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97

REPORTS

DATE:

FEB 2002



February 18, 2002

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

RE: 2001 Annual Ground Water Report
Conoco Location: Shephard & Kelsey #1
Unit L, Sec. 29, T29N, R11W, NMPM, San Juan Co., NM

Project: 2-1362

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 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* (here after known as the monitoring plan), submitted to the New Mexico Oil Conservation Division on October 15, 1998.

Summary Of 2001 Activities:

Per NMOCD direction ground water monitoring was resumed during 2001. Ground water monitoring was conducted during the months of June, September, and December of 2001. The June sampling event included MW-NE, DG 1, SB 12, UG 1, UG 2, and DG-MW. No top of casing elevation has been found for DG-MW.

Based on the June 2002 sampling event findings, the September and December events were limited to the sampling of SB 12, MW-NE, and DG 1.

SB 12 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 the 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 was followed. The laboratory analyses ordered, followed the approved Conoco Ground Water 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.

PO Box 2606
Farmington, NM

505-325-5667

FAX: 505-327-1496

SUMMARY AND CONCLUSIONS:

The following conclusions are based on the 2001 ground water monitoring results and trends, associated with a former production pit at the Shephard & Kelsey #1 well location:

1. SB 12 continues to show BTEX contamination above the New Mexico Water Quality Control Commission (NMWQCC) standards.
2. Ground water monitoring should continue until NMOCD's requirement to have four consecutive quarters with BTEX contamination levels below NMWQCC standards have been met.
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 for closure, plug and abandon all monitoring wells in accordance with NMOCD regulations.

Limitations and Closure:

This annual groundwater 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 geotechnical, petroleum and environmental engineering, and hydrogeology.

This document has been prepared by On Site Technologies for the exclusive use of Conoco, Inc., as it pertains to the referenced well location operated by Conoco.

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

Respectfully submitted,



John Hagstrom.
Environmental Technician

Reviewed by:



Lawrence "Larry" Trujillo
Environmental Specialist

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: Ground Water Potentiometric Maps
Laboratory Results, QA/QC, Chain of Custody

Acknowledgment:
CONOCO, Inc.

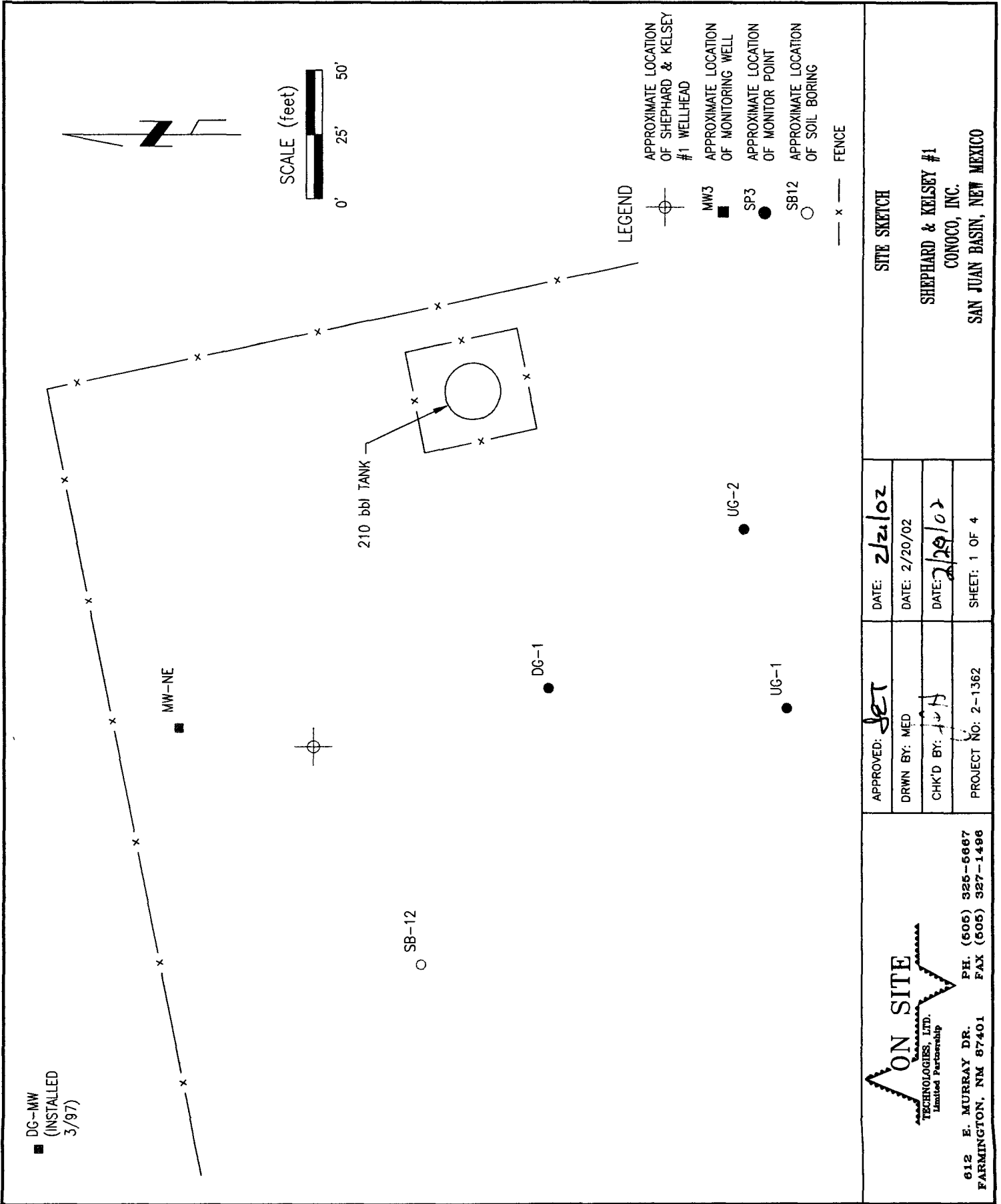
Dan Sedberry SHEAR specialist
(Name/Title)
2/21/02
(Date)

JPH/jph 21362-01.doc

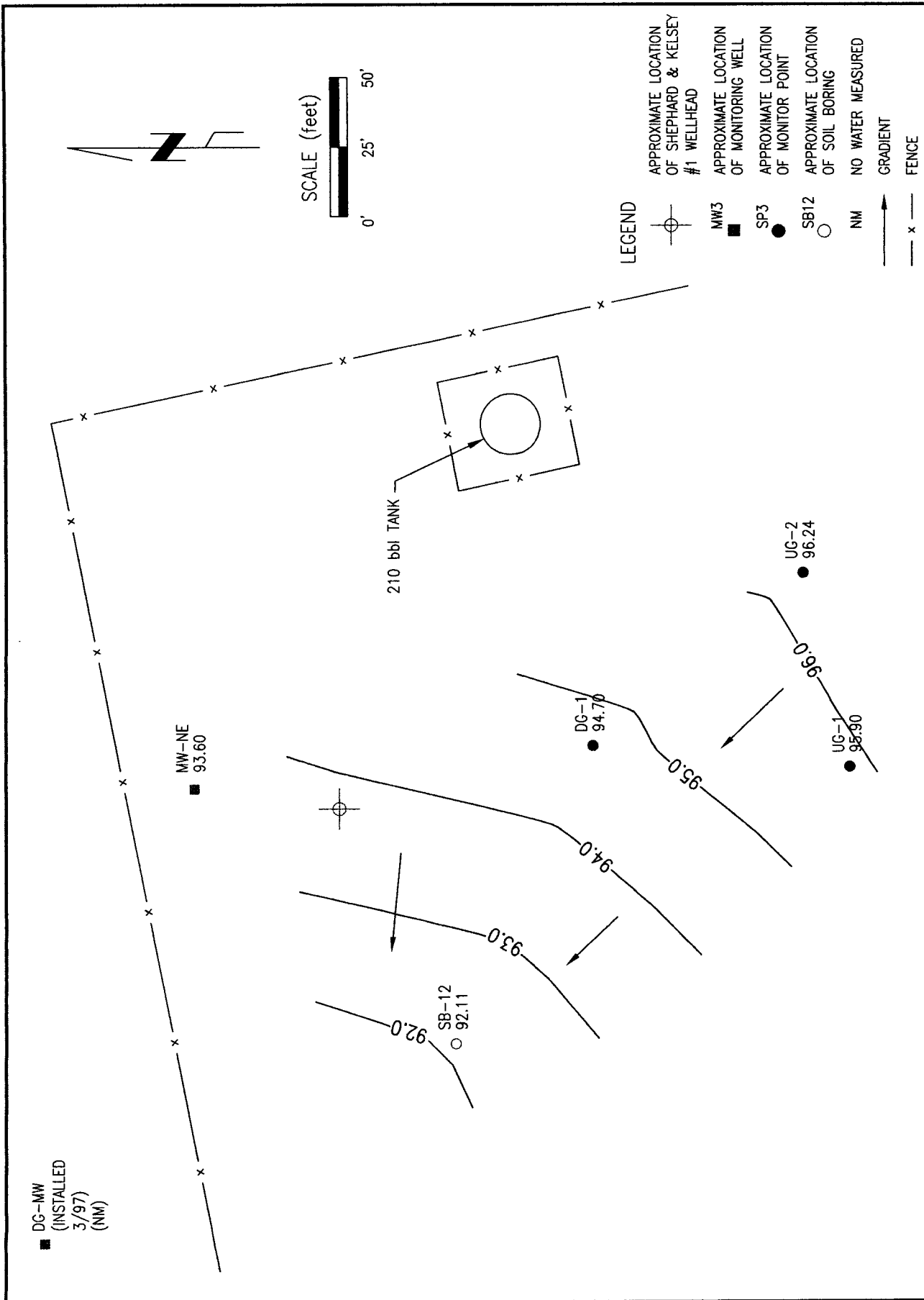
References

On Site Technologies, Ltd., March 21, 1998, letter to Mr. C. John Coy, SHEAR Specialist, Conoco, Inc., Midland Division, regarding: *Monitoring Well Installation & Status of Sampling, Conoco Location, Shephard & Kelsey #1, Unit L, Sec. 29, T29N, R11W, NMPM, San Juan Co., NM.*

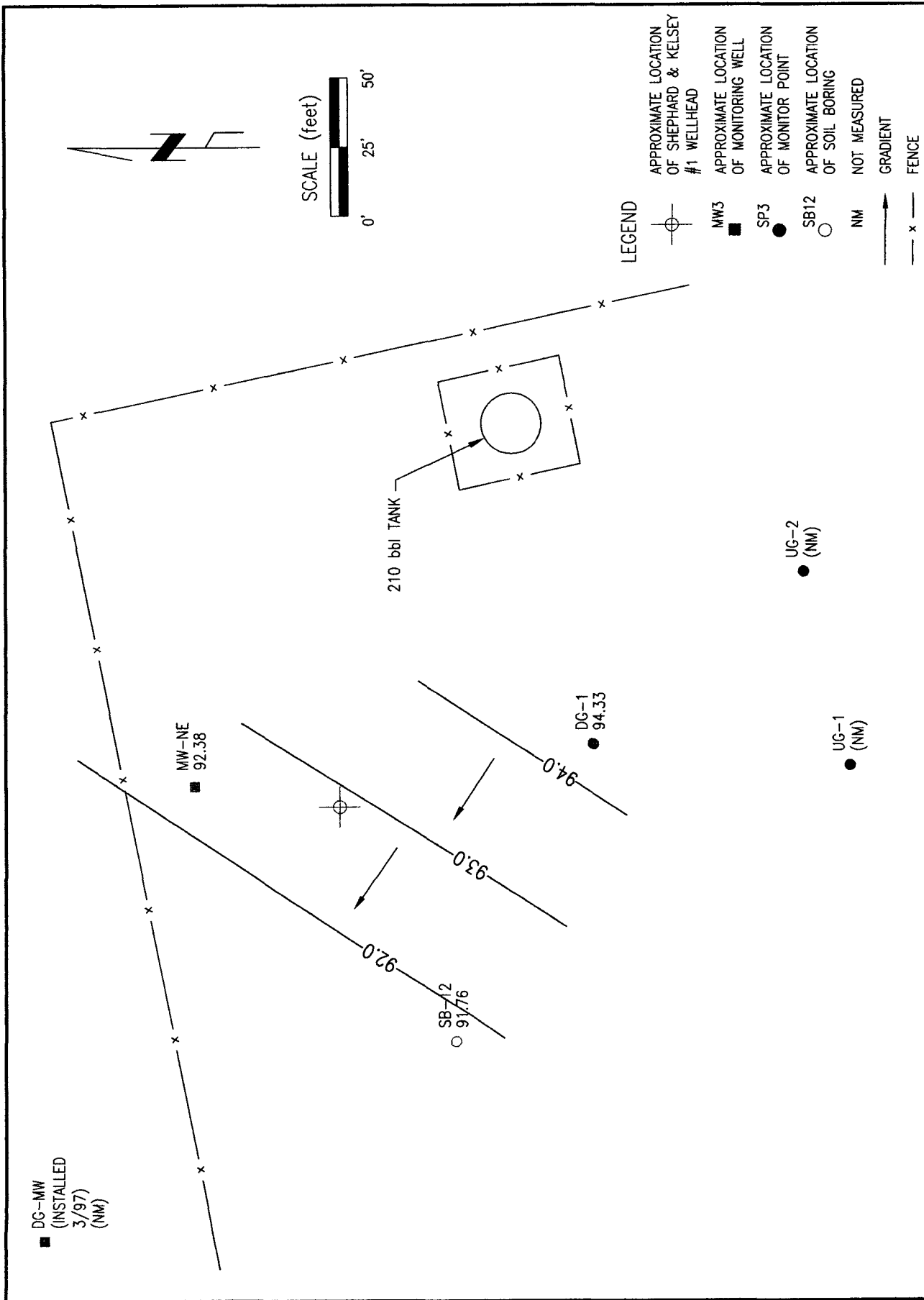
On Site Technologies, Ltd., February 1, 1998, letter to Ms. Shirley Ebert, SHEAR Specialist, Conoco, Inc., Midland Division, regarding: *1997 Annual Ground Water Report, Conoco Location, Shephard & Kelsey #1, Unit L, Sec. 29, T29N, R11W, NMPM, San Juan Co., NM.*



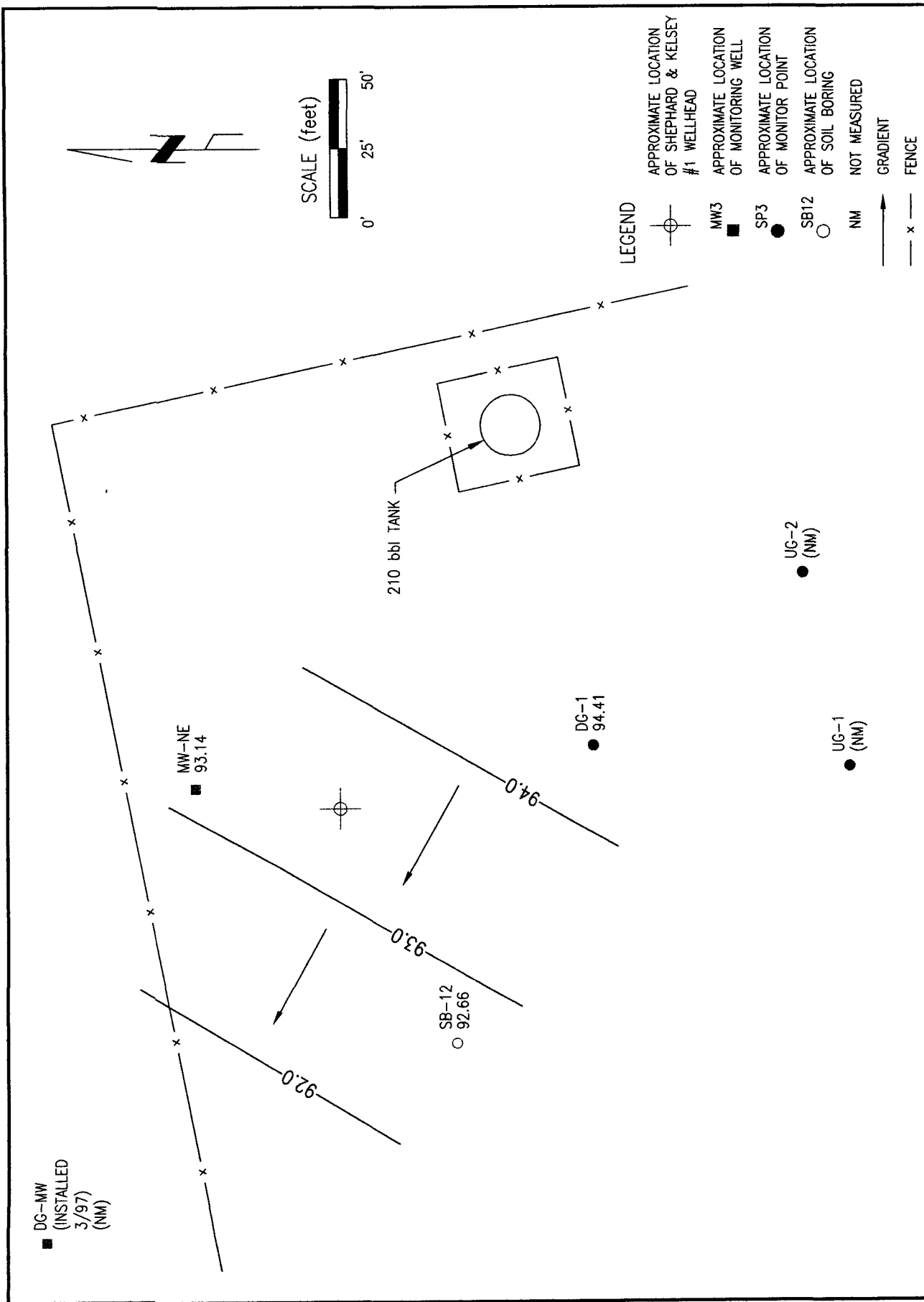
ON SITE		SITE SKETCH	
TECHNOLOGIES, LTD. Limited Partnership		SHEPHARD & KELSEY #1 CONOCO, INC. SAN JUAN BASIN, NEW MEXICO	
612 E. MURRAY DR. FARMINGTON, NM 87401		APPROVED: <i>jet</i>	DATE: 2/24/02
PH. (505) 325-6667 FAX (505) 327-1496		DRWN BY: MED	DATE: 2/20/02
		CHK'D BY: <i>jet</i>	DATE: 2/29/02
		PROJECT NO: 2-1362	SHEET: 1 OF 4



ON SITE TECHNOLOGIES, LTD. Limited Partnership 612 E. MURRAY DR. FARMINGTON, NM 87401 PH. (505) 325-6667 FAX (505) 327-1496		APPROVED: DRWN BY: MED CHK'D BY: <i>[Signature]</i> PROJECT NO: 2-1362	DATE: DATE: 2/20/02 DATE: 3/6/02 SHEET: 2 OF 4	GROUND WATER SURFACE MAP: JUNE 14 & 15, 2001 SHEPARD & KELSEY #1 CONOCO, INC. SAN JUAN BASIN, NEW MEXICO
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ON SITE TECHNOLOGIES, LTD. Limited Partnership 612 E. MURRAY DR. FARMINGTON, NM 87401 PH. (505) 325-6667 FAX (505) 327-1496		APPROVED: DRWN BY: MED CHK'D BY: JH	DATE: DATE: 2/20/02 DATE: 2/20/02	SHEET: 3 OF 4
GROUND WATER SURFACE MAP: SEPTEMBER 19, 2002 SHEPHARD & KELSEY #1 CONOCO, INC. SAN JUAN BASIN, NEW MEXICO				



ON SITE TECHNOLOGIES, LTD. Limited Partnership 612 E. MURRAY DR. FARMINGTON, NM 87401 PH. (505) 325-6667 FAX (505) 327-1496		APPROVED:	DATE:	GROUND WATER SURFACE MAP: DECEMBER 13, 2002 SHEPHARD & KELSEY #1 CONOCO, INC. SAN JUAN BASIN, NEW MEXICO	
		DRWN BY: MED	DATE: 2/20/02		
		CHK'D BY: <i>[Signature]</i>	DATE: 2/25/02		
		PROJECT NO: 2-1362	SHEET: 4 OF 4		

On Site Technologies, Ltd.

Table 1

Groundwater Level Summary
Shephard & Kelsey #1
Unit L, Sec. 29, T29N, R11W

Well Number	Top of Casing Elevation* (ft)	Total Depth of Well (ft)*	Well Type	Screen Interval (ft) (BGS) *	Sample Date	Depth to Groundwater (ft) (BTOC)*	Relative Groundwater Elevation (ft)
MW-NE	100.0	5.42		4.0	06/12/96	2.54	97.46
					09/16/97	NM	
					12/02/97	2.31	97.69
					3/13/98	2.19	97.81
					6/9/98	2.12	97.81
					9/14/98	3.28	97.88
					6/14/01	6.4	93.60
					9/19/01	7.62	92.38
					12/13/01	6.86	93.14
DG 1	100.895	9.05		4.0	6/15/01	6.15	94.70
					9/19/01	6.57	94.33
					12/13/01	6.49	94.41
SB 12	99.01	11.31		4.0	6/14/01	6.9	92.11
					9/19/01	7.25	91.76
					12/13/01	6.39	92.62
UG 1	101.71	9.83		4.0	6/14/01	5.81	95.90
UG 2	101.23	9.84		4.0	6/14/01	4.99	96.24
DG-MW	unknown	5.42		4.0	6/15/01	2.25	

BGS - approximate measurements taken as Below Ground Surface

BTOC - Below Top of Casing

NM - Not Measured

gw1362.doc

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Table 2

BTEX Analytical Summary

Shephard & Kelsey #1

Unit L, Sec. 29, T29N, R11W

Sample Date	Sample ID#	Monitor Well	Remarks	BTEX per EPA 8020 (ppb)				
				Benzene	Toluene	Ethylbenzene	Total Xylene	Total BTEX
07/18/97	0396G01420	DG#1	IML	10.5	36.3	280.0	1077.6	1405.4
06/15/01	0106018-01A	DG #1		BDL	BDL	54.0	285.0	339.0
09/19/01	0109026-03A	DG#1		BDL	BDL	BDL	BDL	BDL
12/13/01	0112015-03A	DG#1		BDL	BDL	BDL	BDL	BDL
07/18/96	0369G01419	MW#1	IML	191.0	BDL	77.9	100.0	368.9
03/20/97	14002	MW#1	On Site Lab.	< 0.2	< 0.2	< 0.2	0.2	0.2
06/12/97	14941	MW#1	On Site Lab.	BDL	BDL	BDL	0.2	0.2
09/16/97	*		NOT SAMPLED					
12/05/97	17002	MW#1	On Site Lab.	BDL	BDL	0.2	0.2	0.4
3/13/98	9803055-01A	MW#1	On Site Lab.	BDL	BDL	BDL	BDL	BDL
6/9/98	9806032-1A	MW#1	On Site Lab.	BDL	BDL	BDL	BDL	BDL
9/14/98	9809030-01A	MW#1	On Site Lab.	BDL	BDL	BDL	BDL	BDL
WQCC	ACTION	LEVELS		10.0	750.0	750.0	620.0	

BDL Below Detection Limits

On Site Technologies

Table 2

BTEX Analytical Summary

Shephard & Kelsey #1

Unit L, Sec. 29, T29N, R11W

Sample Date	Sample ID#	Monitor Well	Remarks	BTEX per EPA 8020 (ppb)				
				Benzene	Toluene	Ethylbenzene	Total Xylene	Total BTEX
06/14/01	0106016-01A	UG 1		BDL	BDL	BDL	BDL	0
06/14/01	0106016-02A	UG 2		BDL	BDL	BDL	BDL	0
06/14/01	0106016-03A	MW-NE		9.6	BDL	8.3	1.9	19.8
09/19/01	0109026-01A	MW-NE		24.0	0.7	18.0	26.5	69.2
12/13/01	0112015-01A	MW-NE		10.0	BDL	6.0	4.7	20.7
06/14/01	0106016-04A	SB 12		42.0	5.50	72.0	370.0	489.5
09/19/01	0109026-02A	SB 12		110.0	BDL	120.0	810.0	1040.0
12/13/01	0112015-02A	SB 12		28.0	BDL	63.0	322.9	413.9
06/15/01	0106018-02A	DG-MW		BDL	BDL	BDL	BDL	BDL
WQCC	ACTION	LEVELS		10.0	750.0	750.0	620.0	

* Well not sampled 9/16/97 due to area around well flooded.

BDL Below Detection Limits

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LAB: (505) 325-1556
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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: 4-1427; Conoco Shephard & Kelsey 1

Order No.: 0106016

Dear John Hagstrom,

On Site Technologies, LTD. received 4 samples 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 over a horizontal line.

David Cox

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

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LAB: (505) 325-1556
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On Site Technologies, LTD.

Date: 04-Jul-01

CLIENT: On Site Technologies Limited
Project: 4-1427; Conoco Shephard & Kelsey 1
Lab Order: 0106016

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: 04-Jul-01

Client:	On Site Technologies Limited	Client Sample Info:	Shephard & Kelsey 1
Work Order:	0106016	Client Sample ID:	UG 1
Lab ID:	0106016-01A	Matrix:	AQUEOUS
Project:	4-1427; Conoco Shephard & Kelsey 1	Collection Date:	6/14/2001 2:25:00 PM
		COC Record:	11342

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	6/27/2001
Toluene	ND	0.5		µg/L	1	6/27/2001
Ethylbenzene	ND	0.5		µg/L	1	6/27/2001
m,p-Xylene	ND	1		µg/L	1	6/27/2001
o-Xylene	ND	0.5		µg/L	1	6/27/2001

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 4

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LAB: (505) 325-1556
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ANALYTICAL REPORT

Date: 04-Jul-01

Client:	On Site Technologies Limited	Client Sample Info:	Shephard & Kelsey 1
Work Order:	0106016	Client Sample ID:	UG 2
Lab ID:	0106016-02A	Matrix:	AQUEOUS
Project:	4-1427; Conoco Shephard & Kelsey 1	Collection Date:	6/14/2001 2:50:00 PM
		COC Record:	11342

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	6/26/2001
Toluene	ND	0.5		µg/L	1	6/26/2001
Ethylbenzene	ND	0.5		µg/L	1	6/26/2001
m,p-Xylene	ND	1		µg/L	1	6/26/2001
o-Xylene	ND	0.5		µg/L	1	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

2 of 4

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LAB: (505) 325-1556
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ANALYTICAL REPORT

Date: 04-Jul-01

Client:	On Site Technologies Limited	Client Sample Info:	Shephard & Kelsey 1
Work Order:	0106016	Client Sample ID:	MW-NE
Lab ID:	0106016-03A	Matrix:	AQUEOUS
Project:	4-1427; Conoco Shephard & Kelsey 1	Collection Date:	6/14/2001 3:10:00 PM
		COC Record:	11342

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	9.6	0.5		µg/L	1	6/27/2001
Toluene	ND	0.5		µg/L	1	6/27/2001
Ethylbenzene	8.3	0.5		µg/L	1	6/27/2001
m,p-Xylene	1.9	1		µg/L	1	6/27/2001
o-Xylene	ND	0.5		µg/L	1	6/27/2001

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

3 of 4

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

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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:	Shephard & Kelsey 1
Work Order:	0106016	Client Sample ID:	SB 12
Lab ID:	0106016-04A	Matrix:	AQUEOUS
Project:	4-1427; Conoco Shephard & Kelsey 1	Collection Date:	6/14/2001 4:00:00 PM
		COC Record:	11342

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	42	2.5		µg/L	5	6/26/2001
Toluene	5.5	2.5		µg/L	5	6/26/2001
Ethylbenzene	72	2.5		µg/L	5	6/26/2001
m,p-Xylene	370	5		µg/L	5	6/26/2001
o-Xylene	ND	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

4 of 4

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: 0106016

Project: 4-1427; Conoco Shephard & Kelsey 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:	0106016	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			
Ethylbenzene	.2547	0.5			J
m,p-Xylene	.2921	1			J
Methyl tert-Butyl Ether	ND	1			
o-Xylene	.3507	0.5			J
Toluene	.116	0.5			J

Sample ID: MB1	Batch ID: GC-1_010627	Test Code: SW8021B	Units: µg/L	Analysis Date 6/27/2001	Prep Date:
Client ID:	0106016	Run ID: GC-1_010627A		SeqNo: 39239	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Benzene	ND	0.5			
Ethylbenzene	.118	0.5			J
m,p-Xylene	.1558	1			J
Methyl tert-Butyl Ether	ND	1			
o-Xylene	ND	0.5			
Toluene	.0835	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: 0106016

Project: 4-1427; Conoco Shephard & Kelsey 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:		0106016		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:		0106016		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

CLIENT: On Site Technologies Limited

Work Order: 0106016

Project: 4-1427; Conoco Shephard & Kelsey 1

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0106014-02AMS		Batch ID: GC-1_010627		Test Code: SW8021B		Units: µg/L		Analysis Date 6/27/2001		Prep Date:	
Client ID:		0106016		Run ID: GC-1_010627A				SeqNo: 39240			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	818.1	10	800	22.78	99.4%	70	130				
Ethylbenzene	1299	10	800	491.4	100.9%	70	130				
m,p-Xylene	5471	20	1600	3944	95.4%	70	130				
Methyl tert-Butyl Ether	780.8	20	800	0	97.6%	70	130				
o-Xylene	834.8	10	800	4.008	103.8%	70	130				
Toluene	827.2	10	800	4.98	102.8%	70	130				

Sample ID: 0106014-02AMSD		Batch ID: GC-1_010627		Test Code: SW8021B		Units: µg/L		Analysis Date 6/27/2001		Prep Date:	
Client ID:		0106016		Run ID: GC-1_010627A				SeqNo: 39241			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	807.8	10	800	22.78	98.1%	70	130	818.1	1.3%	8	
Ethylbenzene	1281	10	800	491.4	98.7%	70	130	1299	1.4%	7	
m,p-Xylene	5382	20	1600	3944	89.9%	70	130	5471	1.6%	7	
Methyl tert-Butyl Ether	780.7	20	800	0	97.6%	70	130	780.8	0.0%	6	
o-Xylene	826.7	10	800	4.008	102.8%	70	130	834.8	1.0%	6	
Toluene	816.4	10	800	4.98	101.4%	70	130	827.2	1.3%	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: 0106016
Project: 4-1427; Conoco Shephard & Kelsey 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:		0106016		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				

Sample ID: LCS WATER		Batch ID: GC-1_010627	Test Code: SW8021B	Units: µg/L	Analysis Date 6/27/2001		Prep Date:				
Client ID:	0106016	Run ID:	GC-1_010627A		SeqNo:	39238					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	42.76	0.5	40	0	106.9%	80	120				
Ethylbenzene	43.26	0.5	40	0.118	107.8%	80	120				
m,p-Xylene	84.62	1	80	0.1558	105.6%	80	120				
Methyl tert-Butyl Ether	41.6	1	40	0	104.0%	80	120				
o-Xylene	43.25	0.5	40	0	108.1%	80	120				
Toluene	42.8	0.5	40	0.0835	106.8%	80	120				

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: 0106016
Project: 4-1427; Conoco Shephard & Kelsey 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:		0106016	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:		0106016	Run ID:	GC-1_010626A		SeqNo:	39192			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	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

CLIENT: On Site Technologies Limited

Work Order: 0106016

Project: 4-1427; Conoco Shephard & Kelsey 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:		0106016	Run ID: GC-1_010626A			SeqNo: 39193			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	RPDLimit Qual
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		

Sample ID: CCV1 BTEX_0105		Batch ID: GC-1_010627	Test Code: SW8021B	Units: µg/L		Analysis Date 6/27/2001		Prep Date:	
Client ID:		0106016	Run ID: GC-1_010627A			SeqNo: 39235			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	RPDLimit Qual
Benzene	21.38	0.5	20	0	106.9%	85	115		
Ethylbenzene	22.26	0.5	20	0	111.3%	85	115		
m,p-Xylene	43.85	1	40	0	109.6%	85	115		
Methyl tert-Butyl Ether	20.24	1	20	0	101.2%	85	115		
o-Xylene	22.25	0.5	20	0	111.2%	85	115		
Toluene	21.87	0.5	20	0	109.3%	85	115		
1,4-Difluorobenzene	112.1	0	120	0	93.4%	70	130		
4-Bromochlorobenzene	122.8	0	120	0	102.4%	70	130		
Fluorobenzene	112.6	0	120	0	93.8%	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: 0106016
Project: 4-1427; Conoco Shephard & Kelsey 1

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID: CCV2 BTEX_0105		Batch ID: GC-1_010627	Test Code: SW8021B	Units: µg/L		Analysis Date 6/27/2001		Prep Date:	
Client ID:		0106016	Run ID: GC-1_010627A			SeqNo: 39236			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	RPDLimit Qual
Benzene	20.62	0.5	20	0	103.1%	85	115		
Ethylbenzene	21.42	0.5	20	0	107.1%	85	115		
m,p-Xylene	42.33	1	40	0	105.8%	85	115		
Methyl tert-Butyl Ether	20.54	1	20	0	102.7%	85	115		
o-Xylene	21.69	0.5	20	0	108.4%	85	115		
Toluene	21.2	0.5	20	0	106.0%	85	115		
1,4-Difluorobenzene	113	0	120	0	94.2%	70	130		
4-Bromochlorobenzene	121.3	0	120	0	101.1%	70	130		
Fluorobenzene	111.7	0	120	0	93.1%	70	130		

Sample ID: CCV3 BTEX_0105		Batch ID: GC-1_010627	Test Code: SW8021B	Units: µg/L		Analysis Date 6/27/2001		Prep Date:	
Client ID:		0106016	Run ID: GC-1_010627A			SeqNo: 39237			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	RPDLimit Qual
Benzene	39.57	0.5	40	0	98.9%	85	115		
Ethylbenzene	41.04	0.5	40	0	102.6%	85	115		
m,p-Xylene	80.35	1	80	0	100.4%	85	115		
Methyl tert-Butyl Ether	38.87	1	40	0	97.2%	85	115		
o-Xylene	41.33	0.5	40	0	103.3%	85	115		
Toluene	40.4	0.5	40	0	101.0%	85	115		
1,4-Difluorobenzene	112.8	0	120	0	94.0%	70	130		
4-Bromochlorobenzene	124.6	0	120	0	103.8%	70	130		
Fluorobenzene	111.9	0	120	0	93.2%	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

On Site Technologies, LTD.

Date: 04-Jul-01

CLIENT: On Site Technologies Limited
Work Order: 0106016
Project: 4-1427; Conoco Shephard & Kelsey
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
0106014-02A	94.8	102	93.6
0106014-02AMS	93	103	93.2
0106014-02AMSD	94	103	92.9
0106014-03A	92.6	102	93.6
0106014-03AMS	91.8	103	91.3
0106014-03AMSD	92	104	91.1
0106014-04A	91.3	112	90.6
0106015-01A	91.5	96.6	93.3
0106016-01A	93.4	102	94
0106016-02A	94	103	93.6
0106016-03A	93.8	101	92.9
0106016-04A	91.7	100	91.9
0106017-01A	96.8	104	95.8
0106018-01A	92.7	100	96
0106018-02A	94.3	105	94.4
0106037-01A	95.7	104	94
0106037-02A	89.8	96.3	89.7
0106037-03A	93.2	99.6	91.9
0106037-04A	91.5	97.9	91
0106037-05A	93.8	99.2	91.9
0106037-06A	95.7	102	94
0106037-07A	92.8	100	93.7
0106037-08A	94.1	98	93
0106037-09A	95.2	98.9	93.8
0106037-10A	95.6	103	94.1
0106037-11A	95.2	101	93.6

Acronym

Surrogate

QC Limits

14FBZ = 1,4-Difluorobenzene
4BCBZ = 4-Bromochlorobenzene
FLBZ = Fluorobenzene

70-130
70-130
70-130

* Surrogate recovery outside acceptance limits

CLIENT: On Site Technologies Limited
Work Order: 0106016
Project: 4-1427; Conoco Shephard & Kelsey
Test No: SW8021B

QC SUMMARY REPORT SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0106037-12A	94.1	109	92.5
0106037-13A	92.6	102	93.5
0106040-01A	94.9	103	93.1
0106040-02A	93.6	105	94.6
0106040-04A	94.5	101	94
0106040-05A	95.2	102	93.7
0106040-06A	93.6	101	94.2
CCV1 BTEX_01052	93.4	102	93.8
CCV2 BTEX_01052	94.2	101	93.1
CCV3 BTEX_01052	94	104	93.2
LCS WATER	94.3	105	92.9
MB1	94.9	104	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

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

July 21, 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: 4-1362; Conoco Shephard & Kelsey 1

Order No.: 0106018

Dear John Hagstrom,

On Site Technologies, LTD. received 2 samples on 6/15/2001 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 "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: 21-Jul-01

CLIENT: On Site Technologies Limited
Project: 4-1362; Conoco Shephard & Kelsey 1
Lab Order: 0106018

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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ANALYTICAL REPORT

Date: 21-Jul-01

Client:	On Site Technologies Limited	Client Sample Info:	Shephard & Kelsey 1
Work Order:	0106018	Client Sample ID:	DG 1
Lab ID:	0106018-01A	Matrix:	AQUEOUS
Project:	4-1362; Conoco Shephard & Kelsey 1	Collection Date:	6/15/2001 9:30:00 AM
		COC Record:	11346

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	6/27/2001
Toluene	ND	0.5		µg/L	1	6/27/2001
Ethylbenzene	54	0.5		µg/L	1	6/27/2001
m,p-Xylene	210	1		µg/L	1	6/27/2001
o-Xylene	75	0.5		µg/L	1	6/27/2001

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 2

P.O. BOX 2606 • FARMINGTON, NM 87499

EMAIL: ONSITE@ONSITELTD.COM

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667
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ANALYTICAL REPORT

Date: 21-Jul-01

Client:	On Site Technologies Limited	Client Sample Info:	Shephard & Kelsey 1
Work Order:	0106018	Client Sample ID:	DG-MW
Lab ID:	0106018-02A	Matrix:	AQUEOUS
Project:	4-1362; Conoco Shephard & Kelsey 1	Collection Date:	6/15/2001 9:50:00 AM
		COC Record:	11346

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	6/26/2001
Toluene	ND	0.5		µg/L	1	6/26/2001
Ethylbenzene	ND	0.5		µg/L	1	6/26/2001
m,p-Xylene	ND	1		µg/L	1	6/26/2001
o-Xylene	ND	0.5		µg/L	1	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

2 of 2

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: 0106018

Project: 4-1429; Conoco Shephard & Kelsey 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:	0106018	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			
Ethylbenzene	.2547	0.5			J
m,p-Xylene	.2921	1			J
Methyl tert-Butyl Ether	ND	1			
o-Xylene	.3507	0.5			J
Toluene	.116	0.5			J

Sample ID: MB1	Batch ID: GC-1_010627	Test Code: SW8021B	Units: µg/L	Analysis Date 6/27/2001	Prep Date:
Client ID:	0106018	Run ID: GC-1_010627A		SeqNo: 39239	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Benzene	ND	0.5			
Ethylbenzene	.118	0.5			J
m,p-Xylene	.1558	1			J
Methyl tert-Butyl Ether	ND	1			
o-Xylene	ND	0.5			
Toluene	.0835	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: 0106018
 Project: 4-1429; Conoco Shephard & Kelsey 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		SeqNo: 39196	Prep Date:	
Client ID:	0106018	Run ID:	GC-1_010626A						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	RPDLimit
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		SeqNo: 39197	Prep Date:	
Client ID:	0106018	Run ID:	GC-1_010626A						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	RPDLimit
Benzene	412.5	5	400	29.11	95.9%	70	130	420	1.8%
Ethylbenzene	524.7	5	400	81.25	110.9%	70	130	532.6	1.5%
m,p-Xylene	2860	10	800	2062	99.8%	70	130	2918	2.0%
Methyl tert-Butyl Ether	395.6	10	400	1.349	98.6%	70	130	396.6	0.3%
o-Xylene	417.1	5	400	2.196	103.7%	70	130	424	1.6%
Toluene	419.1	5	400	11.43	101.9%	70	130	429.3	2.4%

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: 0106018

Project: 4-1429, Conoco Shephard & Kelsey I

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0106014-02AMS		Batch ID: GC-1_010627		Test Code: SW8021B		Units: µg/L		Analysis Date 6/27/2001		Prep Date:	
Client ID:		0106018		Run ID:		GC-1_010627A		SeqNo: 39240			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	818.1	10	800	22.78	99.4%	70	130				
Ethylbenzene	1299	10	800	491.4	100.9%	70	130				
m,p-Xylene	5471	20	1600	3944	95.4%	70	130				
Methyl tert-Butyl Ether	780.8	20	800	0	97.6%	70	130				
o-Xylene	834.8	10	800	4.008	103.8%	70	130				
Toluene	827.2	10	800	4.98	102.8%	70	130				

Sample ID: 0106014-02AMSD		Batch ID: GC-1_010627		Test Code: SW8021B		Units: µg/L		Analysis Date 6/27/2001		Prep Date:	
Client ID:		0106018		Run ID:		GC-1_010627A		SeqNo: 39241			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	807.8	10	800	22.78	98.1%	70	130	818.1	1.3%	8	
Ethylbenzene	1281	10	800	491.4	98.7%	70	130	1299	1.4%	7	
m,p-Xylene	5382	20	1600	3944	89.9%	70	130	5471	1.6%	7	
Methyl tert-Butyl Ether	780.7	20	800	0	97.6%	70	130	780.8	0.0%	6	
o-Xylene	826.7	10	800	4.008	102.8%	70	130	834.8	1.0%	6	
Toluene	816.4	10	800	4.98	101.4%	70	130	827.2	1.3%	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: 0106018
Project: 4-1429; Conoco Shephard & Kelsey 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:	0106018	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

Sample ID: LCS WATER	Batch ID: GC-1_010627	Test Code: SW8021B	Units: µg/L	Analysis Date 6/27/2001	Prep Date:
Client ID:	0106018	Run ID: GC-1_010627A		SeqNo: 39238	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Benzene	42.76	0.5	40	0	106.9% 80 120
Ethylbenzene	43.26	0.5	40	0.118	107.8% 80 120
m,p-Xylene	84.62	1	80	0.1558	105.6% 80 120
Methyl tert-Butyl Ether	41.6	1	40	0	104.0% 80 120
o-Xylene	43.25	0.5	40	0	108.1% 80 120
Toluene	42.8	0.5	40	0.0835	106.8% 80 120

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: 0106018

Project: 4-1429; Conoco Shephard & Kelsey 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:		0106018	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:		0106018	Run ID:	GC-1_010626A		SeqNo:	39192			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	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

CLIENT: On Site Technologies Limited

Work Order: 0106018

Project: 4-1429; Conoco Shephard & Kelsey 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:		0106018	Run ID: GC-1_010626A			SeqNo: 39193					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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				

Sample ID: CCV1 BTEX_0105		Batch ID: GC-1_010627	Test Code: SW8021B	Units: µg/L		Analysis Date 6/27/2001		Prep Date:			
Client ID:		0106018	Run ID:	GC-1_010627A			SeqNo: 39235				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.38	0.5	20	0	106.9%	85	115				
Ethylbenzene	22.26	0.5	20	0	111.3%	85	115				
m,p-Xylene	43.85	1	40	0	109.6%	85	115				
Methyl tert-Butyl Ether	20.24	1	20	0	101.2%	85	115				
o-Xylene	22.25	0.5	20	0	111.2%	85	115				
Toluene	21.87	0.5	20	0	109.3%	85	115				
1,4-Difluorobenzene	112.1	0	120	0	93.4%	70	130				
4-Bromochlorobenzene	122.8	0	120	0	102.4%	70	130				
Fluorobenzene	112.6	0	120	0	93.8%	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: 0106018

Project: 4-1429; Conoco Shephard & Kelsey 1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV2 BTEX_0105		Batch ID: GC-1_010627	Test Code: SW8021B	Units: µg/L		Analysis Date 6/27/2001		Prep Date:	
Client ID:		0106018	Run ID: GC-1_010627A			SeqNo: 39236			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	RPDLimit Qual
Benzene	20.62	0.5	20	0	103.1%	85	115		
Ethylbenzene	21.42	0.5	20	0	107.1%	85	115		
m,p-Xylene	42.33	1	40	0	105.8%	85	115		
Methyl tert-Butyl Ether	20.54	1	20	0	102.7%	85	115		
o-Xylene	21.69	0.5	20	0	108.4%	85	115		
Toluene	21.2	0.5	20	0	106.0%	85	115		
1,4-Difluorobenzene	113	0	120	0	94.2%	70	130		
4-Bromochlorobenzene	121.3	0	120	0	101.1%	70	130		
Fluorobenzene	111.7	0	120	0	93.1%	70	130		

Sample ID: CCV3 BTEX_0105		Batch ID: GC-1_010627	Test Code: SW8021B	Units: µg/L		Analysis Date 6/27/2001		Prep Date:	
Client ID:		0106018	Run ID: GC-1_010627A			SeqNo: 39237			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	RPDLimit Qual
Benzene	39.57	0.5	40	0	98.9%	85	115		
Ethylbenzene	41.04	0.5	40	0	102.6%	85	115		
m,p-Xylene	80.35	1	80	0	100.4%	85	115		
Methyl tert-Butyl Ether	38.87	1	40	0	97.2%	85	115		
o-Xylene	41.33	0.5	40	0	103.3%	85	115		
Toluene	40.4	0.5	40	0	101.0%	85	115		
1,4-Difluorobenzene	112.8	0	120	0	94.0%	70	130		
4-Bromochlorobenzene	124.6	0	120	0	103.8%	70	130		
Fluorobenzene	111.9	0	120	0	93.2%	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

On Site Technologies, LTD.

Date: 04-Jul-01

CLIENT: On Site Technologies Limited
Work Order: 0106018
Project: 4-1429; Conoco Shephard & Kelsey
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
0106014-02A	94.8	102	93.6
0106014-02AMS	93	103	93.2
0106014-02AMSD	94	103	92.9
0106014-03A	92.6	102	93.6
0106014-03AMS	91.8	103	91.3
0106014-03AMSD	92	104	91.1
0106014-04A	91.3	112	90.6
0106015-01A	91.5	96.6	93.3
0106016-01A	93.4	102	94
0106016-02A	94	103	93.6
0106016-03A	93.8	101	92.9
0106016-04A	91.7	100	91.9
0106017-01A	96.8	104	95.8
0106018-01A	92.7	100	96
0106018-02A	94.3	105	94.4
0106037-01A	95.7	104	94
0106037-02A	89.8	96.3	89.7
0106037-03A	93.2	99.6	91.9
0106037-04A	91.5	97.9	91
0106037-05A	93.8	99.2	91.9
0106037-06A	95.7	102	94
0106037-07A	92.8	100	93.7
0106037-08A	94.1	98	93
0106037-09A	95.2	98.9	93.8
0106037-10A	95.6	103	94.1
0106037-11A	95.2	101	93.6

Acronym

14FBZ

4BCBZ

FLBZ

Surrogate

= 1,4-Difluorobenzene

= 4-Bromochlorobenzene

= Fluorobenzene

QC Limits

70-130

70-130

70-130

* Surrogate recovery outside acceptance limits

CLIENT: On Site Technologies Limited
Work Order: 0106018
Project: 4-1429; Conoco Shephard & Kelsey
Test No: SW8021B

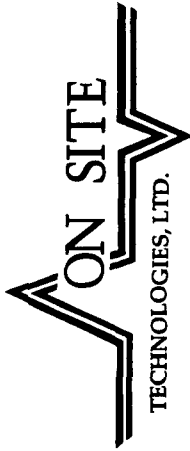
QC SUMMARY REPORT SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0106037-12A	94.1	109	92.5
0106037-13A	92.6	102	93.5
0106040-01A	94.9	103	93.1
0106040-02A	93.6	105	94.6
0106040-04A	94.5	101	94
0106040-05A	95.2	102	93.7
0106040-06A	93.6	101	94.2
CCV1 BTEX_01052	93.4	102	93.8
CCV2 BTEX_01052	94.2	101	93.1
CCV3 BTEX_01052	94	104	93.2
LCS WATER	94.3	105	92.9
MB1	94.9	104	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



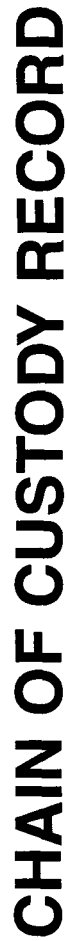
CHAIN OF CUSTODY RECORD

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

Date: 1/16/01

Page: 1 of 1

Purchase Order No.:		Project No. <u>11779</u>		Name <u>John H. Hargrave</u>		Title	
SEND INVOICE TO		Company		Company			
Address		Dept.		Mailing Address			
City, State, Zip				City, State, Zip			
				Telephone No.		Telefax No.	
PROJECT LOCATION:				ANALYSIS REQUESTED			
SAMPLER'S SIGNATURE: <u>James H. Hargrave</u>				LAB ID			
SAMPLE IDENTIFICATION							
DATE	TIME	MATRIX	PRES.				
<u>1/16/01</u>	<u>09:50</u>	<u>1</u>	<u>1</u>				
Relinquished by: <u>John H. Hargrave</u>				Received by: <u>John H. Hargrave</u>			
Relinquished by:				Received by:			
Relinquished by:				Received by:			
Method of Shipment:				Rush ☐ 24-48 Hours ☐ 10 Working Days ☐ By Date ☐			
Authorized by: <u>John H. Hargrave</u> Date <u>1/16/01</u>				Special Instructions / Remarks:			



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

Date:

Page:

of

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

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

September 26, 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: 4-1427; Conoco Shephard & Kelsy #1

Order No.: 0109026

Dear John Hagstrom,

On Site Technologies, LTD. received 3 samples on 9/19/2001 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 "David Cox", is written over a horizontal line.

David Cox

P.O. BOX 2606 • FARMINGTON, NM 87499

EMAIL: ONSITE@ONSITELTD.COM

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

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On Site Technologies, LTD.

Date: 26-Sep-01

CLIENT: On Site Technologies Limited
Project: 4-1427; Conoco Shephard & Kelsy #1
Lab Order: 0109026

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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FAX: (505) 327-1496

ANALYTICAL REPORT

Date: 26-Sep-01

Client:	On Site Technologies Limited	Client Sample Info:	Shephard & Kelsey #1
Work Order:	0109026	Client Sample ID:	MW NE
Lab ID:	0109026-01A	Matrix:	AQUEOUS
Project:	4-1427; Conoco Shephard & Kelsey #1	Collection Date:	9/19/2001 12:00:00 PM
		COC Record:	11550

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: HR		
Benzene	24	0.5		µg/L	1	9/22/2001
Toluene	0.7	0.5		µg/L	1	9/22/2001
Ethylbenzene	18	0.5		µg/L	1	9/22/2001
m,p-Xylene	21	1		µg/L	1	9/22/2001
o-Xylene	5.5	0.5		µg/L	1	9/22/2001

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 3

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OFF: (505) 325-5667
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LAB: (505) 325-1556
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ANALYTICAL REPORT

Date: 26-Sep-01

Client:	On Site Technologies Limited	Client Sample Info:	Shephard & Kelsey #1
Work Order:	0109026	Client Sample ID:	SB 12
Lab ID:	0109026-02A	Matrix:	AQUEOUS
Project:	4-1427; Conoco Shephard & Kelsy #1	Collection Date:	9/19/2001 12:28:00 PM
		COC Record:	11550

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: HR		
Benzene	110	5		µg/L	10	9/23/2001
Toluene	ND	5		µg/L	10	9/23/2001
Ethylbenzene	120	5		µg/L	10	9/23/2001
m,p-Xylene	810	10		µg/L	10	9/23/2001
o-Xylene	ND	5		µg/L	10	9/23/2001

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

2 of 3

P.O. BOX 2606 • FARMINGTON, NM 87499

EMAIL: ONSITE@ONSITELTD.COM

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

ANALYTICAL REPORT

Date: 26-Sep-01

Client:	On Site Technologies Limited	Client Sample Info:	Shephard & Kelsey #1
Work Order:	0109026	Client Sample ID:	DG 1
Lab ID:	0109026-03A	Matrix:	AQUEOUS
Project:	4-1427; Conoco Shephard & Kelsey #1	Collection Date:	9/19/2001 12:40:00 PM
		COC Record:	11550

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: HR		
Benzene	ND	0.5		µg/L	1	9/22/2001
Toluene	ND	0.5		µg/L	1	9/22/2001
Ethylbenzene	ND	0.5		µg/L	1	9/22/2001
m,p-Xylene	ND	1		µg/L	1	9/22/2001
o-Xylene	ND	0.5		µg/L	1	9/22/2001

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

3 of 3

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

On Site Technologies, LTD.

Date: 26-Sep-01

CLIENT: On Site Technologies Limited

Work Order: 0109026

Project: 4-1427; Conoco Shephard & Kelsy #1

QC SUMMARY REPORT

Method Blank

Sample ID: MB1	Batch ID: GC-1_010922	Test Code: SW8021B	Units: µg/L	Analysis Date 9/22/2001	Prep Date:
Client ID:	0109026	Run ID: GC-1_010922A		SeqNo: 42584	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Benzene	.0521	0.5			J
Ethylbenzene	.2728	0.5			J
m,p-Xylene	ND	1			
Methyl tert-Butyl Ether	.3639	1			J
o-Xylene	ND	0.5			
Toluene	.1163	0.5			J

Sample ID: MB1	Batch ID: GC-1_010923	Test Code: SW8021B	Units: µg/L	Analysis Date 9/23/2001	Prep Date:
Client ID:	0109026	Run ID: GC-1_010923A		SeqNo: 42596	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Benzene	.0422	0.5			J
Ethylbenzene	ND	0.5			
m,p-Xylene	ND	1			
Methyl tert-Butyl Ether	ND	1			
o-Xylene	ND	0.5			
Toluene	.1251	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: 26-Sep-01

CLIENT: On Site Technologies Limited
Work Order: 0109026
Project: 4-1427; Conoco Shephard & Kelsy #1

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0109023-09AMS		Batch ID: GC-1_010922		Test Code: SW8021B		Units: µg/L		Analysis Date 9/22/2001		Prep Date:	
Client ID:		0109026		Run ID: GC-1_010922A				SeqNo: 42585			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2174	25	2000	94.19	104.0%	78	117				
Ethylbenzene	2143	25	2000	53.24	104.5%	79	121				
m,p-Xylene	4164	50	4000	73.06	102.3%	80	115				
Methyl tert-Butyl Ether	4784	50	2000	3178	80.3%	84	114				S
o-Xylene	2090	25	2000	10.14	104.0%	88	116				
Toluene	1980	25	2000	11.38	98.4%	88	113				

Sample ID: 0109023-09AMSD		Batch ID: GC-1_010922	Test Code: SW8021B	Units: µg/L	Analysis Date 9/22/2001		Prep Date:				
Client ID:		0109026	Run ID: GC-1_010922A		SeqNo: 42586						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2150	25	2000	94.19	102.8%	78	117	2174	1.1%	6	
Ethylbenzene	2232	25	2000	53.24	108.9%	79	121	2143	4.0%	7	
m,p-Xylene	4337	50	4000	73.06	106.6%	80	115	4164	4.1%	6	
Methyl tert-Butyl Ether	5116	50	2000	3178	96.9%	84	114	4784	6.7%	5	R
o-Xylene	2181	25	2000	10.14	108.5%	88	116	2090	4.3%	5	
Toluene	2198	25	2000	11.38	109.3%	88	113	1980	10.5%	6	R

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: 0109026
Project: 4-1427; Conoco Shephard & Kelsy #1

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: 0109025-11AMS		Batch ID: GC-1_010923	Test Code: SW8021B	Units: µg/L	Analysis Date 9/23/2001		Prep Date:				
Client ID:	0109026	Run ID:	GC-1_010923A		SeqNo: 42597						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	206.7	2.5	200	23	91.8%	78	117				
Ethylbenzene	487.5	2.5	200	280	103.7%	79	121				
m,p-Xylene	403.9	5	400	8.8	98.8%	80	115				
Methyl tert-Butyl Ether	227.5	5	200	0	113.8%	84	114				
o-Xylene	201	2.5	200	2	99.5%	88	116				
Toluene	201.5	2.5	200	23	89.3%	88	113				

Sample ID: 0109025-11AMSD		Batch ID: GC-1_010923	Test Code: SW8021B	Units: µg/L	Analysis Date 9/23/2001		Prep Date:				
Client ID:		0109026	Run ID: GC-1_010923A		SeqNo: 42598						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	203.5	2.5	200	23	90.2%	78	117	206.7	1.6%	6	
Ethylbenzene	481.4	2.5	200	280	100.7%	79	121	487.5	1.2%	7	
m,p-Xylene	400.5	5	400	8.8	97.9%	80	115	403.9	0.9%	6	
Methyl tert-Butyl Ether	226.9	5	200	0	113.4%	84	114	227.5	0.3%	5	
o-Xylene	199.2	2.5	200	2	98.6%	88	116	201	0.9%	5	
Toluene	205.7	2.5	200	23	91.3%	88	113	201.5	2.0%	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

2 of 2

On Site Technologies, LTD.

Date: 26-Sep-01

CLIENT: On Site Technologies Limited
Work Order: 0109026
Project: 4-1427; Conoco Shephard & Kelsy #1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS WATER		Batch ID: GC-1_010922		Test Code: SW8021B		Units: µg/L		Analysis Date 9/22/2001		Prep Date:	
Client ID:		0109026		Run ID: GC-1_010922A				SeqNo: 42583			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	41.33	0.5	40	0.0521	103.2%	92	113				
Ethylbenzene	41.29	0.5	40	0.2728	102.5%	94	114				
m,p-Xylene	80.41	1	80	0	100.5%	92	111				
Methyl tert-Butyl Ether	39.52	1	40	0.3639	97.9%	91	112				
o-Xylene	42.36	0.5	40	0	105.9%	97	112				
Toluene	41.24	0.5	40	0.1163	102.8%	95	111				

Sample ID: LCS WATER	Batch ID: GC-1_010923	Test Code: SW8021B	Units: µg/L	Analysis Date 9/23/2001		Prep Date:					
Client ID:	0109026	Run ID: GC-1_010923A		SeqNo: 42595							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	42.24	0.5	40	0.0422	105.5%	92	113				
Ethylbenzene	42.53	0.5	40	0	106.3%	94	114				
m,p-Xylene	83.42	1	80	0	104.3%	92	111				
Methyl tert-Butyl Ether	39.69	1	40	0	99.2%	91	112				
o-Xylene	42.37	0.5	40	0	105.9%	97	112				
Toluene	41.99	0.5	40	0.1251	104.7%	95	111				

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

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

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 26-Sep-01

CLIENT: On Site Technologies Limited
Work Order: 0109026
Project: 4-1427; Conoco Shephard & Kelsy #1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 BTEX_0107		Batch ID: GC-1_010922	Test Code: SW8021B	Units: µg/L	Analysis Date 9/22/2001		Prep Date:				
Client ID:		0109026	Run ID:	GC-1_010922A	SeqNo:	42580					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	41.8	0.5	40	0	104.5%	85	115				
Ethylbenzene	42.32	0.5	40	0	105.8%	85	115				
m,p-Xylene	83.15	1	80	0	103.9%	85	115				
Methyl tert-Butyl Ether	39.41	1	40	0	98.5%	85	115				
o-Xylene	42.33	0.5	40	0	105.8%	85	115				
Toluene	41.76	0.5	40	0	104.4%	85	115				
1,4-Difluorobenzene	113.2	0	120	0	94.3%	77	112				
4-Bromochlorobenzene	125.9	0	120	0	105.0%	88	116				
Fluorobenzene	113.5	0	120	0	94.6%	87	102				

Sample ID: CCV2 BTEX_0107		Batch ID: GC-1_010922	Test Code: SW8021B	Units: µg/L	Analysis Date 9/22/2001		Prep Date:				
Client ID:		0109026	Run ID:	GC-1_010922A	SeqNo:	42581					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	42.04	0.5	40	0	105.1%	85	115				
Ethylbenzene	42.31	0.5	40	0	105.8%	85	115				
m,p-Xylene	82.9	1	80	0	103.6%	85	115				
Methyl tert-Butyl Ether	40.34	1	40	0	100.9%	85	115				
o-Xylene	42.2	0.5	40	0	105.5%	85	115				
Toluene	41.86	0.5	40	0	104.6%	85	115				
1,4-Difluorobenzene	113.5	0	120	0	94.6%	77	112				
4-Bromochlorobenzene	125.3	0	120	0	104.4%	88	116				
Fluorobenzene	114.2	0	120	0	95.1%	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: 0109026
Project: 4-1427; Conoco Shephard & Kelsy #1

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID: CCV3 BTEX_0107		Batch ID: GC-1_010922	Test Code: SW8021B	Units: µg/L		Analysis Date 9/22/2001		Prep Date:	
Client ID:		0109026	Run ID: GC-1_010922A			SeqNo: 42582			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	RPDLimit
Benzene	40.48	0.5	40	0	101.2%	85	115		
Ethylbenzene	40.59	0.5	40	0	101.5%	85	115		
m,p-Xylene	79.53	1	80	0	99.4%	85	115		
Methyl tert-Butyl Ether	40.1	1	40	0	100.3%	85	115		
o-Xylene	40.82	0.5	40	0	102.1%	85	115		
Toluene	40.26	0.5	40	0	100.6%	85	115		
1,4-Difluorobenzene	113	0	120	0	94.2%	77	112		
4-Bromochlorobenzene	126.3	0	120	0	105.2%	88	116		
Fluorobenzene	114.2	0	120	0	95.2%	87	102		

Sample ID: CCV1 BTEX_0109		Batch ID: GC-1_010923	Test Code: SW8021B	Units: µg/L		Analysis Date 9/23/2001		Prep Date:	
Client ID:		0109026	Run ID: GC-1_010923A			SeqNo: 42593			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	RPDLimit
Benzene	40.18	0.5	40	0	100.5%	85	115		
Ethylbenzene	40.44	0.5	40	0	101.1%	85	115		
m,p-Xylene	79.25	1	80	0	99.1%	85	115		
Methyl tert-Butyl Ether	37.8	1	40	0	94.5%	85	115		
o-Xylene	40.29	0.5	40	0	100.7%	85	115		
Toluene	39.92	0.5	40	0	99.8%	85	115		
1,4-Difluorobenzene	113.5	0	120	0	94.6%	77	112		
4-Bromochlorobenzene	127.1	0	120	0	105.9%	88	116		
Fluorobenzene	114.8	0	120	0	95.6%	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: 0109026
Project: 4-1427; Conoco Shephard & Kelsy #1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV2 BTEX_0109		Batch ID: GC-1_010923	Test Code: SW8021B	Units: µg/L		Analysis Date 9/23/2001		Prep Date:	
Client ID:		0109026	Run ID: GC-1_010923A			SeqNo: 42594			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	RPDLimit
Benzene	40.86	0.5	40	0	102.2%	85	115		Qual
Ethylbenzene	41.15	0.5	40	0	102.9%	85	115		
m,p-Xylene	80.56	1	80	0	100.7%	85	115		
Methyl tert-Butyl Ether	39.41	1	40	0	98.5%	85	115		
o-Xylene	41	0.5	40	0	102.5%	85	115		
Toluene	40.69	0.5	40	0	101.7%	85	115		
1,4-Difluorobenzene	113.5	0	120	0	94.6%	77	112		
4-Bromochlorobenzene	126.7	0	120	0	105.6%	88	116		
Fluorobenzene	114.7	0	120	0	95.6%	87	102		

On Site Technologies, LTD.

Date: 26-Sep-01

CLIENT: On Site Technologies Limited
 Work Order: 0109026
 Project: 4-1427; Conoco Shephard & Kelsy
 Test No: SW8021B

QC SUMMARY REPORT SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0109001-01A	96	108	97.5
0109023-09A	95.4	105	96.4
0109023-09AMS	94.8	105	95
0109023-09AMSD	99	110	95.6
0109025-09A	95.9	106	96.9
0109025-10A	95.7	112	96.6
0109025-11A	94	98.8	93.1
0109025-11AMS	90.2	104	93.7
0109025-11AMSD	90.6	101	96.9
0109025-12A	97.7	104	100
0109025-13A	95.7	107	96.2
0109026-01A	92.8	108	94.8
0109026-02A	91.6	101	93.5
0109026-03A	95.5	107	97
0109027-01A	96	104	96.9
0109027-02A	95.6	105	96.7
0109027-03A	91.9	105	93.7
0109027-04A	92.5	106	93.6
0109028-01A	89.6	104	90.8
0109030-12A	95.8	105	97
0109030-19A	96.3	106	96.9
CCV1 BTEX_01070	94.3	105	94.6
CCV1 BTEX_01092	94.6	106	95.6
CCV2 BTEX_01070	94.6	104	95.1
CCV2 BTEX_01092	94.6	106	95.6
CCV3 BTEX_01070	94.2	105	95.2
LCS WATER	94.6	106	95.5

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

* Surrogate recovery outside acceptance limits

CLIENT: On Site Technologies Limited
Work Order: 0109026
Project: 4-1427; Conoco Shephard & Kelsy
Test No: SW8021B

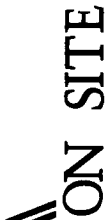
QC SUMMARY REPORT SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
MB1	95.6	104	97

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

* Surrogate recovery outside acceptance limits



2000

Page: 7 of 7

Page: 7 of 7

Purchase Order No.	Project No. W-1007	
Name Company Address City, State, Zip	Dept.	
PROJECT LOCATION: 		
SAMPLER'S SIGNATURE:		
SAMPLE IDENTIFICATION		
DATE	TIME	MATRIX PRES.
9/16/01	10:00	WET
9/17/01	10:00	WET
9/18/01	10:00	WET
Relinquished by:	Date/Time	
Relinquished by:	Date/Time	
Relinquished by:	Date/Time	
Method of Shipment:	Rush	24-48 Hours
Special Instructions / Remarks:		
Authorized by:	Date	



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

Date:

Page:

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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: 2-1362; Conoco Shephard & Kelsey 1

Order No.: 0112015

Dear John Hagstrom,

On Site Technologies, LTD. received 3 samples 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,

A handwritten signature in black ink, appearing to be 'DC' or similar initials, written over a horizontal line.

David Cox

P.O. BOX 2606 • FARMINGTON, NM 87499

EMAIL: ONSITE@ONSITELTD.COM

- TECHNOLOGY BUILDING INDUSTRY WITH THE ENVIRONMENT -

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On Site Technologies, LTD.

Date: 17-Dec-01

CLIENT: On Site Technologies Limited
Project: 2-1362; Conoco Shephard & Kelsey 1
Lab Order: 0112015

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: 17-Dec-01

Client:	On Site Technologies Limited	Client Sample Info:	Conoco Shephard & Kelsey 1
Work Order:	0112015	Client Sample ID:	MW-NE
Lab ID:	0112015-01A	Matrix:	AQUEOUS
Project:	2-1362; Conoco Shephard & Kelsey 1	Collection Date:	12/13/2001 12:15:00 PM
		COC Record:	11695

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: HNR		
Benzene	10	0.5		µg/L	1	12/15/2001
Toluene	ND	0.5		µg/L	1	12/15/2001
Ethylbenzene	6	0.5		µg/L	1	12/15/2001
m,p-Xylene	4.1	1		µg/L	1	12/15/2001
o-Xylene	0.6	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 3

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LAB: (505) 325-1556
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ANALYTICAL REPORT

Date: 17-Dec-01

Client:	On Site Technologies Limited	Client Sample Info:	Conoco Shephard & Kelsey 1
Work Order:	0112015	Client Sample ID:	SB-12
Lab ID:	0112015-02A	Matrix:	AQUEOUS
Project:	2-1362; Conoco Shephard & Kelsey 1	Collection Date:	12/13/2001 12:35:00 PM
		COC Record:	11695

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: HNR		
Benzene	28	0.5		µg/L	1	12/15/2001
Toluene	ND	0.5		µg/L	1	12/15/2001
Ethylbenzene	63	0.5		µg/L	1	12/15/2001
m,p-Xylene	320	1		µg/L	1	12/15/2001
o-Xylene	2.9	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

2 of 3

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OFF: (505) 325-5667
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LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: 17-Dec-01

Client:	On Site Technologies Limited	Client Sample Info:	Conoco Shephard & Kelsey 1
Work Order:	0112015	Client Sample ID:	DG-1
Lab ID:	0112015-03A	Matrix:	AQUEOUS
Project:	2-1362; Conoco Shephard & Kelsey 1	Collection Date:	12/13/2001 12:55:00 PM
		COC Record:	11695

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

Surrogate - Surrogate

3 of 3

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

On Site Technologies, Ltd.

Date: 17-Dec-01

CLIENT: On Site Technologies Limited

Work Order: 0112015

Project: 2-1362; Conoco Shephard & Kelsey 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: 0112015	Run ID: GC-1_011215A	PQL	SPK value	SeqNo: 45894	
Analyte	Result	PQL	SPK value	LowLimit	HighLimit
Benzene	ND	0.5		%REC	RPDLimit
Ethylbenzene	ND	0.5			Qual
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
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: 0112015

Project: 2-1362; Conoco Shephard & Kelsey 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: 0112015		Run ID: GC-1_011215A	PQL	SPK value	SPK Ref Val	SeqNo: 45895	
Analyte	Result					LowLimit	HighLimit
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
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: 0112009-09AMS		Batch ID: GC-1_011215	Test Code: SW8021B	Units: µg/L	Analysis Date 12/15/2001		Prep Date: 12/15/01
Client ID: 0112015		Run ID: GC-1_011215A	PQL	SPK value	SPK Ref Val	SeqNo: 45896	
Analyte	Result					LowLimit	HighLimit
Benzene	1812	25	2000	20	89.6%	70	130
Ethylbenzene	1753	25	2000	10	87.1%	70	130
m,p-Xylene	2226	50	4000	10	55.4%	70	130
Methyl tert-Butyl Ether	2549	50	2000	560	99.4%	70	130
o-Xylene	1783	25	2000	0	89.1%	70	130
Toluene	1771	25	2000	30	87.0%	70	130
1,4-Difluorobenzene	5130	0	5500	0	93.3%	77	112
4-Bromochlorobenzene	5702	0	5500	0	103.7%	88	116
Fluorobenzene	5171	0	5500	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

On Site Technologies, Ltd.

Date: 17-Dec-01

CLIENT: On Site Technologies Limited
 Work Order: 0112015
 Project: 2-1362; Conoco Shephard & Kelsey 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:	0112015	Run ID: GC-1_011215A		SeqNo: 45893		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Benzene	36.56	0.5	40	0	91.4%	80 120
Ethylbenzene	36.68	0.5	40	0	91.7%	80 120
m,p-Xylene	76.03	1	80	0	95.0%	80 120
Methyl tert-Butyl Ether	39.98	1	40	0	100.0%	80 120
o-Xylene	38.68	0.5	40	0	96.7%	80 120
Toluene	36.89	0.5	40	0	92.2%	80 120
1,4-Difluorobenzene	101	0	110	0	91.8%	77 112
4-Bromochlorobenzene	112.6	0	110	0	102.4%	88 116
Fluorobenzene	103.1	0	110	0	93.7%	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

On Site Technologies, Ltd.

Date: 17-Dec-01

CLIENT: On Site Technologies Limited

Work Order: 0112015

Project: 2-1362; Conoco Shephard & Kelsey 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:		0112015		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:		0112015		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: 0112015
Project: 2-1362; Conoco Shephard & Kelsey I

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:		0112015		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:		0112015		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

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CLIENT: On Site Technologies Limited
Work Order: 0112015
Project: 2-1362; Conoco Shephard & Kelsey I

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:		0112015		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: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank

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On Site Technologies, LTD.

Date: 17-Dec-01

CLIENT: On Site Technologies Limited
Work Order: 0112015
Project: 2-1362; Conoco Shephard & Kelsey 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



Date: _____

Page: _____ of _____

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