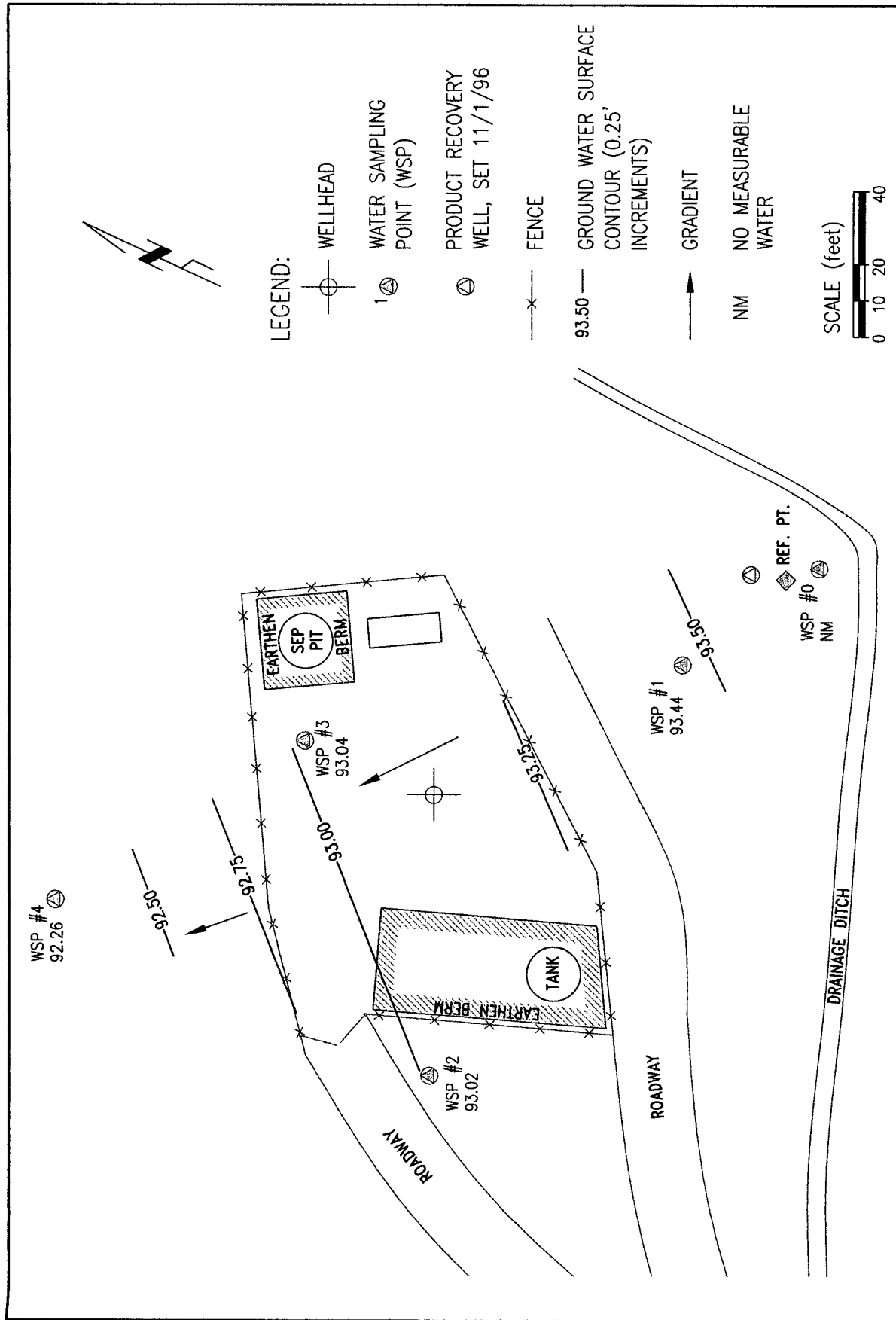
Table 2

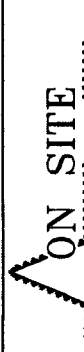
BTEX Analytical Summary
Farmington B Com 1
Unit H, Sec. 12, T29N, R12W

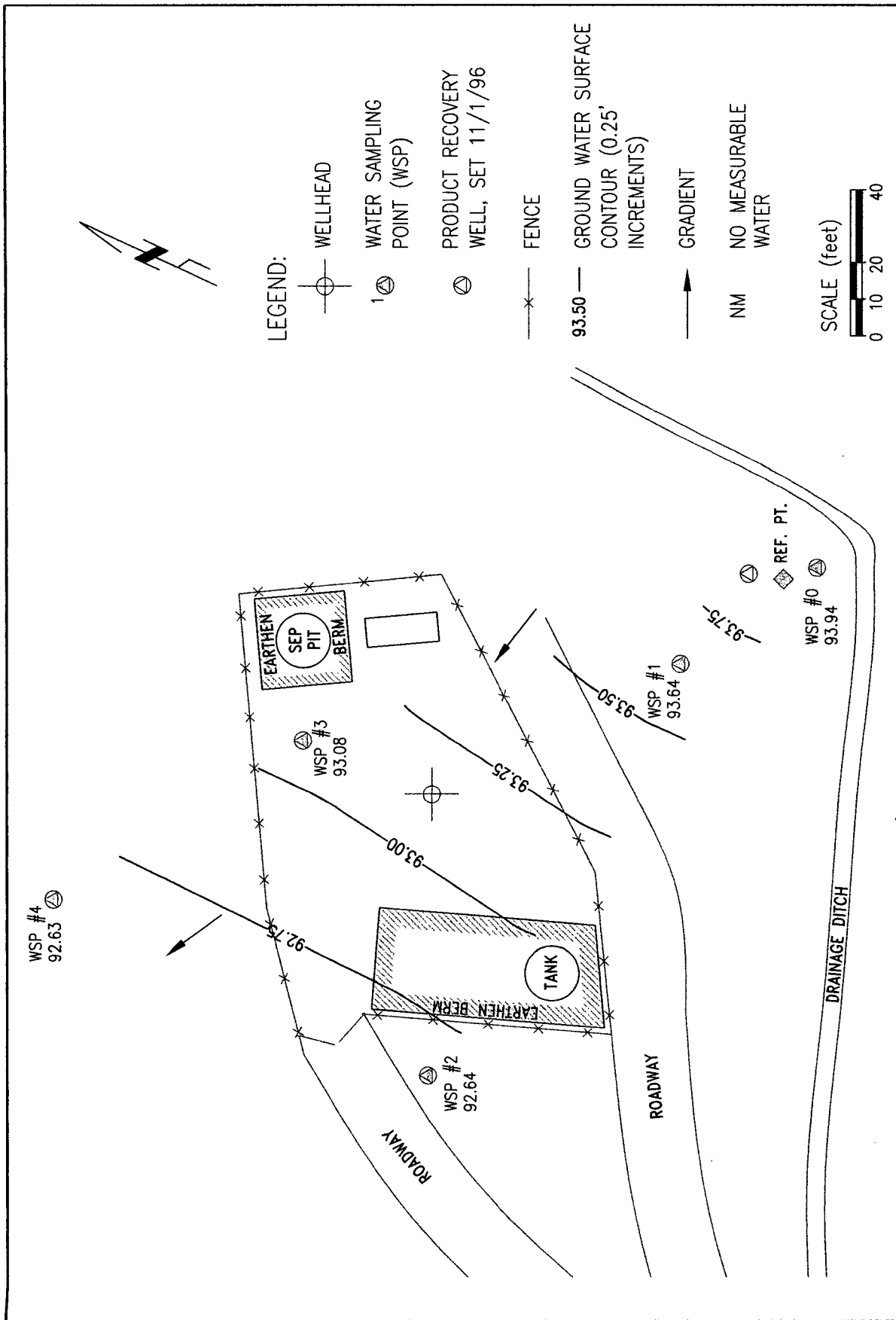
Sample Date	Sample ID#	Monitor Well	Remarks	BTEX per EPA 8020 (ppb)			
				Benzene	Toluene	Ethylbenzene	Total Xylene
01/30/97	13563	WSP-2	On Site Lab.	22.5	23.0	23.7	108.0
03/18/97	13936			25.8	13.4	11.8	53.8
06/11/97	14904			10.1	5.3	9.2	22.7
09/16/97	16208			3.9	1.0	4.5	14.8
12/05/97	17050			1.6	1.0	1.4	3.6
3/12/98	9803040-03A			0.9	BDL	1.0	3.2
6/15/98	9806057-03A			BDL	BDL	BDL	1.1
9/15/98	9809034-03A			BDL	BDL	BDL	BDL
01/30/97	13562	WSP-3	On Site Lab.	506.8	22.0	67.8	607.1
03/18/97	13937			35.8	1.9	1.1	7.2
06/12/97	14906			8.5	0.5	1.5	1.4
09/17/97	16211			ND	0.7	0.4	0.9
12/05/97	17051			1.6	BDL	BDL	BDL
3/12/98	9803040-04A			BDL	BDL	BDL	0.5
6/15/98	9806057-04A			BDL	BDL	BDL	BDL
9/15/98	9809034-04A			BDL	BDL	BDL	BDL
03/18/97	13938	WSP-4	On Site Lab.	<0.2	27.1	<0.2	1.0
06/11/97	14905			BDL	0.2	BDL	0.4
09/16/97	16207			0.9	BDL	BDL	BDL
12/05/97	17052			BDL	BDL	BDL	BDL
3/12/98	9803040-05A			BDL	BDL	BDL	BDL
6/15/98	9806057-05A			BDL	BDL	BDL	BDL
9/15/98	9809034-05A			BDL	BDL	BDL	BDL
12/21/98	9812048-01A	Piezometer	On Site Lab.	BDL	BDL	BDL	BDL
WQCC ACTION		LEVELS		10.0	750.0	750.0	620.0



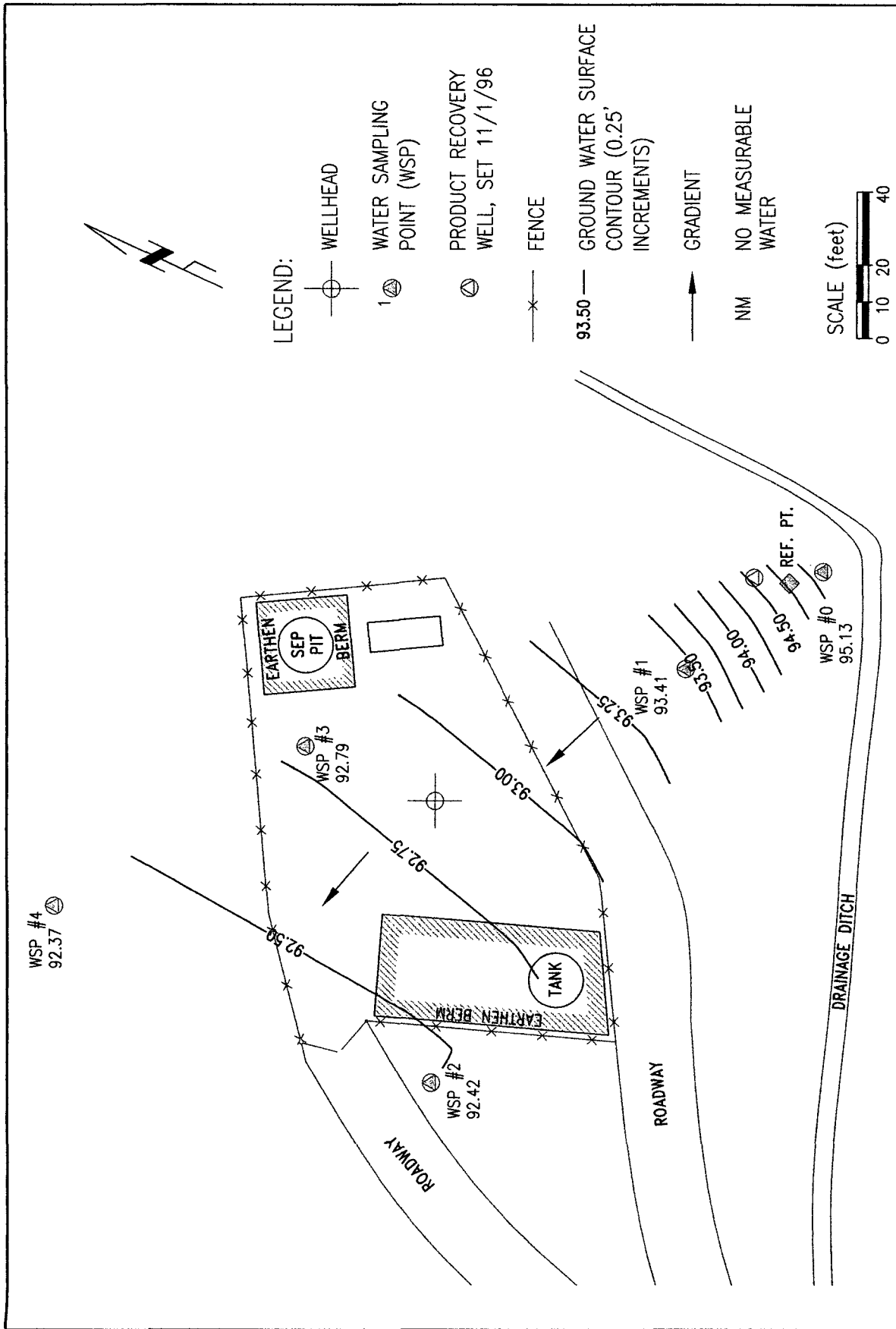
ON SITE TECHNOLOGIES, LTD. Limited Partnership		APPROVED: <i>Jet</i>	DATE: <i>2/15/02</i>	SITE SKETCH	
612 E. MURRAY DR. FARMINGTON, NM 87401	PH. (505) 325-5687 FAX (505) 327-1496	DRWN BY: MED	DATE: 2/15/02	CONOCO B COM #1 FARMINGTON, NM	
		CHK'D BY: <i>JPH</i>	DATE: <i>2/18/02</i>		
		PROJECT NO: 4-1325	SHEET: 1 OF 5		



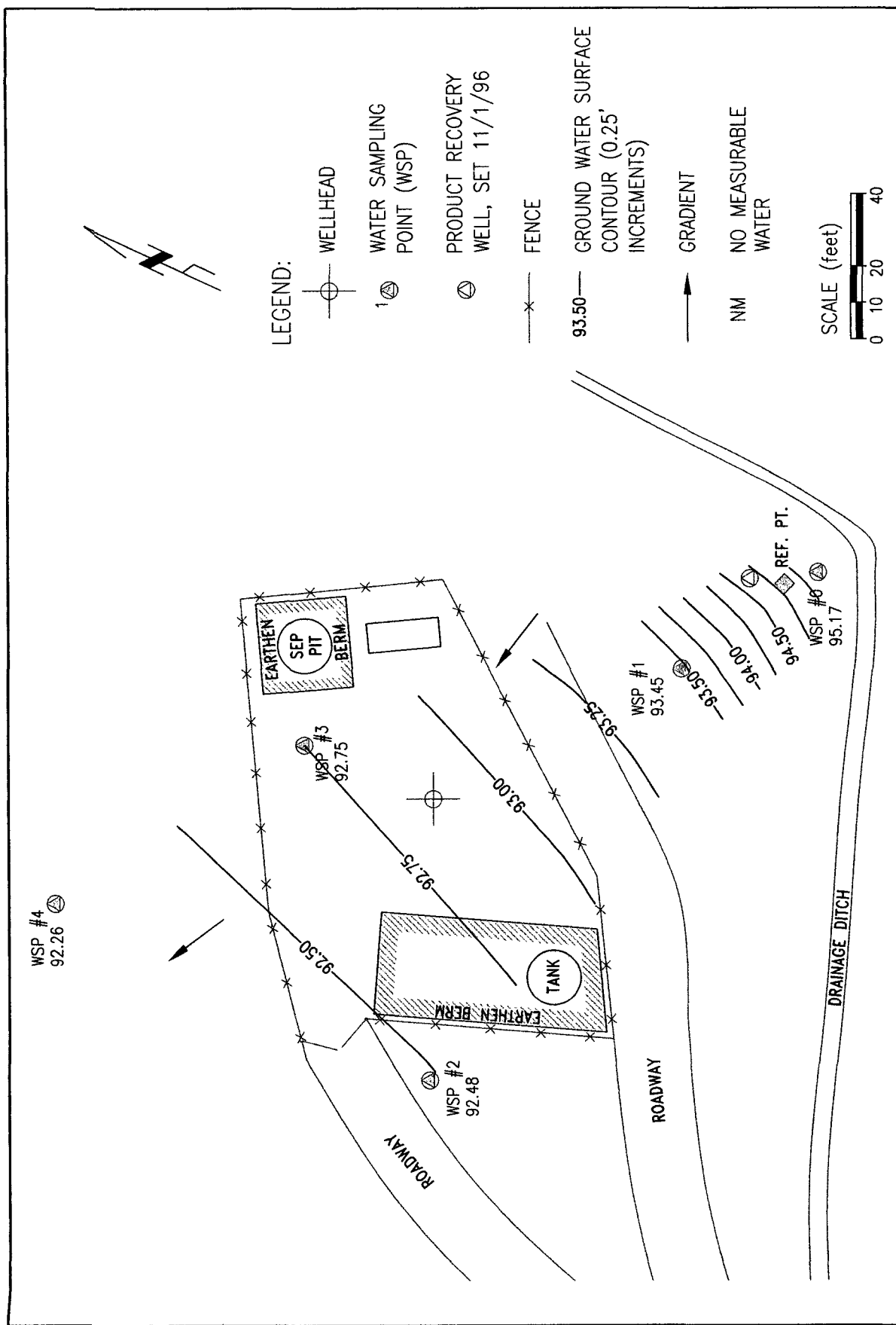
 ON SITE TECHNOLOGIES, LTD. Limited Partnership		APPROVED: <i>set</i>		DATE: <i>2/21/02</i>	
		DRWN BY: MED		DATE: 2/13/02	
		CHK'D BY: <i>jo ft</i>		DATE: <i>2/18/02</i>	
		PROJECT NO: 4-1325		SHEET: 2 OF 5	
GROUND WATER SURFACE MAP MARCH 20, 2001 CONOCO B COM #1 FARMINGTON, NM					



ON SITE TECHNOLOGIES, LTD. Limited Partnership 612 E. MURRAY DR. PH. (505) 325-6667 FARMINGTON, NM 87401 FAX (505) 327-1496		GROUND WATER SURFACE MAP JUNE 14, 2001 CONOCO B COM #1 FARMINGTON, NM	
APPROVED: <i>JET</i>	DATE: 2/21/02	DATE: 2/13/02	SHEET: 2 OF 4
DRWN BY: MED	CHK'D BY: <i>JPH</i>	DATE: 2/18/02	
PROJECT NO: 4-1325			



ON SITE TECHNOLOGIES, LTD. Limited Partnership 612 E. MURRAY DR. PH. (505) 326-6687 FARMINGTON, NM 87401 FAX (505) 327-1496		APPROVED: <i>jet</i> DRWN BY: MED CHK'D BY: <i>jet</i> PROJECT NO: 4-1325	DATE: 2/21/02 DATE: 2/13/02 DATE: 2/18/02 SHEET: 4 OF 5	GROUND WATER SURFACE MAP SEPTEMBER 18, 2001 CONOCO B COM #1 FARMINGTON, NM
--	--	--	--	---



ON SITE TECHNOLOGIES, LTD. Limited Partnership		612 E. MURRAY DR. PH. (505) 325-5687 FARMINGTON, NM 87401 FAX (505) 327-1496	
APPROVED: <i>jet</i>	DATE: 2/21/02	GROUND WATER SURFACE MAP DECEMBER 13, 2001 CONOCO B COM #1 FARMINGTON, NM	
DRWN BY: MED	DATE: 2/13/02		
CHK'D BY: <i>JPB</i>	DATE: 2/18/02		
PROJECT NO: 4-1325	SHEET: 5 OF 5		

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



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

March 23, 2001

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

RE: 4-1325; Farmington B Com #1

Order No.: 0103017

Dear John Hagstrom,

On Site Technologies, LTD. received 1 sample on 3/20/2001 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 read "D. Cox", is written over a horizontal line.

David Cox

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



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

On Site Technologies, LTD.

Date: 23-Mar-01

CLIENT: On Site Technologies Limited
Project: 4-1325; Farmington B Com #1
Lab Order: 0103017

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: 23-Mar-01

Client:	On Site Technologies Limited	Client Sample Info:	Farmington B Com #1
Work Order:	0103017	Client Sample ID:	WSP #1
Lab ID:	0103017-01A	Matrix:	AQUEOUS
Project:	4-1325; Farmington B Com #1	Collection Date:	3/20/2001 9:04:00 AM
		COC Record:	11141

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	10	2.5		µg/L	5	3/21/2001
Toluene	ND	2.5		µg/L	5	3/21/2001
Ethylbenzene	85	2.5		µg/L	5	3/21/2001
m,p-Xylene	370	5		µg/L	5	3/21/2001
o-Xylene	48	2.5		µg/L	5	3/21/2001

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

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

On Site Technologies, LTD.

Date: 23-Mar-01

CLIENT: On Site Technologies Limited
Work Order: 0103017
Project: 4-1325; Farmington B Com #1

QC SUMMARY REPORT

Method Blank

Sample ID: MB1	Batch ID: GC-1_010321	Test Code: SW8021B	Units: µg/L	Analysis Date 3/21/2001		Prep Date:					
Client ID:	0103017	Run ID: GC-1_010321A		SeqNo: 35873							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									J
Ethylbenzene	.0794	0.5									J
m,p-Xylene	.5522	1									
Methyl tert-Butyl Ether	ND	1									J
o-Xylene	.1977	0.5									J
Toluene	.154	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: 23-Mar-01

CLIENT: On Site Technologies Limited
Work Order: 0103017
Project: 4-1325; Farmington B Com #1

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0103008-01AMS		Batch ID: GC-1_010321		Test Code: SW8021B		Units: µg/L		Analysis Date 3/21/2001		Prep Date:	
Client ID: 0103017		Run ID: 0103017		PQL		SPK value		SeqNo: 35874			
Analyte	Result	PQL		SPK value		SPK Ref Val		%REC		%RPD	
Benzene	1070	5		400		710		90.1%		RPDLimit	
Ethylbenzene	733.1	5		400		320		103.3%		Qual	
m,p-Xylene	1386	10		800		560		103.2%			
Methyl tert-Butyl Ether	444.8	10		400		110		83.7%			
o-Xylene	517.8	5		400		110		102.0%			
Toluene	468.4	5		400		54		103.6%			

Sample ID: 0103008-01AMS		Batch ID: GC-1_010321		Test Code: SW8021B		Units: µg/L		Analysis Date 3/21/2001		Prep Date:	
Client ID: 0103017		Run ID: 0103017		PQL		SPK value		SeqNo: 35875			
Analyte	Result	PQL		SPK value		SPK Ref Val		%REC		%RPD	
Benzene	1064	5		400		710		88.6%		RPDLimit	
Ethylbenzene	709.4	5		400		320		97.3%		Qual	
m,p-Xylene	1343	10		800		560		97.9%			
Methyl tert-Butyl Ether	449.2	10		400		110		84.8%			
o-Xylene	502.9	5		400		110		98.2%			
Toluene	449.4	5		400		54		98.8%			

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: 23-Mar-01

CLIENT: On Site Technologies Limited
Work Order: 0103017
Project: 4-1325; Farmington B Com #1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS WATER		Batch ID: GC-1_010321		Test Code: SW8021B		Units: µg/L		Analysis Date 3/21/2001		Prep Date:	
Client ID:		0103017		Run ID: GC-1_010321A				SeqNo: 35872			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	39.67	0.5	40	0	99.2%	92	109				
Ethylbenzene	41.4	0.5	40	0.0794	103.3%	92	112				
m,p-Xylene	82.98	1	80	0.5522	103.0%	91	108				
Methyl tert-Butyl Ether	40.98	1	40	0	102.4%	89	116				
o-Xylene	41.51	0.5	40	0.1977	103.3%	93	109				
Toluene	40.7	0.5	40	0.154	101.4%	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: 23-Mar-01

CLIENT: On Site Technologies Limited
Work Order: 0103017
Project: 4-1325; Farmington B Com #1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 BTEX_0103		Batch ID: GC-1_010321	Test Code: SW8021B	Units: µg/L		Analysis Date 3/21/2001		Prep Date:			
Client ID:		0103017	Run ID:	GC-1_010321A		SeqNo: 35869					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.15	0.5	20	0	100.7%	85	115				
Ethylbenzene	21.03	0.5	20	0	105.2%	85	115				
m,p-Xylene	42.36	1	40	0	105.9%	85	115				
Methyl tert-Butyl Ether	19.21	1	20	0	96.1%	85	115				
o-Xylene	21.15	0.5	20	0	105.8%	85	115				
Toluene	20.66	0.5	20	0	103.3%	85	115				
1,4-Difluorobenzene	78.38	0	80	0	98.0%	85	103				
4-Bromochlorobenzene	77.29	0	80	0	96.6%	93	108				
Fluorobenzene	78.25	0	80	0	97.8%	88	103				

Sample ID: CCV2 BTEX_0103		Batch ID: GC-1_010321	Test Code: SW8021B	Units: µg/L		Analysis Date 3/21/2001		Prep Date:		
Client ID:		0103017	Run ID:	GC-1_010321A		SeqNo:	35870			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	RPDLimit	Qual
Benzene	19.36	0.5	20	0	96.8%	85	115			
Ethylbenzene	20.17	0.5	20	0	100.8%	85	115			
m,p-Xylene	40.64	1	40	0	101.6%	85	115			
Methyl tert-Butyl Ether	17.97	1	20	0	89.8%	85	115			
o-Xylene	20.4	0.5	20	0	102.0%	85	115			
Toluene	19.89	0.5	20	0	99.5%	85	115			
1,4-Difluorobenzene	78.33	0	80	0	97.9%	85	103			
4-Bromochlorobenzene	76.34	0	80	0	95.4%	93	108			
Fluorobenzene	78.14	0	80	0	97.7%	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: 0103017
Project: 4-1325; Farmington B Com #1

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID: CCV3 BTEX_0103		Batch ID: GC-1_010321	Test Code: SW8021B	Units: µg/L	Analysis Date 3/21/2001		Prep Date:				
Client ID:		0103017	Run ID: GC-1_010321A		SeqNo: 35871						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.51	0.5	40	0	96.3%	85	115				
Ethylbenzene	39.82	0.5	40	0	99.5%	85	115				
m,p-Xylene	79.8	1	80	0	99.7%	85	115				
Methyl tert-Butyl Ether	38.07	1	40	0	95.2%	85	115				
o-Xylene	40.31	0.5	40	0	100.8%	85	115				
Toluene	39.43	0.5	40	0	98.6%	85	115				
1,4-Difluorobenzene	78.66	0	80	0	98.3%	85	103				
4-Bromochlorobenzene	75.38	0	80	0	94.2%	93	108				
Fluorobenzene	77.44	0	80	0	96.8%	88	103				

CLIENT: On Site Technologies Limited
Work Order: 0103017
Project: 4-1325; Farmington B Com #1
Test No: SW8021B

QC SUMMARY REPORT SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ					
0103008-01A	95.3	96.8	95.2					
0103008-01AMS	95.3	99.7	95					
0103008-01AMSD	95.4	97.3	94.6					
0103011-01A	97.9	99.2	96.6					
0103015-01A	88.2	87.7 *	95.6					
0103015-02A	98.5	97.7	98.5					
0103017-01A	93.4	92.3 *	94					
0103018-01A	96.7	95.6	95.8					
0103019-01A	99.2	97.3	98.2					
0103020-01A	96.4	91.7 *	96.4					
0103020-02A	94.7	93.7	93.8					
0103020-03A	98.9	96.6	97.8					
0103021-01A	99	98.4	97.9					
0103022-01A	99.3	97.7	98					
0103022-02A	98.4	95.8	97.8					
0103022-03A	96.1	93.4	99.2					
0103023-06A	107 *	96.2	101					
0103028-01A	98.3	95.6	98.8					
CCV1 BTEX_01030	98	96.6	97.8					
CCV2 BTEX_01030	97.9	95.4	97.7					
CCV3 BTEX_01030	98.3	94.2	96.8					
LCS WATER	97.3	97.4	97					
MB1	98.7	96.7	98.3					

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: _____

Page: _____ of _____

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



Date: _____

Page: _____ of _____

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

[illegible]

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



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

July 04, 2001

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

RE: 4-1325; Conoco Farmington B Com 1

Order No.: 0106015

Dear John Hagstrom,

On Site Technologies, LTD. received 1 sample on 6/14/2001 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 'DC' or 'D Cox', written in a cursive style.

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: 04-Jul-01

CLIENT: On Site Technologies Limited
Project: 4-1325; Conoco Farmington B Com 1
Lab Order: 0106015

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: 04-Jul-01

Client:	On Site Technologies Limited	Client Sample Info:	Farmington B Com 1
Work Order:	0106015	Client Sample ID:	WSP 1
Lab ID:	0106015-01A	Matrix:	AQUEOUS
Project:	4-1325; Conoco Farmington B Com 1	Collection Date:	6/14/2001 9:20:00 AM
		COC Record:	11344

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	24	2.5		µg/L	5	6/26/2001
Toluene	ND	2.5		µg/L	5	6/26/2001
Ethylbenzene	78	2.5		µg/L	5	6/26/2001
m,p-Xylene	390	5		µg/L	5	6/26/2001
o-Xylene	44	2.5		µg/L	5	6/26/2001

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: 04-Jul-01

CLIENT: On Site Technologies Limited

Work Order: 0106015

Project: 4-1325; Conoco Farmington B Com 1

QC SUMMARY REPORT

Method Blank

Sample ID: MB1	Batch ID: GC-1_010626	Test Code: SW8021B	Units: µg/L	Analysis Date 6/26/2001	Prep Date:						
Client ID:	0106015	Run ID: GC-1_010626A		SeqNo: 39195							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									J
Ethylbenzene	.2547	0.5									J
m,p-Xylene	.2921	1									J
Methyl tert-Butyl Ether	ND	1									J
o-Xylene	.3507	0.5									J
Toluene	.116	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: 04-Jul-01

CLIENT: On Site Technologies Limited
Work Order: 0106015
Project: 4-1325; Conoco Farmington B Com 1

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0106014-03AMS		Batch ID: GC-1_010626		Test Code: SW8021B		Units: µg/L		Analysis Date 6/26/2001		Prep Date:	
Client ID:		0106015		Run ID: GC-1_010626A				SeqNo: 39196			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	420	5	400	29.11	97.7%	70	130				
Ethylbenzene	532.6	5	400	81.25	112.8%	70	130				
m,p-Xylene	2918	10	800	2062	107.0%	70	130				
Methyl tert-Butyl Ether	396.6	10	400	1.349	98.8%	70	130				
o-Xylene	424	5	400	2.196	105.4%	70	130				
Toluene	429.3	5	400	11.43	104.5%	70	130				

Sample ID: 0106014-03AMSD		Batch ID: GC-1_010626		Test Code: SW8021B		Units: µg/L		Analysis Date 6/26/2001		Prep Date:	
Client ID: 0106015		Run ID: GC-1_010626A		SeqNo: 39197							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	412.5	5	400	29.11	95.9%	70	130	420	1.8%	8	
Ethylbenzene	524.7	5	400	81.25	110.9%	70	130	532.6	1.5%	7	
m,p-Xylene	2860	10	800	2062	99.8%	70	130	2918	2.0%	7	
Methyl tert-Butyl Ether	395.6	10	400	1.349	98.6%	70	130	396.6	0.3%	6	
o-Xylene	417.1	5	400	2.196	103.7%	70	130	424	1.6%	6	
Toluene	419.1	5	400	11.43	101.9%	70	130	429.3	2.4%	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: 04-Jul-01

CLIENT: On Site Technologies Limited

Work Order: 0106015

Project: 4-1325; Conoco Farmington B Com 1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS WATER		Batch ID: GC-1_010626	Test Code: SW8021B	Units: µg/L	Analysis Date 6/26/2001		Prep Date:				
Client ID:		0106015	Run ID: GC-1_010626A		SeqNo: 39194						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	41.01	0.5	40	0	102.5%	80	120				
Ethylbenzene	42.36	0.5	40	0.2547	105.3%	80	120				
m,p-Xylene	82.97	1	80	0.2921	103.3%	80	120				
Methyl tert-Butyl Ether	40.18	1	40	0	100.5%	80	120				
o-Xylene	42.49	0.5	40	0.3507	105.3%	80	120				
Toluene	41.71	0.5	40	0.116	104.0%	80	120				

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: 04-Jul-01

CLIENT: On Site Technologies Limited

Work Order: 0106015

Project: 4-1325; Conoco Farmington B Com 1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 BTEX_0105		Batch ID: GC-1_010626		Test Code: SW8021B		Units: µg/L		Analysis Date 6/26/2001		Prep Date:	
Client ID:		0106015		Run ID: GC-1_010626A		SeqNo: 39191					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.92	0.5	20	0	109.6%	85	115				
Ethylbenzene	22.96	0.5	20	0	114.8%	85	115				
m,p-Xylene	45.32	1	40	0	113.3%	85	115				
Methyl tert-Butyl Ether	20.94	1	20	0	104.7%	85	115				
o-Xylene	22.7	0.5	20	0	113.5%	85	115				
Toluene	22.42	0.5	20	0	112.1%	85	115				
1,4-Difluorobenzene	113.7	0	120	0	94.7%	70	130				
4-Bromochlorobenzene	129.3	0	120	0	107.7%	70	130				
Fluorobenzene	112	0	120	0	93.4%	70	130				

Sample ID: CCV2 BTEX_0105		Batch ID: GC-1_010626	Test Code: SW8021B	Units: µg/L	Analysis Date 6/26/2001		Prep Date:				
Client ID:		0106015	Run ID: GC-1_010626A		SeqNo: 39192						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.31	0.5	20	0	101.5%	85	115				
Ethylbenzene	21.8	0.5	20	0	109.0%	85	115				
m,p-Xylene	42.4	1	40	0	106.0%	85	115				
Methyl tert-Butyl Ether	20.69	1	20	0	103.5%	85	115				
o-Xylene	21.35	0.5	20	0	106.7%	85	115				
Toluene	20.78	0.5	20	0	103.9%	85	115				
1,4-Difluorobenzene	113.3	0	120	0	94.4%	70	130				
4-Bromochlorobenzene	123.5	0	120	0	102.9%	70	130				
Fluorobenzene	111.6	0	120	0	93.0%	70	130				

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

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

B - Analyte detected in the associated Method Blank
I of 2

CLIENT: On Site Technologies Limited
Work Order: 0106015
Project: 4-1325; Conoco Farmington B Com 1

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID: CCV3 BTEX_0105		Batch ID: GC-1_010626	Test Code: SW8021B	Units: µg/L	Analysis Date: 6/26/2001		Prep Date:						
Client ID:		0106015	Run ID: GC-1_010626A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte	Result												
Benzene	40.72			0.5	40	0	101.8%	85	115				
Ethylbenzene	41.76			0.5	40	0	104.4%	85	115				
m,p-Xylene	81.55			1	80	0	101.9%	85	115				
Methyl tert-Butyl Ether	40.37			1	40	0	100.9%	85	115				
o-Xylene	42.06			0.5	40	0	105.2%	85	115				
Toluene	41.18			0.5	40	0	103.0%	85	115				
1,4-Difluorobenzene	113.3			0	120	0	94.4%	70	130				
4-Bromochlorobenzene	123.2			0	120	0	102.7%	70	130				
Fluorobenzene	112.2			0	120	0	93.5%	70	130				

CLIENT: On Site Technologies Limited
Work Order: 0106015
Project: 4-1325; Conoco Farmington B Com
Test No: SW8021B

QC SUMMARY REPORT SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ					
0106014-01A	93.8	113	93.6					
0106014-03A	92.6	102	93.6					
0106014-03AMS	91.8	103	91.3					
0106014-03AMSD	92	104	91.1					
0106015-01A	91.5	96.6	93.3					
0106016-02A	94	103	93.6					
0106016-04A	91.7	100	91.9					
0106018-02A	94.3	105	94.4					
0106037-02A	89.8	96.3	89.7					
0106037-03A	93.2	99.6	91.9					
0106037-04A	91.5	97.9	91					
0106037-12A	94.1	109	92.5					
0106037-13A	92.6	102	93.5					
CCV1 BTEX_01052	94.7	108	93.4					
CCV2 BTEX_01052	94.4	103	93					
CCV3 BTEX_01052	94.4	103	93.5					
LCS WATER	94.5	106	92.8					
MB1	94.5	102	94.3					

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

* Surrogate recovery outside acceptance limits



6612 E. Murray Dr. • P.O. Box 2606 • Farmington, NM 87499
LAB: (505) 325-5667 • FAX: (505) 327-1496

Page: _____ of _____

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



Date: _____

Page: _____ of _____

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

[illegible]

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



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

September 24, 2001

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

RE: 4-1325; Conoco B Com #1

Order No.: 0109020

Dear John Hagstrom,

On Site Technologies, LTD. received 1 sample on 9/18/2001 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

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



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

On Site Technologies, LTD.

Date: 24-Sep-01

CLIENT: On Site Technologies Limited
Project: 4-1325; Conoco B Com #1
Lab Order: 0109020

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: 24-Sep-01

Client:	On Site Technologies Limited	Client Sample Info:	Conoco B Com #1
Work Order:	0109020	Client Sample ID:	WSP 1
Lab ID:	0109020-01A	Matrix:	AQUEOUS
Project:	4-1325; Conoco B Com #1	Collection Date:	9/18/2001 1:08:00 PM
		COC Record:	11521

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	14	2.5		µg/L	5	9/21/2001
Toluene	ND	2.5		µg/L	5	9/21/2001
Ethylbenzene	44	2.5		µg/L	5	9/21/2001
m,p-Xylene	300	5		µg/L	5	9/21/2001
o-Xylene	36	2.5		µg/L	5	9/21/2001

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	Sur: - 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: 24-Sep-01

CLIENT: On Site Technologies Limited
Work Order: 0109020
Project: 4-1325; Conoco B Com #1

QC SUMMARY REPORT

Method Blank

Sample ID: MB1		Batch ID: GC-1_010919		Test Code: SW8021B		Units: µg/L		Analysis Date 9/19/2001		Prep Date:	
Client ID:		0109020		Run ID: GC-1_010919A				SeqNo: 42447			
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	.0974	0.5									J

Sample ID: MB1	Batch ID: GC-1_010921	Test Code: SW8021B	Units: µg/L	Analysis Date 9/21/2001	Prep Date:						
Client ID:	0109020	Run ID: GC-1_010921A		SeqNo: 42520							
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	.1082	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: 24-Sep-01

CLIENT: On Site Technologies Limited
Work Order: 0109020
Project: 4-1325; Conoco B Com #1

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0109001-01AMS		Batch ID: GC-1_010919	Test Code: SW8021B	Units: µg/L	Analysis Date 9/19/2001		Prep Date:	
Client ID: 0109020		Run ID: GC-1_010919A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit
Analyte	Result							
Benzene	42.98	0.5	0.5	40	0	107.5%	70	130
Ethylbenzene	53.68	0.5	0.5	40	11	106.7%	70	130
m,p-Xylene	189.6	1	1	80	110	99.5%	70	130
Methyl tert-Butyl Ether	41.71	1	1	40	0	104.3%	70	130
o-Xylene	117.5	0.5	0.5	40	75	106.2%	70	130
Toluene	96.26	0.5	0.5	40	54	105.6%	70	130

Sample ID: 0109001-01AMS		Batch ID: GC-1_010919	Test Code: SW8021B	Units: µg/L	Analysis Date 9/19/2001		Prep Date:	
Client ID: 0109020		Run ID: GC-1_010919A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit
Analyte	Result							
Benzene	41.88	0.5	0.5	40	0	104.7%	70	130
Ethylbenzene	52.17	0.5	0.5	40	11	102.9%	70	130
m,p-Xylene	184.4	1	1	80	110	92.9%	70	130
Methyl tert-Butyl Ether	41.52	1	1	40	0	103.8%	70	130
o-Xylene	114.6	0.5	0.5	40	75	99.1%	70	130
Toluene	93.67	0.5	0.5	40	54	99.2%	70	130

Qualifiers:

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

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

B - Analyte detected in the associated Method Blank

CLIENT: On Site Technologies Limited
Work Order: 0109020
Project: 4-1325; Conoco B Com #1

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0109021-07AMS	Batch ID: GC-1_010921	Test Code: SW8021B	Units: µg/L	Analysis Date 9/21/2001	Prep Date:
Client ID: 0109020	Run ID: GC-1_010921A	PQL	SPK value	SeqNo: 42521	
Analyte	Result		SPK Ref Val	LowLimit	HighLimit
Benzene	15740	50	11000	70	130
Ethylbenzene	4890	50	800	70	130
m,p-Xylene	14000	100	6000	70	130
Methyl tert-Butyl Ether	4005	100	0	70	130
o-Xylene	5279	50	1100	70	130
Toluene	11440	50	7100	70	130

Sample ID: 0109021-07AMSD	Batch ID: GC-1_010921	Test Code: SW8021B	Units: µg/L	Analysis Date 9/21/2001	Prep Date:
Client ID: 0109020	Run ID: GC-1_010921A	PQL	SPK value	SeqNo: 42522	
Analyte	Result		SPK Ref Val	LowLimit	HighLimit
Benzene	15300	50	11000	70	130
Ethylbenzene	4752	50	800	70	130
m,p-Xylene	13610	100	6000	70	130
Methyl tert-Butyl Ether	3952	100	0	70	130
o-Xylene	5137	50	1100	70	130
Toluene	11120	50	7100	70	130

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

On Site Technologies, LTD.

Date: 24-Sep-01

CLIENT: On Site Technologies Limited
Work Order: 0109020
Project: 4-1325; Conoco B Com #1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS WATER		Batch ID: GC-1_010919	Test Code: SW8021B	Units: µg/L	Analysis Date 9/19/2001	Prep Date:					
Client ID:		0109020	Run ID: GC-1_010919A		SeqNo: 42446						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	45.07	0.5	40	0	112.7%	80	120				
Ethylbenzene	42.93	0.5	40	0	107.3%	80	120				
m,p-Xylene	84.42	1	80	0	105.5%	80	120				
Methyl tert-Butyl Ether	44.56	1	40	0	111.4%	80	120				
o-Xylene	42.75	0.5	40	0	106.9%	80	120				
Toluene	43.03	0.5	40	0.0974	107.3%	80	120				

Sample ID: LCS WATER		Batch ID: GC-1_010921	Test Code: SW8021B	Units: µg/L	Analysis Date 9/21/2001		Prep Date:				
Client ID:		0109020	Run ID: GC-1_010921A		SeqNo: 42519						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	42.32	0.5	40	0	105.8%	80	120				
Ethylbenzene	42.38	0.5	40	0	106.0%	80	120				
m,p-Xylene	83.35	1	80	0	104.2%	80	120				
Methyl tert-Butyl Ether	39.44	1	40	0	98.6%	80	120				
o-Xylene	42.63	0.5	40	0	106.6%	80	120				
Toluene	41.98	0.5	40	0.1082	104.7%	80	120				

Qualifiers:	NID - 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: 24-Sep-01

CLIENT: On Site Technologies Limited
Work Order: 0109020
Project: 4-1325; Conoco B Com #1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 BTEX_0107		Batch ID: GC-1_010919	Test Code: SW8021B	Units: µg/L		Analysis Date 9/19/2001		Prep Date:			
Client ID:		0109020	Run ID:	GC-1_010919A		SeqNo: 42443					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	42.46	0.5	40	0	106.2%	85	115				
Ethylbenzene	42.36	0.5	40	0	105.9%	85	115				
m,p-Xylene	83.22	1	80	0	104.0%	85	115				
Methyl tert-Butyl Ether	40.78	1	40	0	101.9%	85	115				
o-Xylene	42.29	0.5	40	0	105.7%	85	115				
Toluene	41.93	0.5	40	0	104.8%	85	115				
1,4-Difluorobenzene	111	0	120	0	92.5%	70	130				
4-Bromochlorobenzene	134.4	0	120	0	112.0%	70	130				
Fluorobenzene	107	0	120	0	89.2%	70	130				

Sample ID: CCV2 BTEX_0107		Batch ID: GC-1_010919	Test Code: SW8021B	Units: µg/L		Analysis Date 9/19/2001		Prep Date:			
Client ID:		0109020	Run ID:	GC-1_010919A	SeqNo:	42444					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	41.77	0.5	40	0	104.4%	85	115				
Ethylbenzene	41.55	0.5	40	0	103.9%	85	115				
m,p-Xylene	81.61	1	80	0	102.0%	85	115				
Methyl tert-Butyl Ether	41.47	1	40	0	103.7%	85	115				
o-Xylene	41.76	0.5	40	0	104.4%	85	115				
Toluene	41.25	0.5	40	0	103.1%	85	115				
1,4-Difluorobenzene	111	0	120	0	92.5%	70	130				
4-Bromochlorobenzene	134.5	0	120	0	112.1%	70	130				
Fluorobenzene	107	0	120	0	89.2%	70	130				

Qualifiers: NID - 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: 0109020
Project: 4-1325; Conoco B Com #1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV3 BTEX_0107		Batch ID: GC-1_010919		Test Code: SW8021B		Units: µg/L		Analysis Date 9/19/2001		Prep Date:	
Client ID: 0109020		Run ID: GC-1_010919A		PQL		SPK value		SeqNo: 42445			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	42.77	0.5	40	0	106.9%	85	115				
Ethylbenzene	42.56	0.5	40	0	106.4%	85	115				
m,p-Xylene	83.42	1	80	0	104.3%	85	115				
Methyl tert-Butyl Ether	40.61	1	40	0	101.5%	85	115				
o-Xylene	42.69	0.5	40	0	106.7%	85	115				
Toluene	42.22	0.5	40	0	105.6%	85	115				
1,4-Difluorobenzene	110.5	0	120	0	92.1%	70	130				
4-Bromochlorobenzene	135.9	0	120	0	113.3%	70	130				
Fluorobenzene	107.2	0	120	0	89.3%	70	130				

Sample ID: CCV1 BTEX_0107		Batch ID: GC-1_010921	Test Code: SW8021B	Units: µg/L		Analysis Date 9/21/2001		Prep Date:			
Client ID:		0109020	Run ID:	GC-1_010921A		SeqNo: 42516					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	42.48	0.5	40	0	106.2%	85	115				
Ethylbenzene	42.58	0.5	40	0	106.4%	85	115				
m,p-Xylene	84.09	1	80	0	105.1%	85	115				
Methyl tert-Butyl Ether	39.48	1	40	0	98.7%	85	115				
o-Xylene	42.85	0.5	40	0	107.1%	85	115				
Toluene	42.1	0.5	40	0	105.3%	85	115				
1,4-Difluorobenzene	114.2	0	120	0	95.2%	70	130				
4-Bromochlorobenzene	134.4	0	120	0	112.0%	70	130				
Fluorobenzene	114.2	0	120	0	95.2%	70	130				

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

CLIENT: On Site Technologies Limited
Work Order: 0109020
Project: 4-1325; Conoco B Com #1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV2 BTEX_0107		Batch ID: GC-1_010921	Test Code: SW8021B		Units: µg/L		Analysis Date 9/21/2001		Prep Date:		
Client ID:		0109020	Run ID:	GC-1_010921A	SeqNo: 42517						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	41	0.5	40	0	102.5%	85	115				
Ethylbenzene	41.1	0.5	40	0	102.7%	85	115				
m,p-Xylene	80.86	1	80	0	101.1%	85	115				
Methyl tert-Butyl Ether	40.04	1	40	0	100.1%	85	115				
o-Xylene	41.23	0.5	40	0	103.1%	85	115				
Toluene	40.82	0.5	40	0	102.1%	85	115				
1,4-Difluorobenzene	113.5	0	120	0	94.6%	70	130				
4-Bromochlorobenzene	124.4	0	120	0	103.7%	70	130				
Fluorobenzene	113.9	0	120	0	94.9%	70	130				

Sample ID: CCV3 BTEX_0107		Batch ID: GC-1_010921	Test Code: SW8021B	Units: µg/L	Analysis Date 9/21/2001		Prep Date:				
Client ID:		0109020	Run ID: GC-1_010921A		SeqNo: 42518						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	41.35	0.5	40	0	103.4%	85	115				
Ethylbenzene	41.25	0.5	40	0	103.1%	85	115				
m,p-Xylene	80.99	1	80	0	101.2%	85	115				
Methyl tert-Butyl Ether	40.19	1	40	0	100.5%	85	115				
o-Xylene	41.57	0.5	40	0	103.9%	85	115				
Toluene	41.08	0.5	40	0	102.7%	85	115				
1,4-Difluorobenzene	113.5	0	120	0	94.6%	70	130				
4-Bromochlorobenzene	124.4	0	120	0	103.7%	70	130				
Fluorobenzene	114.4	0	120	0	95.3%	70	130				

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

CLIENT: On Site Technologies Limited

Work Order: 0109020

Project: 4-1325; Conoco B Com #1

Test No: SW8021B

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

Sample ID	14FBZ	4BCBZ	FLBZ					
0109001-01A	93.2	111	90.2					
0109001-01AMS	91.9	112	89.4					
0109001-01AMSD	92.1	112	89.3					
0109005-01A	81.5	97.4	80.4					
0109009-01A	93.7	112	90.6					
0109009-02A	93.4	111	90.5					
0109009-03A	93.2	112	90.9					
0109017-04B	93	112	90					
0109019-01A	92.7	110	90.8					
0109020-01A	95.2	101	97					
0109021-01A	91.6	113	89.2					
0109021-02A	89.9	110	87.8					
0109021-03A	93.6	112	90.5					
0109021-04A	93.2	112	90.4					
0109021-05A	91.9	111	89.4					
0109021-06A	93.3	111	90.7					
0109021-07A	93.2	102	94.1					
0109021-07AMS	92.7	103	93.5					
0109021-07AMSD	93.2	103	93.4					
0109021-08A	93.2	110	90.8					
0109021-09A	92.9	111	90.7					
0109022-01A	94.6	102	95.6					
0109022-02A	93.4	118	90.6					
0109022-03A	93	112	90.6					
0109023-01A	95.9	111	96.6					
0109023-02A	95.8	111	96.3					
0109023-03A	95.5	112	96.6					

Acronym**Surrogate****QC Limits**

14FBZ

= 1,4-Difluorobenzene

70-130

4BCBZ

= 4-Bromochlorobenzene

70-130

FLBZ

= Fluorobenzene

70-130

* Surrogate recovery outside acceptance limits

CLIENT: On Site Technologies Limited
Work Order: 0109020
Project: 4-1325; Conoco B Com #1
Test No: SW8021B

QC SUMMARY REPORT SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ				
0109023-04A	96.5	99.8	97.3				
0109023-05A	95.4	101	96.6				
0109023-06A	96.2	101	96.5				
0109023-07A	95.8	101	96.6				
0109023-08A	96	101	96.5				
0109023-09A	95.4	102	94.3				
0109025-01A	96.1	96.8	96.8				
0109025-02A	95.9	105	96.7				
0109025-03A	96.2	111	97.3				
0109025-04A	95.5	105	96.7				
0109025-05A	95.5	105	96.5				
0109025-06A	94	104	96.2				
0109025-07A	95.5	101	96.9				
0109025-08A	95.7	101	96.3				
CCV1 BTEX_01070	95.2	112	95.2				
CCV2 BTEX_01070	94.6	104	94.9				
CCV3 BTEX_01070	94.6	104	95.3				
LCS WATER	94.8	106	95.3				
MBI	95.9	106	96.3				

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

* Surrogate recovery outside acceptance limits



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

Page: _____ of _____

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



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

Page: _____ of _____

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

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



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

December 17, 2001

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

RE: 4-1325; Conoco B Com 1

Order No.: 0112014

Dear John Hagstrom,

On Site Technologies, LTD. received 1 sample on 12/13/2001 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,

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: 17-Dec-01

CLIENT: On Site Technologies Limited
Project: 4-1325; Conoco B Com 1
Lab Order: 0112014

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: 17-Dec-01

Client:	On Site Technologies Limited	Client Sample Info:	Conoco B Com 1
Work Order:	0112014	Client Sample ID:	WSP-1
Lab ID:	0112014-01A	Matrix:	AQUEOUS
		Collection Date:	12/13/2001 10:02:00 AM
Project:	4-1325; Conoco B Com 1	COC Record:	11694

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: HNR		
Benzene	3.6	0.5		µg/L	1	12/15/2001
Toluene	ND	0.5		µg/L	1	12/15/2001
Ethylbenzene	24	0.5		µg/L	1	12/15/2001
m,p-Xylene	210	1		µg/L	1	12/15/2001
o-Xylene	21	0.5		µg/L	1	12/15/2001

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: 17-Dec-01

CLIENT: On Site Technologies Limited
Work Order: 0112014
Project: 4-1325; Conoco B Com 1

QC SUMMARY REPORT

Method Blank

Sample ID: MB_011215		Batch ID: GC-1_011215		Test Code: SW8021B		Units: µg/L		Analysis Date 12/15/2001		Prep Date: 12/15/01	
Client ID:		0112014		Run ID: GC-1_011215A				SeqNo: 45894			
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									
1,4-Difluorobenzene	102.1	0									
4-Bromochlorobenzene	112.6	0									
Fluorobenzene	102	0									

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: 17-Dec-01

CLIENT: On Site Technologies Limited
Work Order: 0112014
Project: 4-1325; Conoco B Com 1

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0112009-09AMS		Batch ID: GC-1_011215		Test Code: SW8021B		Units: µg/L		Analysis Date 12/15/2001		Prep Date: 12/15/01	
Client ID: 0112014		Run ID: GC-1_011215A		PQL		SPK value		SeqNo: 45895			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1866	25	2000	20	92.3%	70	130				
Ethylbenzene	1793	25	2000	10	89.2%	70	130				
m,p-Xylene	2279	50	4000	10	56.7%	70	130				
Methyl tert-Butyl Ether	2575	50	2000	560	100.7%	70	130				S
o-Xylene	1829	25	2000	0	91.5%	70	130				
Toluene	1833	25	2000	30	90.1%	70	130				
1,4-Difluorobenzene	5131	0	5500	0	93.3%	77	112				
4-Bromochlorobenzene	5752	0	5500	0	104.6%	88	116				
Fluorobenzene	5209	0	5500	0	94.7%	87	102				

Sample ID: 0112009-09AMSD		Batch ID: GC-1_011215		Test Code: SW8021B		Units: µg/L		Analysis Date 12/15/2001				Prep Date: 12/15/01	
Client ID: 0112014		Run ID: GC-1_011215A		PQL		SPK value		SPK Ref Val		%REC		%RPD	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Benzene	1812	25	2000	20	89.6%	70	130	1866	2.9%	6			
Ethylbenzene	1753	25	2000	10	87.1%	70	130	1793	2.3%	7			
m,p-Xylene	2226	50	4000	10	55.4%	70	130	2279	2.4%	6	S		
Methyl tert-Butyl Ether	2549	50	2000	560	99.4%	70	130	2575	1.0%	5			
o-Xylene	1783	25	2000	0	89.1%	70	130	1829	2.6%	5			
Toluene	1771	25	2000	30	87.0%	70	130	1833	3.4%	6			
1,4-Difluorobenzene	5130	0	5500	0	93.3%	77	112	0	0.0%	0			
4-Bromochlorobenzene	5702	0	5500	0	103.7%	88	116	0	0.0%	0			
Fluorobenzene	5171	0	5500	0	94.0%	87	102	0	0.0%	0			

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-Dec-01

CLIENT: On Site Technologies Limited
 Work Order: 0112014
 Project: 4-1325; Conoco B Com 1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS_011215	Batch ID: GC-1_011215	Test Code: SW8021B	Units: µg/L	Analysis Date 12/15/2001	Prep Date: 12/15/01
Client ID: 0112014	Run ID: GC-1_011215A	PQL	SPK value	SeqNo: 45893	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
Benzene	36.56	0.5	40	0	91.4%
Ethylbenzene	36.68	0.5	40	0	91.7%
m,p-Xylene	76.03	1	80	0	95.0%
Methyl tert-Butyl Ether	39.98	1	40	0	100.0%
o-Xylene	38.68	0.5	40	0	96.7%
Toluene	36.89	0.5	40	0	92.2%
1,4-Difluorobenzene	101	0	110	0	91.8%
4-Bromochlorobenzene	112.6	0	110	0	102.4%
Fluorobenzene	103.1	0	110	0	93.7%
				LowLimit	HighLimit
				80	120
				80	120
				80	120
				80	120
				80	120
				80	120
				80	120
				77	112
				88	116
				87	102
				%RPD	RPDLimit
					Qual

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: 17-Dec-01

CLIENT: On Site Technologies Limited
Work Order: 0112014
Project: 4-1325; Conoco B Com 1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1_011215		Batch ID: GC-1_011215		Test Code: SW8021B		Units: µg/L		Analysis Date 12/15/2001		Prep Date: 12/15/01	
Client ID:		0112014		Run ID: GC-1_011215A				SeqNo: 45888			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.58	0.5	20	0	92.9%	85	115				
Ethylbenzene	18.92	0.5	20	0	94.6%	85	115				
m,p-Xylene	38.68	1	40	0	96.7%	85	115				
Methyl tert-Butyl Ether	20.89	1	20	0	104.5%	85	115				
o-Xylene	19.9	0.5	20	0	99.5%	85	115				
Toluene	18.67	0.5	20	0	93.3%	85	115				
1,4-Difluorobenzene	101.8	0	110	0	92.6%	77	112				
4-Bromochlorobenzene	112.5	0	110	0	102.3%	88	116				
Fluorobenzene	103.6	0	110	0	94.2%	87	102				

Sample ID: CCV2_011215	Batch ID: GC-1_011215	Test Code: SW8021B	Units: µg/L	Analysis Date 12/15/2001	Prep Date: 12/15/01						
Client ID:	0112014	Run ID: GC-1_011215A		SeqNo: 45889							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.08	0.5	20	0	90.4%	85	115				
Ethylbenzene	17.94	0.5	20	0	89.7%	85	115				
m,p-Xylene	36.74	1	40	0	91.8%	85	115				
Methyl tert-Butyl Ether	20.46	1	20	0	102.3%	85	115				
o-Xylene	18.83	0.5	20	0	94.1%	85	115				
Toluene	18.12	0.5	20	0	90.6%	85	115				
1,4-Difluorobenzene	103.1	0	110	0	93.7%	77	112				
4-Bromochlorobenzene	114.4	0	110	0	104.1%	88	116				
Fluorobenzene	104.5	0	110	0	95.0%	87	102				

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: 0112014
Project: 4-1325; Conoco B Com 1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV3_011215		Batch ID: GC-1_011215		Test Code: SW8021B		Units: µg/L		Analysis Date 12/15/2001		Prep Date: 12/15/01	
Client ID:		0112014		Run ID: GC-1_011215A				SeqNo: 45890			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	36.84	0.5	40	0	92.1%	85	115				
Ethylbenzene	36.2	0.5	40	0	90.5%	85	115				
m,p-Xylene	75.27	1	80	0	94.1%	85	115				
Methyl tert-Butyl Ether	39.04	1	40	0	97.6%	85	115				
o-Xylene	38.14	0.5	40	0	95.4%	85	115				
Toluene	36.72	0.5	40	0	91.8%	85	115				
1,4-Difluorobenzene	101.6	0	110	0	92.4%	77	112				
4-Bromochlorobenzene	110.6	0	110	0	100.5%	88	116				
Fluorobenzene	103.1	0	110	0	93.8%	87	102				

Sample ID: CCV4_011215		Batch ID: GC-1_011215		Test Code: SW8021B		Units: µg/L		Analysis Date 12/15/2001		Prep Date: 12/15/01	
Client ID:		0112014		Run ID: GC-1_011215A				SeqNo: 45891			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.11	0.5	20	0	95.5%	85	115				
Ethylbenzene	19.15	0.5	20	0	95.8%	85	115				
m,p-Xylene	39.66	1	40	0	99.2%	85	115				
Methyl tert-Butyl Ether	21.18	1	20	0	105.9%	85	115				
o-Xylene	20.19	0.5	20	0	100.9%	85	115				
Toluene	18.72	0.5	20	0	93.6%	85	115				
1,4-Difluorobenzene	103.2	0	110	0	93.9%	77	112				
4-Bromochlorobenzene	111.2	0	110	0	101.1%	88	116				
Fluorobenzene	104.9	0	110	0	95.3%	87	102				

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: 0112014

Project: 4-1325; Conoco B Com 1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV5_011215		Batch ID: GC-1_011215		Test Code: SW8021B		Units: µg/L		Analysis Date 12/15/2001		Prep Date: 12/15/01	
Client ID:		0112014		Run ID: GC-1_011215A				SeqNo: 45892			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.42	0.5	20	0	92.1%	85	115				
Ethylbenzene	18.4	0.5	20	0	92.0%	85	115				
m,p-Xylene	37.78	1	40	0	94.5%	85	115				
Methyl tert-Butyl Ether	20.74	1	20	0	103.7%	85	115				
o-Xylene	19.17	0.5	20	0	95.8%	85	115				
Toluene	18.36	0.5	20	0	91.8%	85	115				
1,4-Difluorobenzene	102	0	110	0	92.7%	77	112				
4-Bromochlorobenzene	111.8	0	110	0	101.7%	88	116				
Fluorobenzene	103.4	0	110	0	94.0%	87	102				

Qualifiers: NID - 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: 0112014

Project: 4-1325; Conoco B Com 1

Test No: SW8021B

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

Sample ID	14FBZ	4BCBZ	FLBZ					
0112009-01A	93.2	98.8	94.3					
0112009-02A	93.4	104	94.4					
0112009-03A	93.8	102	94.9					
0112009-04A	94.2	105	95.1					
0112009-05A	93.9	102	94.7					
0112009-06A	93	103	95.1					
0112009-07A	94.3	103	95.5					
0112009-08A	92.6	103	94.4					
0112009-09A	95.4	105	95.5					
0112009-09AMS	93.3	104	94.7					
0112009-09AMSD	93.3	104	94					
0112010-01A	94.3	101	94.3					
0112012-01A	92.5	103	93.9					
0112013-01A	94.4	104	95.4					
0112014-01A	84.3	98.2	94.5					
0112015-01A	92.2	98.9	93.8					
0112015-02A	86.6	97.5	93.6					
0112015-03A	94.8	105	95.3					
0112016-01A	95.2	101	95.5					
CCV1_011215	92.6	102	94.2					
CCV2_011215	93.7	104	95					
CCV3_011215	92.4	100	93.8					
CCV4_011215	93.8	101	95.3					
CCV5_011215	92.7	102	94					
LCS_011215	91.8	102	93.7					
MB_011215	92.8	102	92.7					

Acronym	Surrogate	QC Limits
14FBZ	= 1,4-Difluorobenzene	77-112
4BCBZ	= 4-Bromochlorobenzene	88-116
FLBZ	= Fluorobenzene	87-102

* Surrogate recovery outside acceptance limits



CHAIN OF CUSTODY RECORD

Date: _____

Page: _____ of _____

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



Date: _____

Page: _____ of _____

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

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