

3R - 83

REPORTS

DATE:

2/18/2003



RECEIVED

February 18, 2003

ConocoPhillips
Attn.: Mr. Neal Goates, RM&R Site Manager
Threadneedle Office
PO Box 2197
Houston, TX 77252-2197

FEB 28 2003

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

RE: 2002 Annual Ground Water Report
ConocoPhillips Location: Farmington, B COM #1
Unit H, Sec. 12, T29N R12W, NMPM, San Juan Co., NM

Project No.: 4-1325

Dear Mr. Goates,

The following report summarizes the ground water remediation and monitoring activities conducted by On Site Technologies Limited Partnership and/or others on behalf of ConocoPhillips, at the referenced oil and gas location. This report covers the calendar year of 2002, 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 2002 ACTIVITIES:

Ground water sampling events were conducted in March, June, and September of 2002. Due to inclement weather the December sampling event was delayed until January 2003. Water Sampling Point 1 (WSP1) has had BTEX contamination below New Mexico Water Quality Control Commission (NMWQCC) standards for four quarters. Sampling for closure was to be conducted during the January sampling event, but there was no measurable water in the wells.

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 2002, 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 2002 ground water monitoring results and trends associated with the Farmington B Com #1 well location:

Tel. (505) 325-5667

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P. O. BOX 2606 • FARMINGTON, NM 87499

-TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT-

1. WSP #1 has had concentrations of BTEX contamination below NMWQCC standards for four quarters.

Recommendation:

1. Closure sampling should be conducted during the March 2003, sampling event if water is in sufficient quantity.
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:

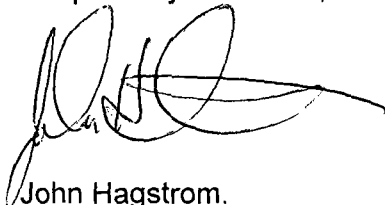
This annual ground water report documents the results of ground water monitoring for the referenced ConocoPhillips well location during the calendar year 2002. This report follows the Comprehensive Ground Water Remediation and Long-Term Monitoring Plan for Conoco Locations in the San Juan Basin, New Mexico, dated October 15, 1997.

The scope of SMA's 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 Souder Miller and Associates for the exclusive use of ConocoPhillips, as it pertains to the referenced well location operated by ConocoPhillips.

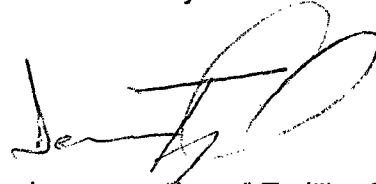
If there are any questions regarding this status report, please contact either John Hagstrom or Larry Trujillo at Souder Miller and Associates, (505) 325-5667. Thank you for your consideration.

Respectfully submitted,



John Hagstrom.
Environmental Technician

Reviewed by:



Lawrence "Larry" Trujillo, CHMM
Environmental Specialist

SOUDER MILLER AND ASSOCIATES

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: Ground Water Potentiometric Map
Laboratory Results, QA/QC, Chain-of Custody.

Acknowledgment:
CONOCOPHILLIPS

Neal A. Adams / Site Manager
(Name/Title)
2-21-03
(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
					3/12/02	5.54	95.29
					6/19/02	5.43	95.40
					9/17/02	5.14	95.69
					1/2/02	NMW	

* 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
					3/12/02	4.45	93.56
					6/19/02	4.39	93.62
					9/17/02	4.48	93.59
					1/2/03	NMW	

* 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
					3/12/02	6.71	92.6
					6/19/02	6.85	92.46
					9/17/02	6.24	93.07
					1/2/03	NMW	

* 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

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
					3/12/02	6.36	92.81
					6/19/02	6.09	93.08
					9/17/02	5.56	93.61
					1/2/03	NMW	

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
					3/12/02	4.57	92.28
					6/19/02	4.39	92.46
					9/17/02	4.01	94.84
					1/2/03	NMW	

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
					3/12/02	6.96	92.2
					6/19/02	6.95	92.21
					9/17/02	5.58	93.58
					1/2/03	NMW	

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

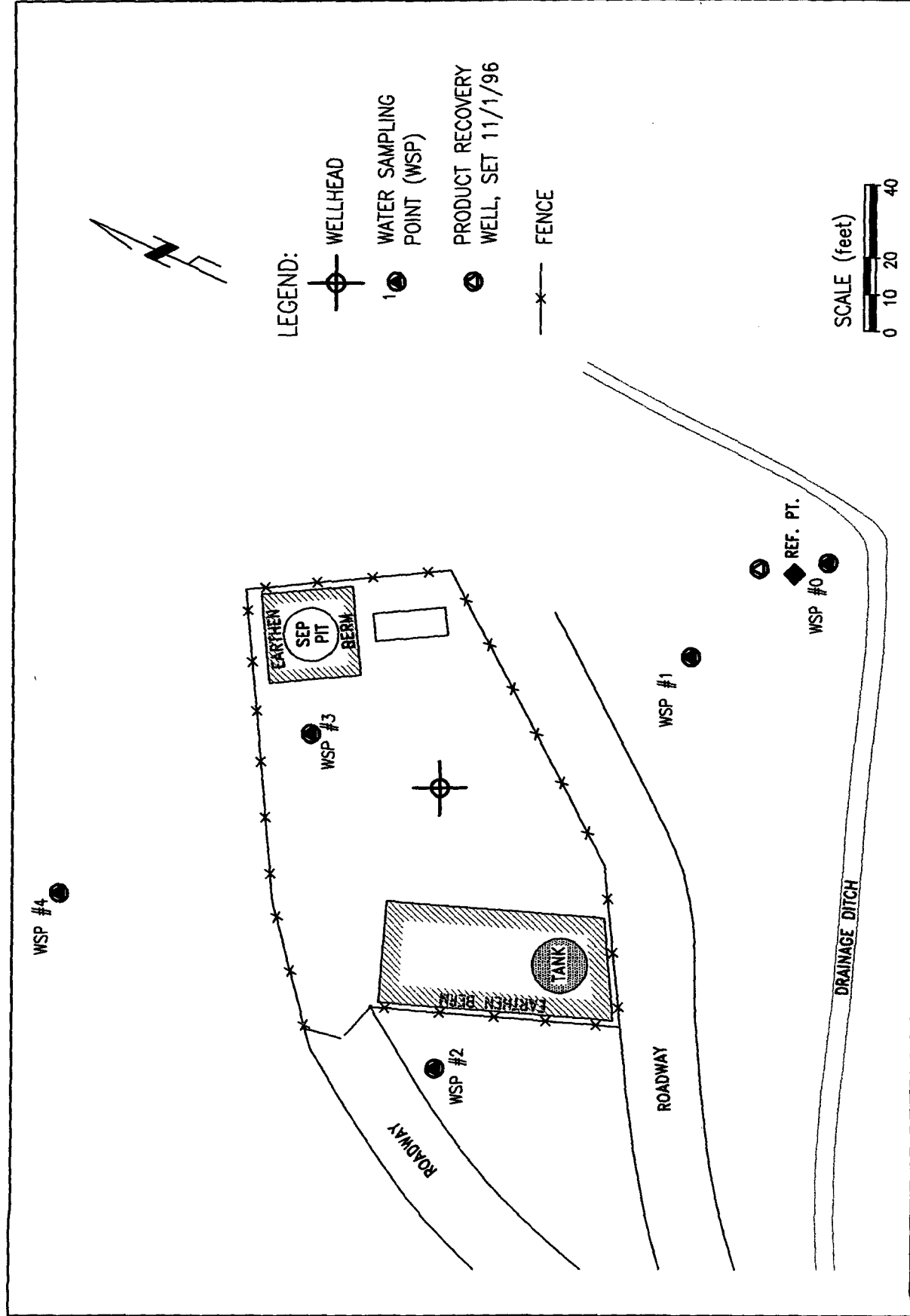
Table 2
BTEX Analytical Summary
Farmington B Com 1
Unit H, Sec. 12, T29N, R12W

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	
3/12/02	0203023-01A			1.8	BDL	19	135	
6/19/02	0206028-01A			3.2	BDL	26.0	200.0	
9/17/02	0209017-01A			3.3	BDL	23.0	186.0	
WQCC	ACTION	LEVELS		10.0	750.0	750.0	620.0	

BDL Below Detection Levels

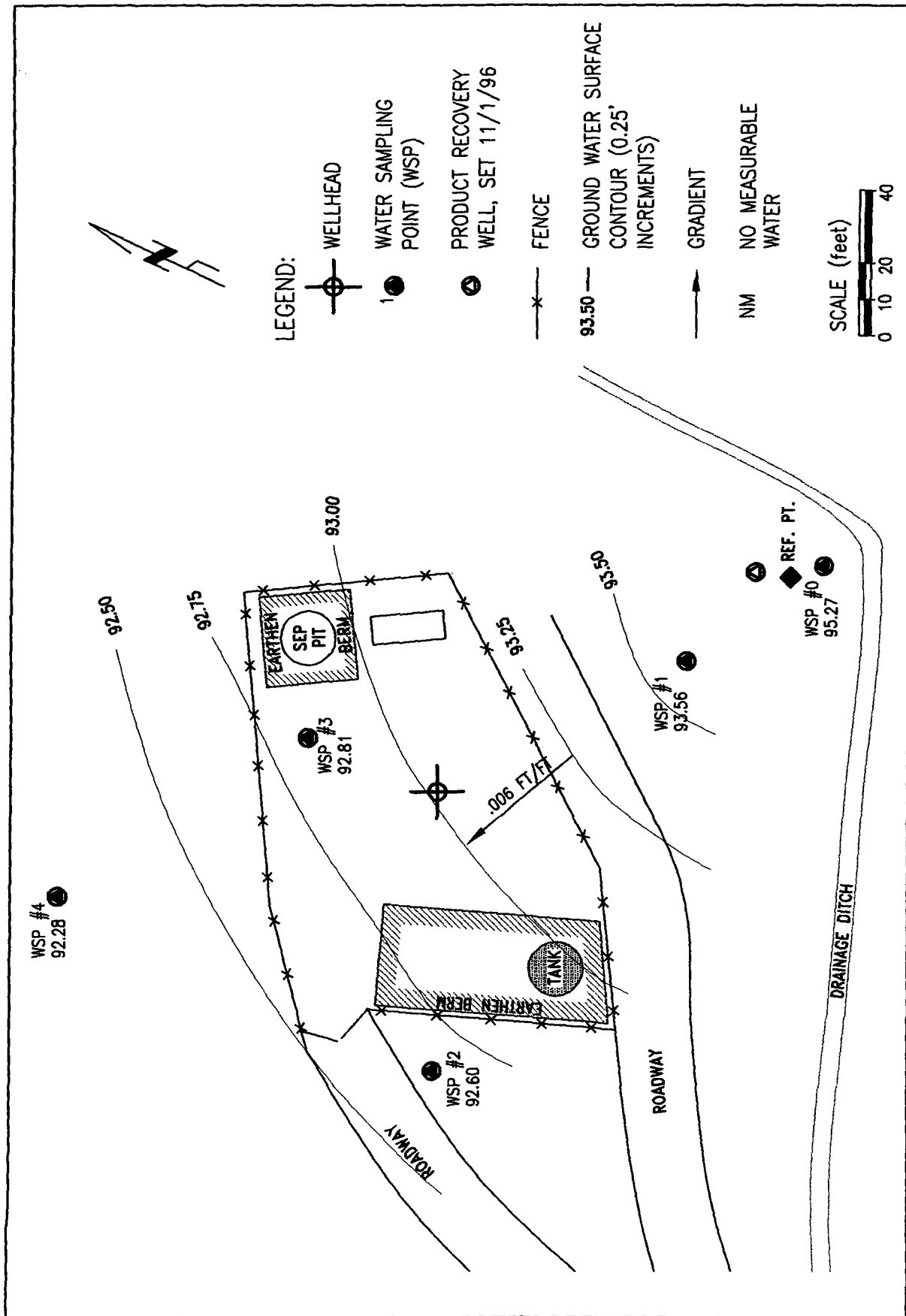
Table 2
BTEX Analytical Summary
Farmington B Com 1
Unit H, Sec. 12, T29N, R12W

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



c:\dd2\4-1325\01.dwg site

 Civil/Environmental Scientists & Engineers 618 E. MURRAY DR. PH. (805) 886-8667 FARMINGTON, NM 87401 FAX (805) 887-1486		APPROVED:		DATE:	
DRWN BY: JNAKAI		DATE: 2/24/03		SITE SKETCH	
CHK'D BY:		DATE:		CONOCO B COM #1 FARMINGTON, NM	
PROJECT NO: 4-1325		SHEET: 1 OF 4			



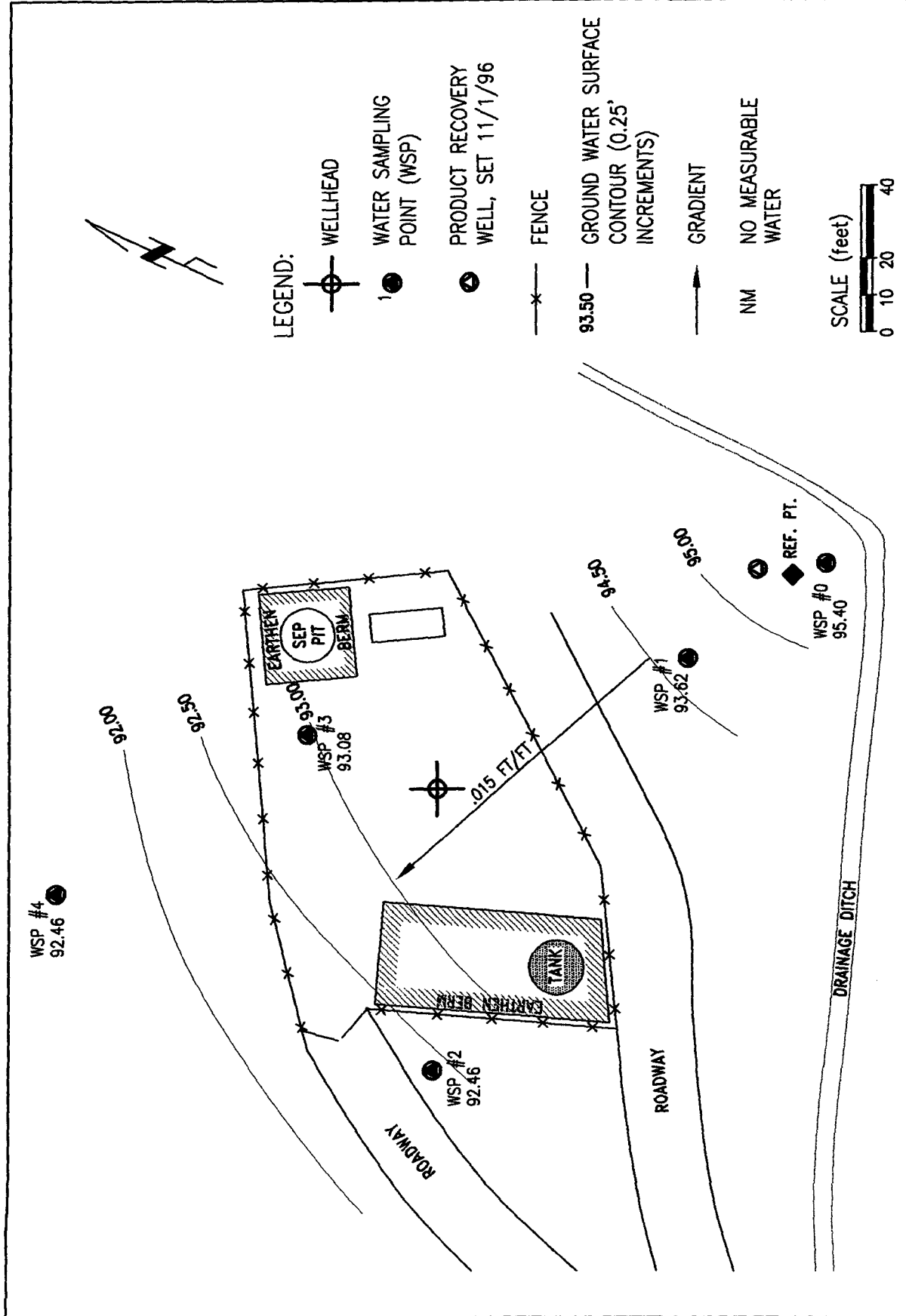
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GROUND WATER SURFACE MAP
MARCH 12, 2002
CONOCO B COM #1
FARMINGTON, NM

APPROVED:	DATE:
DRWN BY: JNAKAI	DATE: 2/24/03
CHK'D BY:	DATE:
PROJECT NO: 4-1325	SHEET: 2 OF 4



*Civil / Environmental
Scientists & Engineers*
612 E. MURRAY DR. PH. (806) 385-5667
FARMINGTON, NM 87401 FAX (806) 387-1498



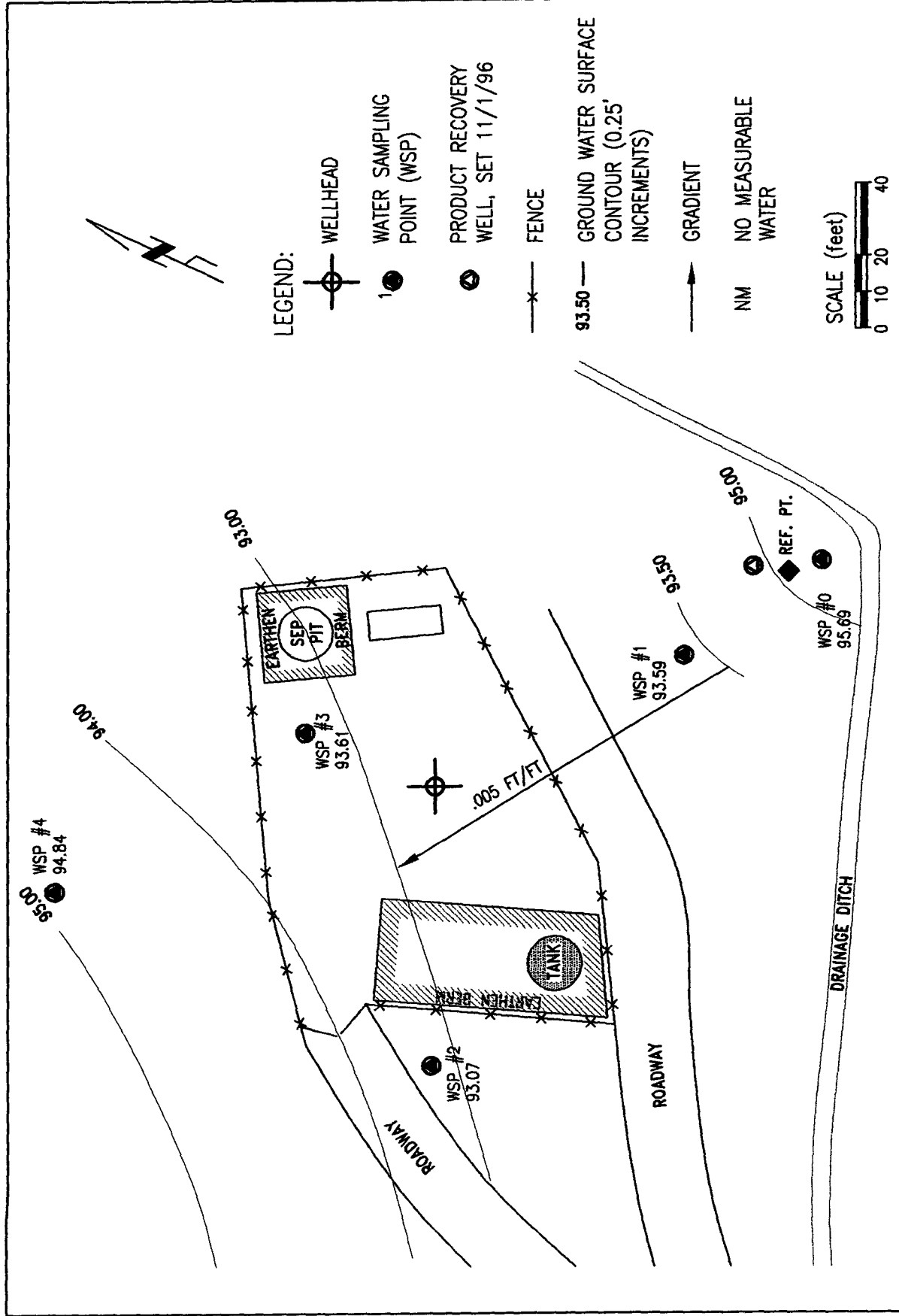
c:\ddr\2-4-1325\01.dwg June

GROUND WATER SURFACE MAP
JUNE 19, 2002
CONOCO B COM #1
FARMINGTON, NM

APPROVED:	DATE:
DRWN BY: JNAKA	DATE: 2/24/03
CHK'D BY:	DATE:
PROJECT NO: 4-1325	SHEET: 3 OF 4



Civil / Environmental Scientists & Engineers
612 E. MURRAY DR. PH. (805) 888-6667
FARMINGTON, NM 87401 FAX (805) 887-1466



c:\ddk2\4-1325\01.dwg-sep

GROUND WATER SURFACE MAP
SEPTEMBER 17, 2002
CONOCO B COM #1
FARMINGTON, NM

APPROVED:	DATE:
DRWN BY: JINAKAI	DATE: 2/24/03
CHK'D BY:	DATE:
PROJECT NO: 4-1325	SHEET: 4 OF 4



Civil / Environmental Scientists & Engineers
 618 E. MURRAY DR. FARMINGTON, NM 87401
 TEL. (505) 856-5667 FAX (505) 857-1486

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



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

March 18, 2002

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.: 0203023

Dear John Hagstrom,

On Site Technologies, LTD. received 1 sample on 03/12/2002 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 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: 18-Mar-02

CLIENT: On Site Technologies Limited
Project: 4-1325; Conoco "B" Com 1
Lab Order: 0203023

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

ANALYTICAL REPORT

Date: 18-Mar-02

Client:	On Site Technologies Limited	Client Sample Info:	Conoco "B" Com 1
Work Order:	0203023	Client Sample ID:	WSP 1
Lab ID:	0203023-01A	Matrix:	AQUEOUS
Project:	4-1325; Conoco "B" Com 1	Collection Date:	03/12/2002 1:00:00 PM
		COC Record:	11822

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: HNR		
Benzene	1.8	0.5		µg/L	1	03/17/2002
Toluene	ND	0.5		µg/L	1	03/17/2002
Ethylbenzene	19	0.5		µg/L	1	03/17/2002
m,p-Xylene	120	1		µg/L	1	03/17/2002
o-Xylene	15	0.5		µg/L	1	03/17/2002

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

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EMAIL: ONSITE@ONSITELTD.COM

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On Site Technologies, LTD.

Date: 18-Mar-02

CLIENT: On Site Technologies Limited

Work Order: 0203023

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

QC SUMMARY REPORT

Method Blank

Sample ID: MB_020317	Batch ID: GC-1_020317	Test Code: SW8021B	Units: µg/L	Analysis Date: 03/17/2002	Prep Date:						
Client ID:	0203023	Run ID: GC-1_020317A		SeqNo: 48743							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									J
Ethylbenzene	.0837	0.5									
m,p-Xylene	ND	1									
Methyl tert-Butyl Ether	.2475	1									J
o-Xylene	ND	0.5									J
Toluene	.1165	0.5									
1,4-Difluorobenzene	104.6	0									
4-Bromochlorobenzene	114.9	0									
Fluorobenzene	105	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: 18-Mar-02

CLIENT: On Site Technologies Limited
 Work Order: 0203023
 Project: 4-1325; Conoco "B" Com 1

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0203007-03AMS	Batch ID: GC-1_020317	Test Code: SW8021B	Units: µg/L	Analysis Date: 03/17/2002				Prep Date:			
Client ID: 0203023	Run ID: GC-1_020317A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte	Result										
Benzene	48.42	0.5	40	10.27	95.4%	70	130				
Ethylbenzene	68.92	0.5	40	29.88	97.6%	70	130				
m,p-Xylene	309.5	1	80	220.2	111.6%	70	130				E
Methyl tert-Butyl Ether	39.75	1	40	0.2069	98.9%	70	130				
o-Xylene	157.9	0.5	40	116.5	103.5%	70	130				
Toluene	57.03	0.5	40	19.27	94.4%	70	130				
1,4-Difluorobenzene	104	0	110	0	94.6%	70	130				
4-Bromochlorobenzene	122.1	0	110	0	111.0%	70	130				
Fluorobenzene	104.2	0	110	0	94.7%	70	130				

Sample ID: 0203007-03AMSD		Batch ID: GC-1_020317		Test Code: SW8021B		Units: µg/L		Analysis Date: 03/17/2002		Prep Date:	
Client ID: 0203023		Run ID: GC-1_020317A		PQL		SPK value		SeqNo: 48745			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	47.88	0.5	40	10.27	94.0%	70	130	48.42	1.1%	15	
Ethylbenzene	68.11	0.5	40	29.88	95.6%	70	130	68.92	1.2%	15	
m,p-Xylene	305.8	1	80	220.2	107.0%	70	130	309.5	1.2%	15	E
Methyl tert-Butyl Ether	40.03	1	40	0.2069	99.6%	70	130	39.75	0.7%	15	
o-Xylene	156.6	0.5	40	116.5	100.2%	70	130	157.9	0.9%	15	
Toluene	56.36	0.5	40	19.27	92.7%	70	130	57.03	1.2%	15	
1,4-Difluorobenzene	104.4	0	110	0	94.9%	70	130	0	0.0%	0	
4-Bromochlorobenzene	121.6	0	110	0	110.5%	70	130	0	0.0%	0	
Fluorobenzene	104.2	0	110	0	94.7%	70	130	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: 18-Mar-02

CLIENT: On Site Technologies Limited
 Work Order: 0203023
 Project: 4-1325; Conoco "B" Com 1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1_020317		Batch ID: GC-1_020317		Test Code: SW8021B		Units: µg/L		Analysis Date: 03/17/2002		Prep Date:		
Client ID:		0203023		Run ID:		GC-1_020317A		SeqNo: 48739				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene		19.12	0.5	20	0	95.6%	85	115				
Ethylbenzene		21.5	0.5	20	0	107.5%	85	115				
m,p-Xylene		40.95	1	40	0	102.4%	85	115				
Methyl tert-Butyl Ether		20	1	20	0	100.0%	85	115				
o-Xylene		19.54	0.5	20	0	97.7%	85	115				
Toluene		18.96	0.5	20	0	94.8%	85	115				
1,4-Difluorobenzene		104.5	0	110	0	95.0%	70	130				
4-Bromochlorobenzene		123.2	0	110	0	112.0%	70	130				
Fluorobenzene		104.9	0	110	0	95.4%	70	130				

Sample ID: CCV2_020317		Batch ID: GC-1_020317		Test Code: SW8021B		Units: µg/L		Analysis Date: 03/17/2002		Prep Date:		
Client ID:		0203023		Run ID:		GC-1_020317A		SeqNo: 48740				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene		38.74	0.5	40	0	96.8%	85	115				
Ethylbenzene		39.5	0.5	40	0	98.7%	85	115				
m,p-Xylene		78.34	1	80	0	97.9%	85	115				
Methyl tert-Butyl Ether		40.45	1	40	0	101.1%	85	115				
o-Xylene		39.14	0.5	40	0	97.9%	85	115				
Toluene		38.14	0.5	40	0	95.4%	85	115				
1,4-Difluorobenzene		104.6	0	110	0	95.1%	70	130				
4-Bromochlorobenzene		121.6	0	110	0	110.6%	70	130				
Fluorobenzene		105	0	110	0	95.5%	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: 0203023
 Project: 4-1325; Conoco "B" Com 1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV3_020317		Batch ID: GC-1_020317		Test Code: SW8021B		Units: µg/L		Analysis Date: 03/17/2002		Prep Date:	
Client ID:		0203023		Run ID:		GC-1_020317A		SeqNo: 48741			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.16	0.5	20	0	95.8%	85	115				
Ethylbenzene	19.5	0.5	20	0	97.5%	85	115				
m,p-Xylene	38.58	1	40	0	96.4%	85	115				
Methyl tert-Butyl Ether	19.98	1	20	0	99.9%	85	115				
o-Xylene	19.22	0.5	20	0	96.1%	85	115				
Toluene	18.89	0.5	20	0	94.4%	85	115				
1,4-Difluorobenzene	104.8	0	110	0	95.3%	70	130				
4-Bromochlorobenzene	121	0	110	0	110.0%	70	130				
Fluorobenzene	104.8	0	110	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

On Site Technologies, LTD.

Date: 18-Mar-02

CLIENT: On Site Technologies Limited
Work Order: 0203023
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					
0203006-01A	96	110	96.5					
0203007-03A	95.4	110	95.6					
0203007-03AMS	94.6	111	94.7					
0203007-03AMSD	94.9	110	94.7					
0203014-01A	96.7	110	97.4					
0203014-02A	96.5	109	96.7					
0203016-01A	93.6	108	94					
0203016-02A	87.2	104	88.3					
0203021-01A	96.5	110	96.8					
0203022-01A	93.6	110	94.4					
0203022-02A	85.9	103	92					
0203022-03A	96.2	111	96.5					
0203023-01A	85.9	101	91.9					
CCV1_020317	95	112	95.4					
CCV2_020317	95.1	110	95.5					
CCV3_020317	95.3	110	95.3					
LCS_020317	94.8	110	95					
MB_020317	95.1	104	95.5					

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

* Surrogate recovery outside acceptance limits

[illegible]

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July 10, 2002

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.: 0206028

Dear John Hagstrom,

On Site Technologies, LTD. received 1 sample on 06/19/2002 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 test results, please feel free to call.

Sincerely,

A handwritten signature in black ink, appearing to be 'DC' or '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: 10-Jul-02

CLIENT: On Site Technologies Limited
Project: 4-1325; Conoco B Com 1
Lab Order: 0206028

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).

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ANALYTICAL REPORT

Date: 10-Jul-02

Client:	On Site Technologies Limited	Client Sample Info:	Conoco B Com 1
Work Order:	0206028	Client Sample ID:	WSP1
Lab ID:	0206028-01A	Matrix:	AQUEOUS
Project:	4-1325; Conoco B Com 1	Collection Date:	06/14/2002 2:00:00 PM
		COC Record:	11983

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DWC		
Benzene	3.2	0.5		µg/L	1	06/27/2002
Toluene	ND	0.5		µg/L	1	06/27/2002
Ethylbenzene	26	0.5		µg/L	1	06/27/2002
m,p-Xylene	180	1		µg/L	1	06/27/2002
o-Xylene	20	0.5		µg/L	1	06/27/2002

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

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On Site Technologies, LTD.

Date: 10-Jul-02

CLIENT: On Site Technologies Limited
 Work Order: 0206028
 Project: 4-1325; Conoco B Com 1

QC SUMMARY REPORT

Method Blank

Sample ID: MB_020627	Batch ID: GC-1_020627	Test Code: SW8021B	Units: µg/L	Analysis Date: 06/27/2002				Prep Date: 06/27/2002			
Client ID:	0206028	Run ID:	GC-1_020627A	SeqNo: 52887							
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	.1054	0.5									J
1,4-Difluorobenzene	107.6	0									
4-Bromochlorobenzene	118.6	0									
Fluorobenzene	109.7	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: 10-Jul-02

CLIENT: On Site Technologies Limited

Work Order: 0206028

Project: 4-1325; Conoco B Com 1

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0206041-01AMS		Batch ID: GC-1_020627	Test Code: SW8021B	Units: µg/L	Analysis Date: 06/27/2002		Prep Date: 06/27/2002	
Client ID: 0206028		Run ID: GC-1_020627A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit
Analyte	Result							
Benzene	1171		5	400	769.1	100.6%	70	130
Ethylbenzene	763.9		5	400	352.2	102.9%	70	130
m,p-Xylene	1554		10	800	774.5	97.4%	70	130
Methyl tert-Butyl Ether	601.3		10	400	205	99.1%	70	130
o-Xylene	474.6		5	400	88.25	96.6%	70	130
Toluene	597.6		5	400	204.9	98.2%	70	130
1,4-Difluorobenzene	1065		0	1100	0	96.8%	70	130
4-Bromochlorobenzene	1210		0	1100	0	110.0%	70	130
Fluorobenzene	1087		0	1100	0	98.8%	70	130

Sample ID: 0206041-01AMS		Batch ID: GC-1_020627	Test Code: SW8021B	Units: µg/L	Analysis Date: 06/27/2002		Prep Date: 06/27/2002	
Client ID: 0206028		Run ID: GC-1_020627A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit
Analyte	Result							
Benzene	1127		5	400	769.1	89.6%	70	130
Ethylbenzene	735.7		5	400	352.2	95.9%	70	130
m,p-Xylene	1498		10	800	774.5	90.5%	70	130
Methyl tert-Butyl Ether	591.9		10	400	205	96.7%	70	130
o-Xylene	460.1		5	400	88.25	93.0%	70	130
Toluene	574.8		5	400	204.9	92.5%	70	130
1,4-Difluorobenzene	1054		0	1100	0	95.9%	70	130
4-Bromochlorobenzene	1208		0	1100	0	109.8%	70	130
Fluorobenzene	1084		0	1100	0	98.5%	70	130

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: 10-Jul-02

CLIENT: On Site Technologies Limited
 Work Order: 0206028
 Project: 4-1325; Conoco B Com 1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS_020627	Batch ID: GC-1_020627	Test Code: SW8021B	Units: µg/L	Analysis Date: 06/27/2002	Prep Date: 06/27/2002						
Client ID:	0206028	Run ID: GC-1_020627A		SeqNo: 52886							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.85	0.5	40	0	97.1%	80	120				
Ethylbenzene	39.46	0.5	40	0	98.7%	80	120				
m,p-Xylene	78.4	1	80	0	98.0%	80	120				
Methyl tert-Butyl Ether	39.58	1	40	0	99.0%	80	120				
o-Xylene	38.05	0.5	40	0	95.1%	80	120				
Toluene	37.88	0.5	40	0.1054	94.4%	80	120				
1,4-Difluorobenzene	106.6	0	110	0	97.0%	70	130				
4-Bromochlorobenzene	120.1	0	110	0	109.2%	70	130				
Fluorobenzene	108.9	0	110	0	99.0%	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

On Site Technologies, LTD.

Date: 10-Jul-02

CLIENT: On Site Technologies Limited

Work Order: 0206028

Project: 4-1325; Conoco B Com 1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: GCV1_020627		Batch ID: GC-1_020627		Test Code: SW8021B		Units: µg/L		Analysis Date: 06/27/2002				Prep Date: 06/27/2002	
Client ID: 0206028		Run ID: GC-1_020627A		PQL		SPK value		SPK Ref Val		%REC		SeqNo: 52883	
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	20.33	0.5	20	0	101.6%	85	115						
m,p-Xylene	40.7	1	40	0	101.7%	85	115						
Methyl tert-Butyl Ether	19.9	1	20	0	99.5%	85	115						
o-Xylene	19.56	0.5	20	0	97.8%	85	115						
Toluene	19.51	0.5	20	0	97.5%	85	115						
1,4-Difluorobenzene	106.7	0	110	0	97.0%	70	130						
4-Bromochlorobenzene	117.7	0	110	0	107.0%	70	130						
Fluorobenzene	109.6	0	110	0	99.6%	70	130						

Sample ID: CCV2_020627		Batch ID: GC-1_020627		Test Code: SW8021B		Units: µg/L		Analysis Date: 06/27/2002		Prep Date: 06/27/2002	
Client ID: 0206028		Run ID: GC-1_020627A		SeqNo: 52884							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.17	0.5	20	0	95.9%	85	115				
Ethylbenzene	19.37	0.5	20	0	96.9%	85	115				
m,p-Xylene	38.18	1	40	0	95.4%	85	115				
Methyl tert-Butyl Ether	18.95	1	20	0	94.7%	85	115				
o-Xylene	18.69	0.5	20	0	93.5%	85	115				
Toluene	18.54	0.5	20	0	92.7%	85	115				
1,4-Difluorobenzene	109.1	0	110	0	99.2%	70	130				
4-Bromochlorobenzene	123.6	0	110	0	112.4%	70	130				
Fluorobenzene	111.7	0	110	0	101.6%	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: 0206028
 Project: 4-1325; Conoco B Com 1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV3_020627	Batch ID: GC-1_020627	Test Code: SW8021B	Units: µg/L	Analysis Date: 06/27/2002		Prep Date: 06/27/2002					
Client ID:	0206028	Run ID:	GC-1_020627A	SeqNo:	52885						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.74	0.5	40	0	96.8%	85	115				
Ethylbenzene	38.89	0.5	40	0	97.2%	85	115				
m,p-Xylene	76.38	1	80	0	95.5%	85	115				
Methyl tert-Butyl Ether	38.49	1	40	0	96.2%	85	115				
o-Xylene	37.42	0.5	40	0	93.5%	85	115				
Toluene	37.56	0.5	40	0	93.9%	85	115				
1,4-Difluorobenzene	107.9	0	110	0	98.1%	70	130				
4-Bromochlorobenzene	119.1	0	110	0	108.3%	70	130				
Fluorobenzene	111.5	0	110	0	101.4%	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: 10-Jul-02

CLIENT: On Site Technologies Limited
 Work Order: 0206028
 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					
0206028-01A	88	100	105					
0206029-01A	99.2	109	102					
0206030-01A	90.1	103	102					
0206030-03A	96.5	111	100					
0206031-02A	98.4	110	102					
0206031-04A	92.1	107	95.5					
0206039-01A	91.8	112	95.2					
0206041-01A	96.6	110	99					
0206041-01AMS	96.8	110	98.8					
0206041-01AMSD	95.8	110	98.5					
0206041-02A	98.1	112	101					
0206048-01A	97.7	109	101					
0206049-01A	97.6	106	100					
0206049-02A	95.9	107	99.7					
0206050-02A	99.5	113	102					
0206052-01A	96.3	106	100					
CCV1_020627	97	107	99.6					
CCV2_020627	99.2	112	102					
CCV3_020627	98.1	108	101					
LCS_020627	97	109	99					
MB_020627	97.8	108	99.8					

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

Project No. 4-1325

**REPORT
RESULTS TO**

Name	Title
Bill Hagstrom	

Company

Mailing Address

City, State, Zip

Telephone No.

Telex No.

PROJECT LOCATION:

CONOCO B'COM

SAMPLER'S SIGNATURE:

SAMPLE IDENTIFICATION

ME	MATRIX	PRES.
1	1	1
2	2	2
3	3	3
4	4	4
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100	100	100

DATE

TIME

RES.

8" Com" 1 WSP 1

1400	1400
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22

2

LAB ID:

0206078-01A

Relinquished by:

Date/Time 6/19/07

Received by:

Date/Time:

Relinquished by:

Date/Time

Received by:

Date/Time

Relinquished by:

Date/Time

Received by:

Date/Time

Method of Shipment:

46212

Rush	24-48 Hours
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Special Instructions / Remarks:

Authorized by:

Date 6/19/02

(Client Signature Must Accompany Request)

(Client Signature Must Accompany Request)

11983

Date:

Page: 1 of 1

612 E. Murray Dr. • P.O. Box 2606 • Farmington, NM 87499

ina ba, Ltd.

Date: 08-Oct-02

CLIENT: On Site Technologies Limited
Work Order: 0209017
Project: 4-1325; Conoco B "Com" 1

ANALYTICAL QC SUMMARY REPORT

BatchID: R3933

Sample ID	MB_020923	SampType: MBLK	TestCode: BTEX_W	Units: µg/L	Prep Date: 9/25/2002	Run ID: GC-1_020925A						
Client ID: ZZZZ		Batch ID: R3933	TestNo: SW8021B		Analysis Date: 9/25/2002	SeqNo: 58371						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzene	0.0412	0.50									J
Ethylbenzene	0.0587	0.50									J
m,p-Xylene	ND	1.0									
o-Xylene	0.0942	0.50									J
Toluene	0.1038	0.50									J
Surr: 1,4-Difluorobenzene	107.6	0	110	0	97.8	82	112	0	0		
Surr: 4-Bromochlorobenzene	117.7	0	110	0	107	95	124	0	0		
Surr: Fluorobenzene	110.1	0	110	0	100	84	114	0	0		

Sample ID	LCS_020925	SampType: LCS	TestCode: BTEX_W	Units: µg/L	Prep Date: 9/25/2002	Run ID: GC-1_020925A					
Client ID: ZZZZ		Batch ID: R3933	TestNo: SW8021B		Analysis Date: 9/25/2002	SeqNo: 58370					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzene	40.11	0.50	40	0.0412	100	86	106	0	0		
Ethylbenzene	41.09	0.50	40	0.0587	103	88	110	0	0		
m,p-Xylene	82.23	1.0	80	0	103	86	110	0	0		
o-Xylene	39.67	0.50	40	0.0942	98.9	83	110	0	0		
Toluene	39.45	0.50	40	0.1038	98.4	84	105	0	0		
Surr: 1,4-Difluorobenzene	107.3	0	110	0	97.6	82	112	0	0		
Surr: 4-Bromochlorobenzene	122.8	0	110	0	112	95	124	0	0		
Surr: Fluorobenzene	108.1	0	110	0	98.3	84	114	0	0		

Sample ID	0209018-03AMS	SampType: MS	TestCode: BTEX_W	Units: µg/L	Prep Date: 9/25/2002	Run ID: GC-1_020925A					
Client ID: ZZZZZ		Batch ID: R3933	TestNo: SW8021B		Analysis Date: 9/25/2002	SeqNo: 58372					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzene	217.5	2.5	200	21.32	98.1	76	114	0	0		
Ethylbenzene	231.2	2.5	200	28.79	101	80	113	0	0		
m,p-Xylene	894.2	5.0	400	469.7	106	73	118	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

CLIENT: On Site Technologies Limited
 Work Order: 0209017
 Project: 4-1325; Conoco B "Com" 1

ANALYTICAL QC SUMMARY REPORT

BatchID: R3933

Sample ID	0209018-03AMS	SampType: MS	TestCode: BTEX_W	Units: µg/L	Prep Date: 9/25/2002	Run ID: GC-1_020925A					
Client ID: ZZZZ		Batch ID: R3933	TestNo: SW8021B		Analysis Date: 9/25/2002	SeqNo: 58372					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

o-Xylene	194.4	2.5	200	6.976	93.7	82	106	0	0		
Toluene	207.4	2.5	200	2.468	102	80	110	0	0		
Surr: 1,4-Difluorobenzene	510.9	0	550	0	92.9	82	112	0	0		
Surr: 4-Bromochlorobenzene	611.8	0	550	0	111	95	124	0	0		
Surr: Fluorobenzene	518.5	0	550	0	94.3	84	114	0	0		

Sample ID	0209018-03AMSD	SampType: MSD	TestCode: BTEX_W	Units: µg/L	Prep Date: 9/25/2002	Run ID: GC-1_020925A					
Client ID: ZZZZZ		Batch ID: R3933	TestNo: SW8021B		Analysis Date: 9/25/2002	SeqNo: 58373					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzene	211.5	2.5	200	21.32	95.1	76	114	217.5	2.82	15	
Ethylbenzene	225.1	2.5	200	28.79	98.2	80	113	231.2	2.66	15	
m,p-Xylene	872.5	5.0	400	469.7	101	73	118	894.2	2.46	15	
o-Xylene	189.7	2.5	200	6.976	91.4	82	106	194.4	2.44	15	
Toluene	199.8	2.5	200	2.468	98.6	80	110	207.4	3.77	15	
Surr: 1,4-Difluorobenzene	515.1	0	550	0	93.7	82	112	0	0	0	
Surr: 4-Bromochlorobenzene	616	0	550	0	112	95	124	0	0	0	
Surr: Fluorobenzene	519.8	0	550	0	94.5	84	114	0	0	0	

Sample ID	CCV1_020925	SampType: CCV	TestCode: BTEX_W	Units: µg/L	Prep Date: 9/25/2002	Run ID: GC-1_020925A					
Client ID: ZZZZZ		Batch ID: R3933	TestNo: SW8021B		Analysis Date: 9/25/2002	SeqNo: 58367					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzene	20.2	0.50	20	0	101	85	115	0	0		
Ethylbenzene	20.68	0.50	20	0	103	85	115	0	0		
m,p-Xylene	40.89	1.0	40	0	102	85	115	0	0		
o-Xylene	19.84	0.50	20	0	99.2	85	115	0	0		
Toluene	19.77	0.50	20	0	98.9	85	115	0	0		
Surr: 1,4-Difluorobenzene	107.5	0	110	0	97.7	82	112	0	0		
Surr: 4-Bromochlorobenzene	120.7	0	110	0	110	95	124	0	0		
Surr: Fluorobenzene	109.1	0	110	0	99.1	84	114	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

CLIENT: On Site Technologies Limited
 Work Order: 0209017
 Project: 4-1325; Conoco B "Com" 1

ANALYTICAL QC SUMMARY REPORT

BatchID: R3933

Sample ID CCV2_020925 SampType: CCV TestCode: BTEX_W Units: µg/L Prep Date: 9/25/2002 Run ID: GC-1_020925A
 Client ID: ZZZZZ Batch ID: R3933 TestNo: SW8021B Analysis Date: 9/25/2002 SeqNo: 58368

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	41.37	0.50	40	0	103	85	115	0	0		
Ethylbenzene	41.99	0.50	40	0	105	85	115	0	0		
m,p-Xylene	83.76	1.0	80	0	105	85	115	0	0		
o-Xylene	40.38	0.50	40	0	101	85	115	0	0		
Toluene	40.53	0.50	40	0	101	85	115	0	0		
Surr: 1,4-Difluorobenzene	106	0	110	0	96.3	82	112	0	0		
Surr: 4-Bromochlorobenzene	125	0	110	0	114	95	124	0	0		
Surr: Fluorobenzene	107.9	0	110	0	98.1	84	114	0	0		

Sample ID CCV3_020925 SampType: CCV TestCode: BTEX_W Units: µg/L Prep Date: 9/25/2002 Run ID: GC-1_020925A
 Client ID: ZZZZZ Batch ID: R3933 TestNo: SW8021B Analysis Date: 9/25/2002 SeqNo: 58369

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.87	0.50	20	0	99.3	85	115	0	0		
Ethylbenzene	20.26	0.50	20	0	101	85	115	0	0		
m,p-Xylene	39	1.0	40	0	97.5	85	115	0	0		
o-Xylene	19.64	0.50	20	0	98.2	85	115	0	0		
Toluene	19.41	0.50	20	0	97.1	85	115	0	0		
Surr: 1,4-Difluorobenzene	107.4	0	110	0	97.6	82	112	0	0		
Surr: 4-Bromochlorobenzene	122.3	0	110	0	111	95	124	0	0		
Surr: Fluorobenzene	109.1	0	110	0	99.2	84	114	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

iina ba, Ltd.

Date: 08-Oct-02

CLIENT: On Site Technologies Limited

Work Order: 0209017

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

Test No: SW8021B

Matrix: W

QC SUMMARY REPORT SURROGATE RECOVERIES

Sample ID	14FBZ	4BCBZ	FLBZ					
0209017-01A	94.6	108	99.4					
0209018-03AMS	92.9	111	94.3					
0209018-03AMSD	93.7	112	94.5					
CCV1_020925	97.7	110	99.1					
CCV2_020925	96.3	114	98.1					
CCV3_020925	97.6	111	99.2					
LCS_020925	97.6	112	98.3					
MB_020923	97.8	107	100					

Acronym	Surrogate	QC Limits
14FBZ	= 1,4-Difluorobenzene	82-112
4BCBZ	= 4-Bromochlorobenzene	95-124
FLBZ	= Fluorobenzene	84-114

* Surrogate recovery outside acceptance limits

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Page 1 of 1

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