

3R - 92

REPORTS

DATE:

2002

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit 1 copy to
appropriate
District Office
and 1 copy to
the Santa Fe Office

(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

Operator: Conoco Inc

Telephone: (505) 327-9557

Address: 3315 Bloomfield Highway, Farmington, NM 87401

Well Name: Salmon 1

Location: Unit or Qtr/Qtr Sec: Unit P SE 1/4 Sec 30 T 29N R 11W County San Juan, NM

Pit Type: Separator _____ Dehydrator _____ Other Line Drip
Land Type: BLM _____, State _____, Fee _____ Other Private

Pit Location: Pit dimensions: length 25', width 25', depth 4'
(Attach diagram)

Reference: wellhead X, other _____

Footage from reference: Approximately 42'

Direction from reference: Approximately 15 Degrees East of North

Depth To Ground Water	Less than 50 feet	Yes	(20 points)
(Vertical distance from	50 feet to 99 feet		(10 points)
contaminants to seasonal	Greater than 100 feet		(0 points) <u>20</u>
high water elevation of			
ground water.)			

Wellhead Protection Area:	Yes	(20 points)
(Less than 200 feet from a private	No	(0 points) <u>0</u>
domestic water source, or; less than		
1000 feet from all other water sources.)		

Distance To Surface Water:	Less than 200 feet	(20 points)
(Horizontal distance to perennial	200 feet to 1000 feet	(10 points)
lakes, ponds, rivers, streams, creeks,	Greater than 1000 feet	Yes (0 points) <u>0</u>
irrigation canals and ditches.)		

RANKING SCORE (TOTAL POINTS): 20

Date Remediation Started: 1994 Date completed 1/18/02

Remediation Method: Excavation ☒ Approx. cubic yards 496 +

(Check all appropriate sections.)

Landfarmed _____

Insitu Bioremediation _____

Other Disposed at Envirotech OCD landfarm

Remediation Location: Onsite _____ Offsite: ☒

(i.e. landfarmed onsite, name and location of offsite facility)

Crouch Mesa Landfarm #2 Unit 5

General Description of Remedial Action: Conoco treated and excavated soils to ground water in the immediate area of an unlined drip pit. During June 18, 19, and 20, 1997, On Site excavated approximately 496 cubic yards of contaminated soil from the site, and disposed of it properly. The excavation was backfilled with clean material. Monitoring wells were installed to monitor ground water quality. Refer to Conoco Annual Ground Water Report 1998, 1999, 2000, and 2001 for ground water sample results

Ground Water Encountered: No _____ Yes: ☒ Depth: Approximately four feet.

Final Pit:
Closure Sampling:
(if multiple samples, attach sample results and diagram of sample locations and depths)

Sample location: Refer to Salmon #1 Excavation Summary (On Site 7/25/97).

Sample depth _____

Sample Date _____ Sample time _____

Sample Results

Benzene(ppm) _____

Total BTEX(ppm) _____

Field headspace(ppm) _____

TPH _____

Ground Water Sample: Yes ☒ No _____ (If yes, attach sample results)

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Date: 2/21/02

Signature

Gary Ledbetter

Printed Name: Gary Ledbetter
and Title: Field SHEAR Specialist



February 18, 2002

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

RE: 2001 Annual Ground Water Report
Conoco Location: Salmon #1
Unit P, Sec. 30, T29N, R11W, NMPM, San Juan Co., NM

Project No.: 4-1377

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 covered the prior calendar year of 2001, and follows the format outlined in the *Comprehensive Ground Water Remediation and Long-Term Monitoring Plan for Conoco Locations in the San Juan Basin, New Mexico* (hereafter referred to as the monitoring plan), submitted to the New Mexico Oil Conservation Division on October 15, 1997.

Summary of 2001 Activities:

Ground water sampling events were conducted in March, June, September and December of 2001 and January 2002. Water levels were taken on all monitoring wells. DG#2 was the only monitoring well sampled during 2001. During the January 2002, sampling event DG 1, 2, and 3 were sampled for closure.

Laboratory result shows that the levels of BTEX contamination have dropped in DG #2 below the New Mexico Water Quality Control Commission (NMWQCC) standards. DG#1 and DG#3 remain Below NMWQCC standards.

Sampling:

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

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

Copies of all laboratory reports for the calendar year 2001, and the sampling for closure (1/02) along with all laboratory QA/QC documentation and chains-of-custody, are attached with this report.

PO Box 2606
Farmington, NM 87499

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 drip pit at the Salmon #1 well location:

1. BTEX contamination has been below NMWQCC water quality standard for the last six (6) sampling events.

Recommendations:

1. Ground water remediation by natural attenuation appears to be complete. A Final Pit Closure Report to be submitted to NMOCD for approval is attached to this report.
2. After approval by NMOCD, plug and abandon monitoring wells in accordance with current regulation.

Limitations and Closure:

This annual ground water report documents the results of ground water monitoring for the referenced Conoco well location during the calendar year 2001. This report follows the Comprehensive Ground Water Remediation and Long-Term Monitoring Plan for Conoco Locations in the San Juan Basin, New Mexico, dated October 15, 1997.

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

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

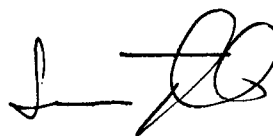
If there are any questions regarding this status report, please contact either John Hagstrom or Larry Trujillo at On Site Technologies, (505) 325-5667. Thank you for your consideration.

Respectfully submitted,



✓ John Hagstrom.
Environmental technician

Reviewed by;



Lawrence "Larry" Trujillo, CHMM
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, 5 Ground Water Potentiometric Maps
Laboratory Results, QA/QC, Chain of Custody

Acknowledgment:
CONOCO, Inc.

Amy Kellert SHEAR Specialist
(Name/Title)
2/31/02
(Date)

JPH/jph 21377-01.doc

REFERENCES:

On Site Technologies, Ltd., May 12, 1997. Letter to Mr. Neal Goates, Senior Environmental Specialist, Conoco, Inc. Midland Division, regarding: *Corrective Action Proposal, Conoco Location, Salmon #1, Unit P, Sec. 30, T29N, R11W, NMPM, San Juan Co., NM.*

On Site Technologies, Ltd., July 28, 1997. Letter to Mr. Neal Goates, Senior Environmental Specialist, Conoco, Inc. Midland Division, regarding: *Salmon #1 Excavation Summary, Conoco Location, Salmon #1, Unit P, Sec. 30, T29N, R11W, NMPM, San Juan Co., NM.*

On Site Technologies, Ltd., February 1, 1998. Letter to Ms. Shirley Ebert, Field SHEAR Specialist, Conoco, Inc. Mid-Continent Region, regarding: *1997 Ground Water Report, Conoco Location, Salmon #1, Unit P, Sec. 30, T29N, R11W, NMPM, San Juan Co., NM.*

On Site Technologies, Ltd., February 4, 1999. Letter to Ms. Shirley Ebert, Field SHEAR Specialist, Conoco, Inc. Mid-Continent Region, regarding: *1998 annual Ground Water Report, Conoco Location, Salmon #1, Unit P, Sec. 30, T29N, R11W, NMPM, San Juan Co., NM.*

On Site Technologies, Ltd., January 4, 2000. Letter to Ms. Shirley Ebert, Field SHEAR Specialist, Conoco, Inc. Mid-Continent Region, regarding: *1999 annual Ground Water Report, Conoco Location, Salmon #1, Unit P, Sec. 30, T29N, R11W, NMPM, San Juan Co., NM.*

On Site Technologies

Table 1

Ground Water Level Summary

Salmon #1

Unit P, Sec. 30, 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)
DG#1	93.64	9.2	2" PVC	4.2	9/16/97	2.86	89.36
					12/22/97	3.01	90.63
					3/25/98	2.96	90.68
					6/9/98	2.75	90.89
					9/14/98	3.17	90.47
					12/30/98	3.48	89.69
					3/1/99	2.92	90.71
					6/7/99	2.71	90.92
					9/10/99	3.27	90.36
					12/13/99	2.92	90.71
					3/13/00	2.99	90.64
					6/5/00	3.01	90.62
					9/11/00	3.79	89.89
					1/23/00	3.32	88.53
					3/20/01	3.23	90.41
					6/15/01	3.3	90.34
					9/19/01	3.53	90.11
					12/13/01	3.36	90.28
					1/18/02	3.34	90.30

Temporary Bench Mark (TBM): is the south east corner of implement storage building Relative Elevation 100'

BGS - approximate measurements taken as Below Ground Surface

BTOC - Below Top of Casing

NM - Not Measured

On Site Technologies

Table 1

Ground Water Level Summary

Salmon #1

Unit P, Sec. 30, 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)
DG#2	92.45	8.60	2" PVC	3.30	9/16/97	3.95	88.50
					12/22/97	*	
					3/25/98	3.80	88.65
					6/9/98	3.62	88.83
					9/14/98	3.41	89.04
					12/30/98	2.69	89.76
					3/1/99	3.69	88.76
					6/7/99	3.51	88.94
					9/10/99	4.07	88.38
					12/13/99	3.58	89.29
					3/13/00	3.56	88.89
					6/5/00	3.21	89.24
					9/11/00	4.56	87.89
					1/23/01	3.92	90.31
					3/20/01	3.18	89.27
					6/15/01	4.5	87.95
					9/19/01	4.44	88.01
					12/13/01	4.2	88.25
					1/18/02	3.95	88.50
Temporary Bench Mark (TBM): is the south east corner of implement storage building Relative Elevation 100' BGS - approximate measurements taken as Below Ground Surface BTOC - Below Top of Casing NM - Not Measured							

* Bailer stuck in well unable to retrieve

On Site Technologies

Table 1

Ground Water Level Summary

Salmon #1

Unit P, Sec. 30, 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)
DG#3	92.22	8.2	2" PVC	3.70	09/16/97	3.19	89.03
					12/22/97	2.95	89.27
					3/25/98	2.89	89.33
					6/9/98	2.95 (est.)	89.27
					9/14/98	4.16	88.06
					12/30/98	2.62	89.60
					3/1/99	2.89	89.33
					6/7/99	2.78	89.44
					9/10/99	3.41	88.81
					12/13/99	2.93	89.29
					3/13/00	2.97	89.25
					6/5/00	3.81	88.61
					9/11/00	3.99	88.23
					1/23/01	Could not locate well due	to ground conditions and livestock
					3/20/01	3.15	89.07
					6/15/01	3.45	88.77
					9/19/01	3.8	88.42
					12/13/01	3.95	88.27
					1/18/02	3.3	88.92

Temporary Bench Mark (TBM): is the south east corner of implement storage building Relative Elevation 100'

BGS - approximate measurements taken as Below Ground Surface

BTOC - Below Top of Casing

NM - Not Measured

On Site Technologies

Table 2

BTEX Analytical Summary

Salmon #1

Unit P, Sec. 30, T29N, R11W

Sample Date	Sample ID#	Monitor Well	Remarks	BTEX per EPA 8020 (ppb)			
				Benzene	Toluene	Ethylbenzene	Total Xylene
07/17/96	03696G01389	UPG#1	IML	BDL	BDL	BDL	BDL
07/17/96	03696G01388			BDL	BDL	BDL	BDL
07/17/96	0396G01390	DWG#1	IML	0.7	3.3	2.8	3.7
03/13/97	13889	MW#1 NE	On Site Lab.	24.4	0.4	0.3	1.5
03/26/97	14001			<0.2	<0.2	<0.2	0.3
03/13/97	13890	MW#2 N	On Site Lab.	67.8	32.9	11.5	116.6
03/20/97				40.7	11.9	8.6	74.2
03/13/97	13891	MW#3 SW	On Site Lab.	<0.2	<0.2	<0.2	0.3
03/13/97	13892	MW#4 SE	On Site Lab.	<0.2	<0.2	<0.2	0.2
09/16/97	16203	DG#1	On Site Lab.	8.1	3.6	16.3	50.6
12/22/97	17210			5.8	2.8	3.5	14.7
3/25/98	9803058-01A			9.7	4.7	4.3	12.5
6/9/98	9806031-01A			4.1	1.7	3.0	6.8
9/14/98	9809031-01A			3.5	4.2	2.3	4.9
1/18/02	0201021-01A			BDL	BDL	BDL	BDL
WQCC	ACTION	LEVELS		10.0	750.0	750.0	620.0

BDL: Below Detection Levels

1. Well replaced on 3/25/98

On Site Technologies

Table 2

BTEX Analytical Summary

Salmon #1

Unit P, Sec. 30, T29N, R11W

Sample Date	Sample ID#	Monitor Well	Remarks	BTEX per EPA 8020 (ppb)				
09/16/97		DG#2	On Site Lab.	Note	Sampled	Bailer In	The Well	
12/22/97								
3/25/98 ¹	9803058-02A			330.0	5.5	4.3	5.4	
6/9/98	9806031-02A			160.0	0.8	2.4	BDL	
9/14/98	9809031-02A			BDL	BDL	BDL	BDL	
12/30/98	9812057-01A			23.0	BDL	2.8	0.9	
3/1/99	9903004-01A			160.0	BDL	7.1	21.0	
6/7/99	9906020-01A			70.0	8.8	BDL	BDL	
9/10/99	9909038-01A			BDL	0.5	BDL	BDL	
12/13/99	9912015-01A			1.2	0.8	1.8	2.6	
3/13/00	0003018-01A			57.0	0.8	2.8	4.7	
6/5/00	0006011-01A			16.0	1.5	2.1	BDL	
9/11/00	0009017-01A			BDL	BDL	BDL	BDL	
01/23/01	0101032-01A			BDL	BDL	BDL	BDL	
3/20/01	0103018-01A			1.4	BDL	BDL	BDL	
6/15/01	0106017-01A			BDL	BDL	0.6	BDL	
9/19/01	0109028-01A			BDL	BDL	BDL	BDL	
12/13/01	0112016-01A			BDL	BDL	BDL	BDL	
1/18/02	0201021-03A			BDL	BDL	BDL	BDL	
09/16/97	16204	DG#3	On Site Lab.	BDL	BDL	BDL	0.2	
12/22/97	17211			BDL	BDL	BDL	BDL	
3/25/98	9803058-03A			BDL	BDL	BDL	BDL	
6/9/98	Not	sampled						
9/14/98	9809031-03A			BDL	BDL	BDL	BDL	
1/18/02	0201021-02A			BDL	BDL	BDL	BDL	
WQCC	ACTION	LEVELS		10.0	750.0	750.0	620.0	

BDL: Below Detection Levels

1. Well replaced on 3/25/98

DG-3

DG-2

TWO ASTS
(APPROXIMATE
LOCATION)

IMPLEMENT
SHED

WATER LINE

NTS

DG-1

FENCE

FORMER DRIP
PIT (APPROX.
LOCATION)

LEGEND:

AST ABOVEGROUND
STORAGE TANK

UG-1
(REMOVED)

UG-2
(REMOVED)



612 E. MURRAY DR. PH. (505) 327-1072
FARMINGTON, NM 87401 FAX (505) 327-1496

APPROVED: *de7*

DATE: *2/12/02*

DRWN BY: MED

DATE: 2/12/02

CHK'D BY:

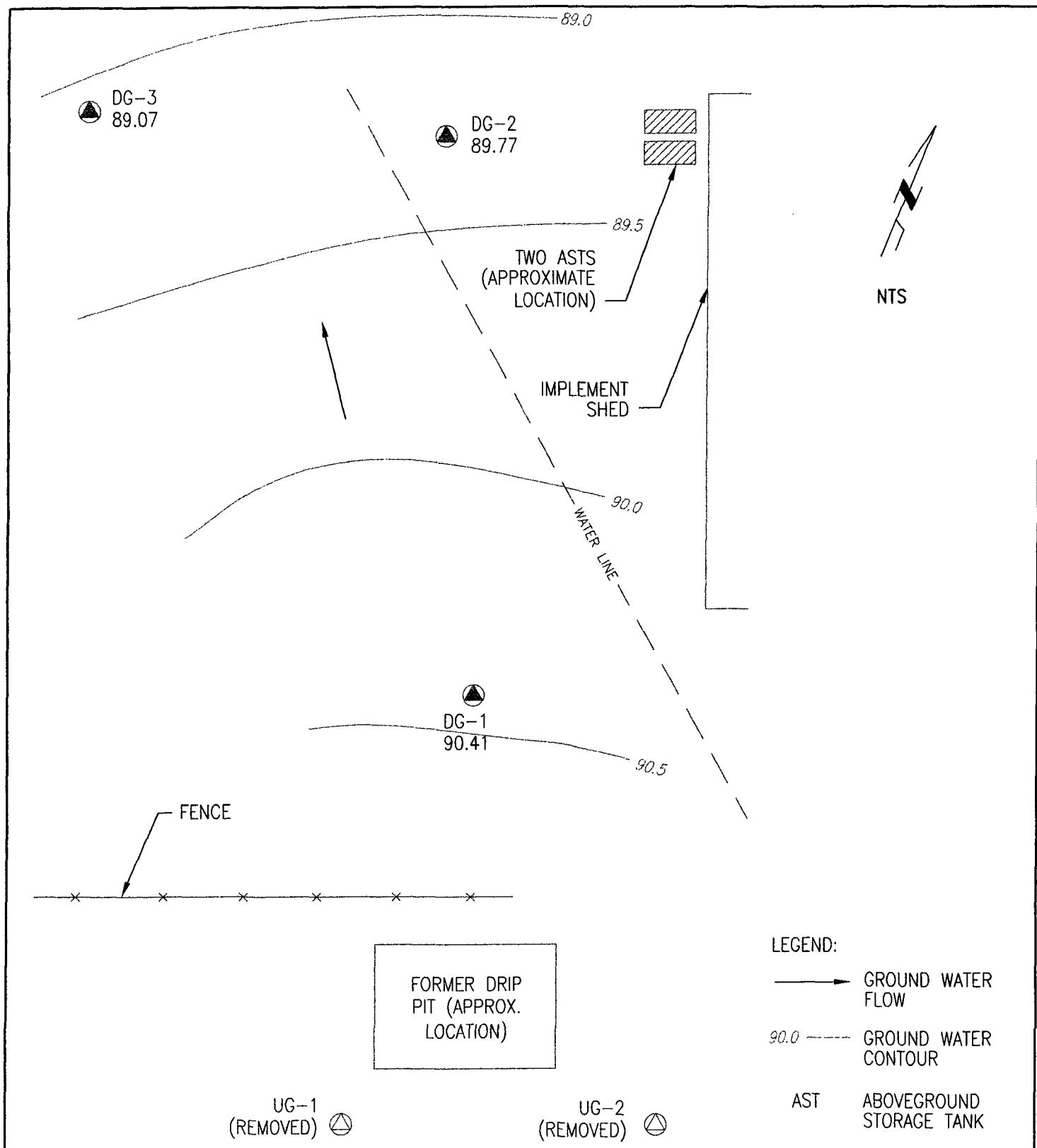
DATE:

PROJECT NO: 4-1377

SHEET: 1 OF 5

SITE SKETCH

CONOCO, INC., SALMON #1
SAN JUAN COUNTY, NEW MEXICO



LEGEND:

—→ GROUND WATER FLOW

90.0 — GROUND WATER CONTOUR

AST ABOVEGROUND STORAGE TANK



612 E. MURRAY DR. PH. (505) 327-1072
FARMINGTON, NM 87401 FAX (505) 327-1496

APPROVED: *det*

DRWN BY: MED

CHK'D BY:

PROJECT NO: 4-1377

DATE: *2/12/02*

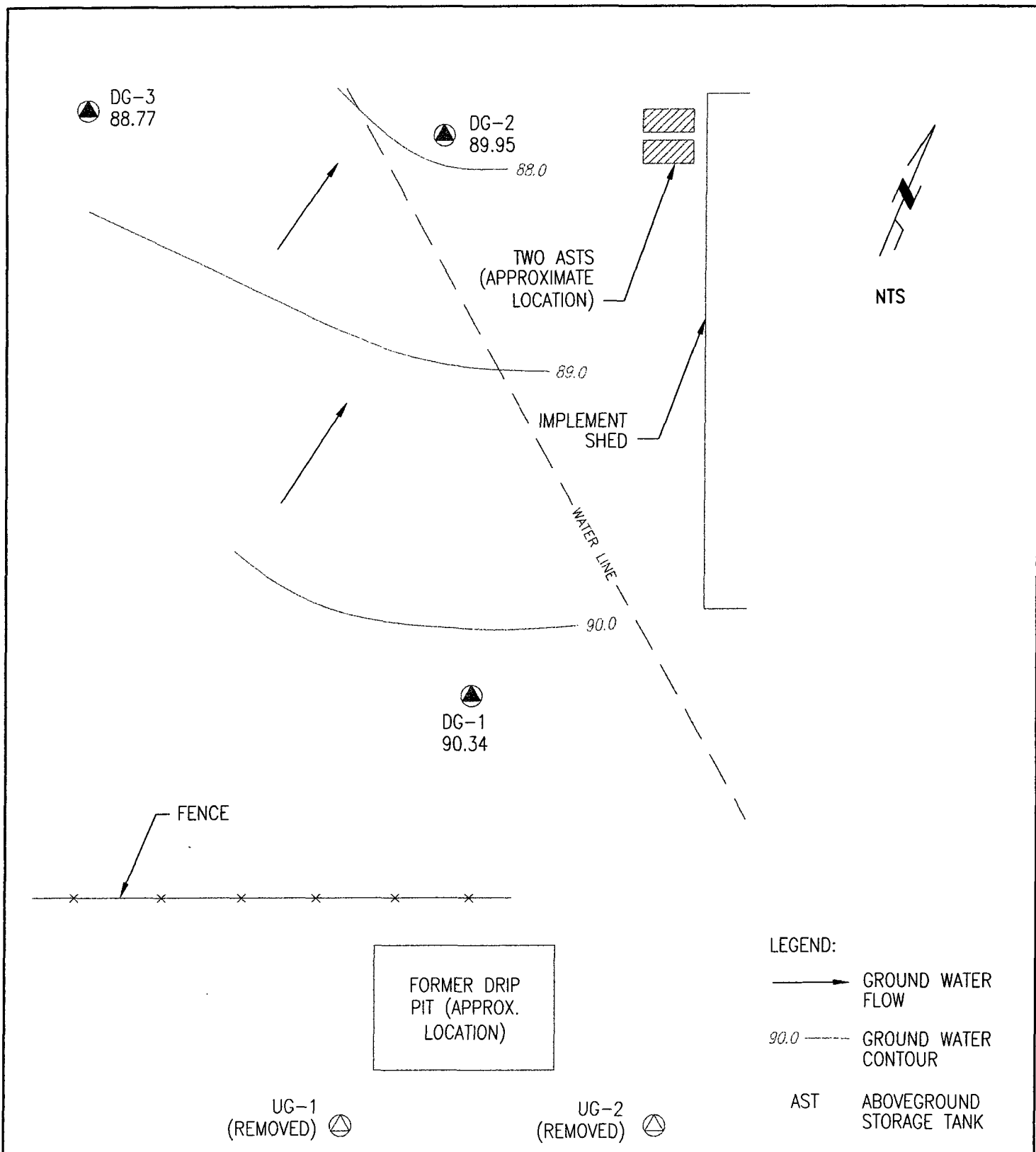
DATE: 2/12/02

DATE:

SHEET: 1 OF 4

GROUND WATER POTENTIOMETRIC MAP
MARCH 20, 2001

CONOCO, INC., SALMON #1
SAN JUAN COUNTY, NEW MEXICO



LEGEND:

- GROUND WATER FLOW
- 90.0 — GROUND WATER CONTOUR
- AST ABOVEGROUND STORAGE TANK



612 E. MURRAY DR. PH. (505) 327-1072
FARMINGTON, NM 87401 FAX (505) 327-1496

APPROVED: *det*

DRWN BY: MED

CHK'D BY:

PROJECT NO: 4-1377

DATE: 2/21/02

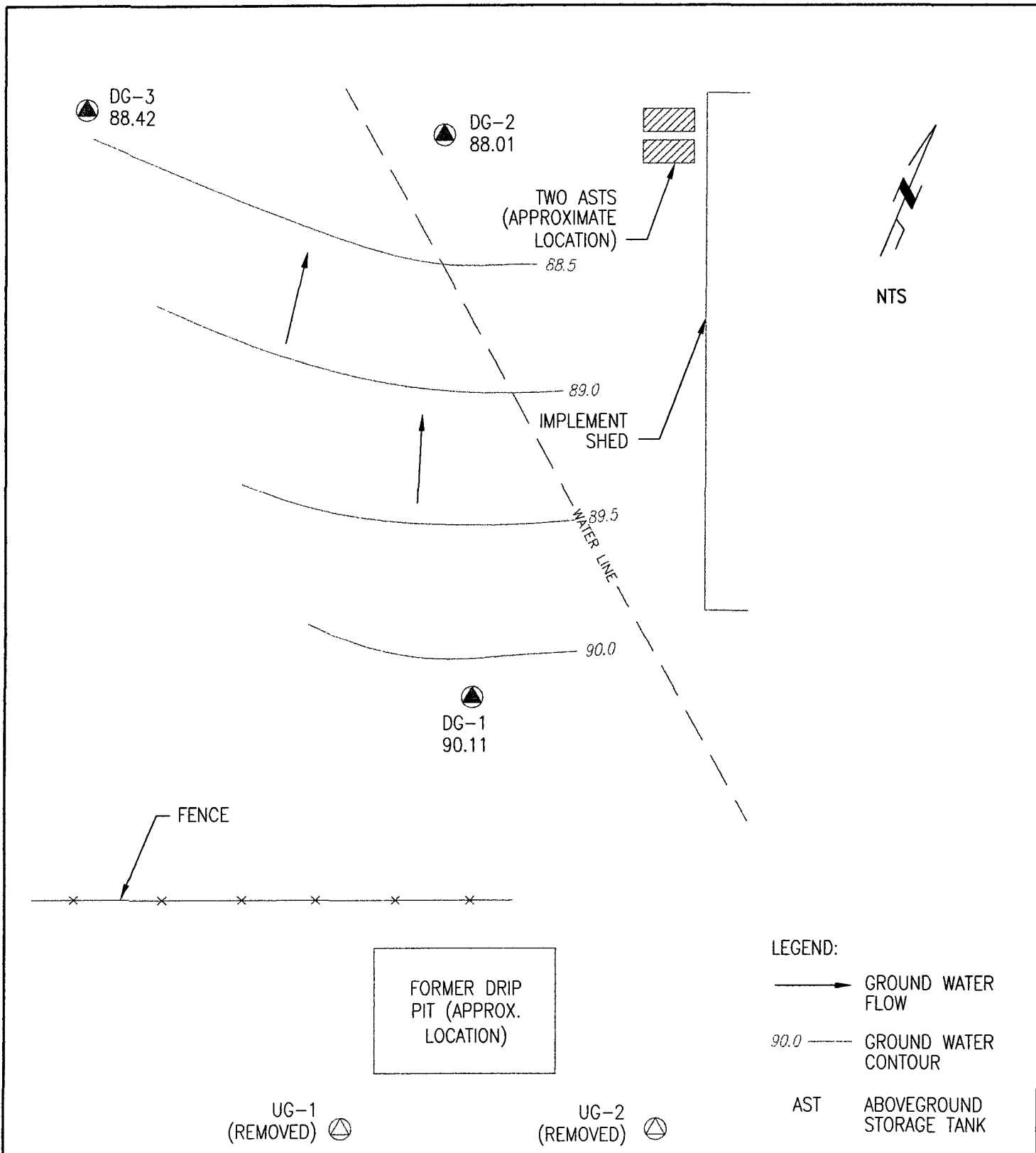
DATE: 2/12/02

DATE:

SHEET: 2 OF 4

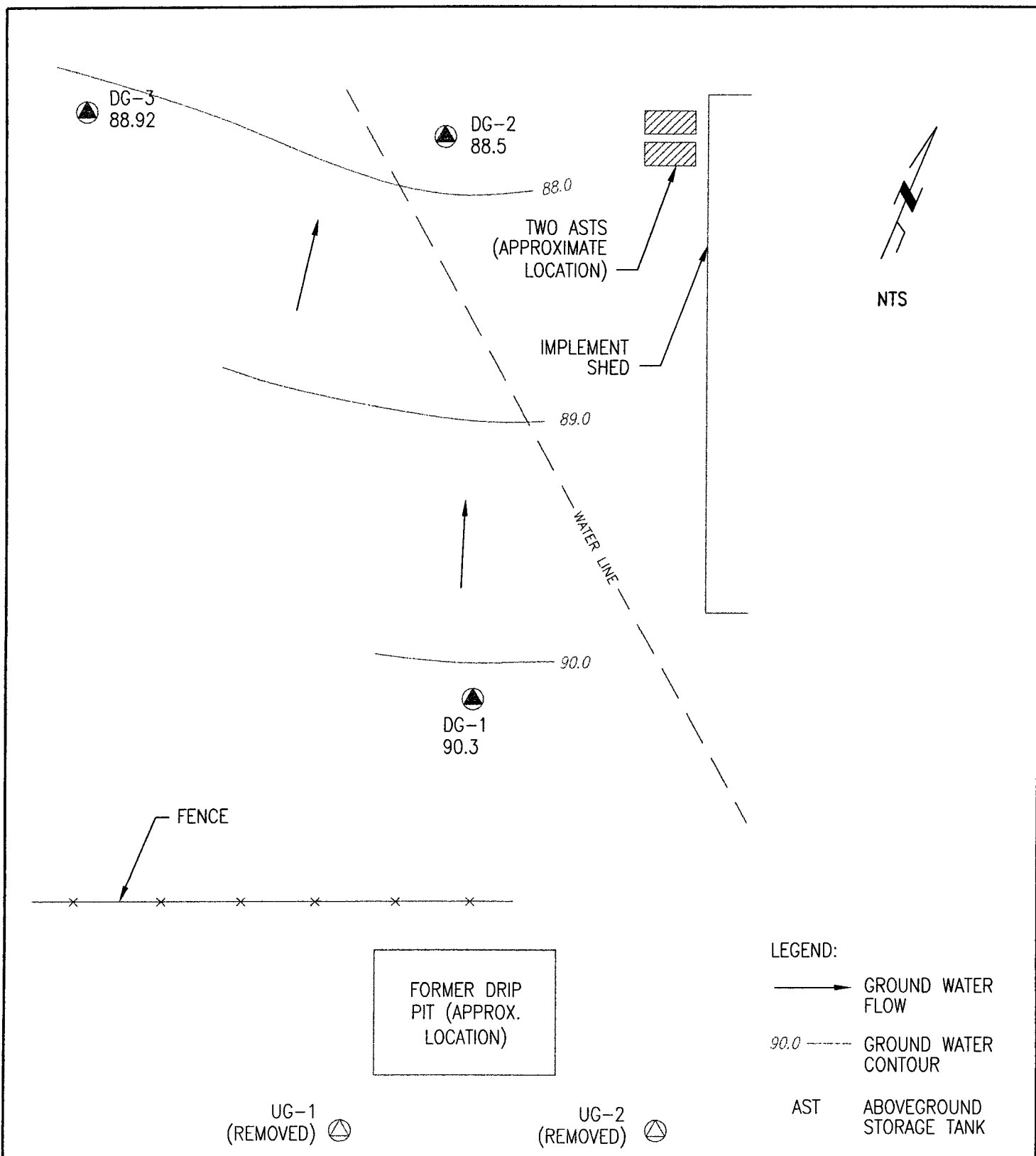
GROUND WATER POTENTIOMETRIC MAP
JUNE 15, 2001

CONOCO, INC., SALMON #1
SAN JUAN COUNTY, NEW MEXICO



 612 E. MURRAY DR. PH. (505) 327-1072 FARMINGTON, NM 87401 FAX (505) 327-1496	APPROVED: <i>jet</i>	DATE: <i>2/21/2</i>	GROUND WATER POTENTIOMETRIC MAP SEPTEMBER 19, 2001 CONOCO, INC., SALMON #1 SAN JUAN COUNTY, NEW MEXICO
	DRWN BY: MED	DATE: 2/12/02	
	CHK'D BY:	DATE:	
	PROJECT NO: 4-1377	SHEET: 3 OF 4	

c:/drawing_files/onsite/4-1377-sal1/2001/sal1.dwg_sept



LEGEND:

- GROUND WATER FLOW
- 90.0 — GROUND WATER CONTOUR
- AST ABOVEGROUND STORAGE TANK



612 E. MURRAY DR. PH. (505) 327-1072
FARMINGTON, NM 87401 FAX (505) 327-1496

APPROVED: *LET*

DRWN BY: MED

CHK'D BY:

PROJECT NO: 4-1377

DATE: *2/2/02*

DATE: 2/12/02

DATE:

SHEET: 4 OF 4

GROUND WATER POTENTIOMETRIC MAP
JANUARY 18, 2002

CONOCO, INC., SALMON #1
SAN JUAN COUNTY, NEW MEXICO

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



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

March 23, 2001

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

RE: 4-1377; Salmon #1

Order No.: 0103018

Dear John Hagstrom,

On Site Technologies, LTD. received 1 sample on 3/20/2001 for the analyses presented in the following report.

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

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

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

Sincerely,

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

David Cox

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



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

On Site Technologies, LTD.

Date: 23-Mar-01

CLIENT: On Site Technologies Limited
Project: 4-1377; Salmon #1
Lab Order: 0103018

CASE NARRATIVE

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

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

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

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

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



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

ANALYTICAL REPORT

Date: 23-Mar-01

Client:	On Site Technologies Limited	Client Sample Info:	Salmon 1
Work Order:	0103018	Client Sample ID:	DG 2
Lab ID:	0103018-01A	Matrix:	AQUEOUS
Project:	4-1377; Salmon #1	Collection Date:	3/20/2001 10:25:00 AM
		COC Record:	11142

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	1.4	0.5		µg/L	1	3/21/2001
Toluene	ND	0.5		µg/L	1	3/21/2001
Ethylbenzene	ND	0.5		µg/L	1	3/21/2001
m,p-Xylene	ND	1		µg/L	1	3/21/2001
o-Xylene	ND	0.5		µg/L	1	3/21/2001

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

1 of 1

On Site Technologies, LTD.

Date: 23-Mar-01

CLIENT: On Site Technologies Limited
Work Order: 0103018
Project: 4-1377; Salmon #1

QC SUMMARY REPORT

Method Blank

Sample ID: MB1	Batch ID: GC-1_010321	Test Code: SW8021B	Units: µg/L	Analysis Date 3/21/2001		Prep Date:					
Client ID:	0103018	Run ID: GC-1_010321A		SeqNo: 35873							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									J
Ethylbenzene	.0794	0.5									J
m,p-Xylene	.5522	1									
Methyl tert-Butyl Ether	ND	1									J
o-Xylene	.1977	0.5									J
Toluene	.154	0.5									J

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

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

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 23-Mar-01

CLIENT: On Site Technologies Limited
Work Order: 0103018
Project: 4-1377; Salmon #1

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0103008-01AMS		Batch ID: GC-1_010321	Test Code: SW8021B	Units: µg/L	Analysis Date 3/21/2001		Prep Date:
Client ID: 0103018		Run ID: GC-1_010321A	PQL	SPK value	SPK Ref Val	SeqNo: 35874	
Analyte	Result					LowLimit	HighLimit
Benzene	1070	5		400	710	84	111
Ethylbenzene	733.1	5		400	320	84	111
m,p-Xylene	1386	10		800	560	84	108
Methyl tert-Butyl Ether	444.8	10		400	110	80	117
o-Xylene	517.8	5		400	110	89	107
Toluene	468.4	5		400	54	90	107
						%REC	
						90.1%	
						103.3%	
						103.2%	
						83.7%	
						102.0%	
						103.6%	
						%RPD	RPDLimit
							Qual

Sample ID: 0103008-01AMSD		Batch ID: GC-1_010321	Test Code: SW8021B	Units: µg/L	Analysis Date 3/21/2001		Prep Date:
Client ID: 0103018		Run ID: GC-1_010321A	PQL	SPK value	SPK Ref Val	SeqNo: 35875	
Analyte	Result					LowLimit	HighLimit
Benzene	1064	5		400	710	84	111
Ethylbenzene	709.4	5		400	320	84	111
m,p-Xylene	1343	10		800	560	84	108
Methyl tert-Butyl Ether	449.2	10		400	110	80	117
o-Xylene	502.9	5		400	110	89	107
Toluene	449.4	5		400	54	90	107
						%REC	
						88.6%	
						97.3%	
						97.9%	
						84.8%	
						98.2%	
						98.8%	
						%RPD	RPDLimit
						0.6%	8
						3.3%	7
						3.1%	7
						1.0%	6
						2.9%	6
						4.2%	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: 23-Mar-01

CLIENT: On Site Technologies Limited
Work Order: 0103018
Project: 4-1377; Salmon #1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS WATER		Batch ID: GC-1_010321	Test Code: SW8021B	Units: µg/L	Analysis Date 3/21/2001		Prep Date:				
Client ID:	0103018		Run ID:	GC-1_010321A	SeqNo:	35872					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	39.67	0.5	40	0	99.2%	92	109				
Ethylbenzene	41.4	0.5	40	0.0794	103.3%	92	112				
m,p-Xylene	82.98	1	80	0.5522	103.0%	91	108				
Methyl tert-Butyl Ether	40.98	1	40	0	102.4%	89	116				
o-Xylene	41.51	0.5	40	0.1977	103.3%	93	109				
Toluene	40.7	0.5	40	0.154	101.4%	93	108				

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

On Site Technologies, LTD.

Date: 23-Mar-01

CLIENT: On Site Technologies Limited
Work Order: 0103018
Project: 4-1377; Salmon #1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 BTEX_0103		Batch ID: GC-1_010321	Test Code: SW8021B	Units: µg/L	Analysis Date 3/21/2001		Prep Date:
Client ID: 0103018		Run ID: GC-1_010321A	PQL	SPK value	SPK Ref Val	%REC	SeqNo: 35869
Analyte	Result						
Benzene	20.15		0.5	20	0	100.7%	85
Ethylbenzene	21.03		0.5	20	0	105.2%	85
m,p-Xylene	42.36		1	40	0	105.9%	85
Methyl tert-Butyl Ether	19.21		1	20	0	96.1%	85
o-Xylene	21.15		0.5	20	0	105.8%	85
Toluene	20.66		0.5	20	0	103.3%	85
1,4-Difluorobenzene	78.38		0	80	0	98.0%	85
4-Bromochlorobenzene	77.29		0	80	0	96.6%	93
Fluorobenzene	78.25		0	80	0	97.8%	88

Sample ID: CCV2 BTEX_0103		Batch ID: GC-1_010321	Test Code: SW8021B	Units: µg/L	Analysis Date 3/21/2001		Prep Date:
Client ID: 0103018		Run ID: GC-1_010321A	PQL	SPK value	SPK Ref Val	%REC	SeqNo: 35870
Analyte	Result						
Benzene	19.36		0.5	20	0	96.8%	85
Ethylbenzene	20.17		0.5	20	0	100.8%	85
m,p-Xylene	40.64		1	40	0	101.6%	85
Methyl tert-Butyl Ether	17.97		1	20	0	89.8%	85
o-Xylene	20.4		0.5	20	0	102.0%	85
Toluene	19.89		0.5	20	0	99.5%	85
1,4-Difluorobenzene	78.33		0	80	0	97.9%	85
4-Bromochlorobenzene	76.34		0	80	0	95.4%	93
Fluorobenzene	78.14		0	80	0	97.7%	88

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: 0103018
Project: 4-1377; Salmon #1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV3 BTEX_0103		Batch ID: GC-1_010321	Test Code: SW8021B	Units: µg/L	Analysis Date 3/21/2001			Prep Date:			
Client ID:	0103018	Run ID:	GC-1_010321A			SeqNo:	35871				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.51	0.5	40	0	96.3%	85	115				
Ethylbenzene	39.82	0.5	40	0	99.5%	85	115				
m,p-Xylene	79.8	1	80	0	99.7%	85	115				
Methyl tert-Butyl Ether	38.07	1	40	0	95.2%	85	115				
o-Xylene	40.31	0.5	40	0	100.8%	85	115				
Toluene	39.43	0.5	40	0	98.6%	85	115				
1,4-Difluorobenzene	78.66	0	80	0	98.3%	85	103				
4-Bromochlorobenzene	75.38	0	80	0	94.2%	93	108				
Fluorobenzene	77.44	0	80	0	96.8%	88	103				

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

On Site Technologies, LTD.

Date: 23-Mar-01

CLIENT: On Site Technologies Limited

Work Order: 0103018

Project: 4-1377; Salmon #1

Test No: SW8021B

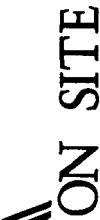
QC SUMMARY REPORT SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

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

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

* Surrogate recovery outside acceptance limits



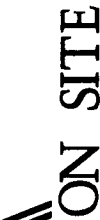
2

Page: _____ of _____

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Page: 1 of 1[illegible]

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

July 04, 2001

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

4-1377 jlt
RE: ~~4-1377~~; Conoco Salmon 1

Order No.: 0106017

Dear John Hagstrom,

On Site Technologies, LTD. received 1 sample 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 similar initials, 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: 04-Jul-01

CLIENT: On Site Technologies Limited
Project: 4-1377; Conoco Salmon 1
Lab Order: 0106017

CASE NARRATIVE

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

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

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

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

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



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

ANALYTICAL REPORT

Date: 04-Jul-01

Client:	On Site Technologies Limited	Client Sample Info:	Salmon 1
Work Order:	0106017	Client Sample ID:	DG 2
Lab ID:	0106017-01A	Matrix:	AQUEOUS
Project:	4-1377; Conoco Salmon 1	Collection Date:	6/15/2001 10:55:00 AM
		COC Record:	11345

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	0.6	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 1

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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: 0106017
 Project: 4-1377; Conoco Salmon 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:	0106017	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:	0106017	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: 0106017
Project: 4-1377; Conoco Salmon 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:		0106017		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:		0106017		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: 0106017
Project: 4-1377; Conoco Salmon 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: 0106017		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: 0106017		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: 0106017
Project: 4-1377; Conoco Salmon 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:		0106017	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:		0106017		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.

CLIENT: On Site Technologies Limited
Work Order: 0106017
Project: 4-1377; Conoco Salmon 1

Date: 04-Jul-01

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: 0106017		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: 0106017		Run ID: GC-1_010626A				SeqNo: 39192					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.31	0.5	20	0	101.5%	85	115				
Ethylbenzene	21.8	0.5	20	0	109.0%	85	115				
m,p-Xylene	42.4	1	40	0	106.0%	85	115				
Methyl tert-Butyl Ether	20.69	1	20	0	103.5%	85	115				
o-Xylene	21.35	0.5	20	0	106.7%	85	115				
Toluene	20.78	0.5	20	0	103.9%	85	115				
1,4-Difluorobenzene	113.3	0	120	0	94.4%	70	130				
4-Bromochlorobenzene	123.5	0	120	0	102.9%	70	130				
Fluorobenzene	111.6	0	120	0	93.0%	70	130				

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

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

B - Analyte detected in the associated Method Blank

CLIENT: On Site Technologies Limited
Work Order: 0106017
Project: 4-1377; Conoco Salmon 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: 0106017		Run ID: GC-1_010626A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	SeqNo: 39193
Analyte	Result								
Benzene	40.72		0.5	40	0	101.8%	85	115	
Ethylbenzene	41.76		0.5	40	0	104.4%	85	115	
m,p-Xylene	81.55		1	80	0	101.9%	85	115	
Methyl tert-Butyl Ether	40.37		1	40	0	100.9%	85	115	
o-Xylene	42.06		0.5	40	0	105.2%	85	115	
Toluene	41.18		0.5	40	0	103.0%	85	115	
1,4-Difluorobenzene	113.3		0	120	0	94.4%	70	130	
4-Bromochlorobenzene	123.2		0	120	0	102.7%	70	130	
Fluorobenzene	112.2		0	120	0	93.5%	70	130	

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: 0106017		Run ID: GC-1_010627A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	SeqNo: 39235
Analyte	Result								
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: 0106017

Project: 4-1377; Conoco Salmon 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:		Run ID:	GC-1_010627A		SeqNo:	39236					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	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:		Run ID:	GC-1_010627A		SeqNo:	39237					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	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: 0106017

Project: 4-1377; Conoco Salmon 1

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: 0106017
Project: 4-1377; Conoco Salmon 1
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: 10/10/01

Page: 1 of 1

Purchase Order No.:		Project No. <u>11377</u>		Name <u>John J. [unclear]</u>		Title	
SEND INVOICE TO		Name		Company			
Address		Dept.		Mailing Address			
City, State, Zip				City, State, Zip			
				Telephone No.		Telefax No.	
PROJECT LOCATION:				ANALYSIS REQUESTED			
SAMPLER'S SIGNATURE:				LAB ID			
SAMPLE IDENTIFICATION							
DATE	TIME	MATRIX	PRES.				
Relinquished by: <u>[Signature]</u>				Received by:		Date/Time	
Relinquished by:				Received by:		Date/Time	
Relinquished by:				Received by:		Date/Time	
Method of Shipment:				Rush		24-48 Hours	
Authorized by: <u>[Signature]</u> Date <u>10/10/01</u> (Client Signature <u>Must</u> Accompany Request)				10 Working Days		By Date	
				Special Instructions / Remarks:			

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



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: 4-1377; Conoco Salmon 1

Order No.: 0109028

Dear John Hagstrom,

On Site Technologies, LTD. received 1 sample 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 -

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



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

On Site Technologies, LTD.

Date: 26-Sep-01

CLIENT: On Site Technologies Limited
Project: 4-1377; Conoco Salmon 1
Lab Order: 0109028

CASE NARRATIVE

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

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

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

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

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



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

ANALYTICAL REPORT

Date: 26-Sep-01

Client:	On Site Technologies Limited	Client Sample Info:	Salmon 1
Work Order:	0109028	Client Sample ID:	DG 2
Lab ID:	0109028-01A	Matrix:	AQUEOUS
Project:	4-1377; Conoco Salmon 1	Collection Date:	9/19/2001 1:20:00 PM
		COC Record:	11549

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

1 of 1

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EMAIL: ONSITE@ONSITELTD.COM

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

On Site Technologies, LTD.

Date: 26-Sep-01

CLIENT: On Site Technologies Limited
Work Order: 0109028
Project: 4-1377; Conoco Salmon 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:	0109028	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

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.

CLIENT: On Site Technologies Limited
Work Order: 0109028
Project: 4-1377; Conoco Salmon 1

Date: 26-Sep-01

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		SeqNo: 42585	Prep Date:	
Client ID: 0109028		Run ID: GC-1_010922A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val
Analyte	Result								
Benzene	2174	25	25	2000	94.19	104.0%	78	117	
Ethylbenzene	2143	25	25	2000	53.24	104.5%	79	121	
m,p-Xylene	4164	50	50	4000	73.06	102.3%	80	115	
Methyl tert-Butyl Ether	4784	50	50	2000	3178	80.3%	84	114	S
o-Xylene	2090	25	25	2000	10.14	104.0%	88	116	
Toluene	1980	25	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		SeqNo: 42586	Prep Date:	
Client ID: 0109028		Run ID: GC-1_010922A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val
Analyte	Result								
Benzene	2150	25	25	2000	94.19	102.8%	78	117	2174
Ethylbenzene	2232	25	25	2000	53.24	108.9%	79	121	2143
m,p-Xylene	4337	50	50	4000	73.06	106.6%	80	115	4164
Methyl tert-Butyl Ether	5116	50	50	2000	3178	96.9%	84	114	4784
o-Xylene	2181	25	25	2000	10.14	108.5%	88	116	2090
Toluene	2198	25	25	2000	11.38	109.3%	88	113	1980

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: 0109028
Project: 4-1377; Conoco Salmon I

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:	0109028	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				

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.

CLIENT: On Site Technologies Limited
Work Order: 0109028
Project: 4-1377; Conoco Salmon 1

Date: 26-Sep-01

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:		0109028	Run ID: GC-1_010922A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit
Analyte	Result								
Benzene	41.8	0.5	40	0	0	104.5%	85	115	
Ethylbenzene	42.32	0.5	40	0	0	105.8%	85	115	
m,p-Xylene	83.15	1	80	0	0	103.9%	85	115	
Methyl tert-Butyl Ether	39.41	1	40	0	0	98.5%	85	115	
o-Xylene	42.33	0.5	40	0	0	105.8%	85	115	
Toluene	41.76	0.5	40	0	0	104.4%	85	115	
1,4-Difluorobenzene	113.2	0	120	0	0	94.3%	77	112	
4-Bromochlorobenzene	125.9	0	120	0	0	105.0%	88	116	
Fluorobenzene	113.5	0	120	0	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:		0109028	Run ID: GC-1_010922A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit
Analyte	Result								
Benzene	42.04	0.5	40	0	0	105.1%	85	115	
Ethylbenzene	42.31	0.5	40	0	0	105.8%	85	115	
m,p-Xylene	82.9	1	80	0	0	103.6%	85	115	
Methyl tert-Butyl Ether	40.34	1	40	0	0	100.9%	85	115	
o-Xylene	42.2	0.5	40	0	0	105.5%	85	115	
Toluene	41.86	0.5	40	0	0	104.6%	85	115	
1,4-Difluorobenzene	113.5	0	120	0	0	94.6%	77	112	
4-Bromochlorobenzene	125.3	0	120	0	0	104.4%	88	116	
Fluorobenzene	114.2	0	120	0	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: 0109028
Project: 4-1377; Conoco Salmon 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:		0109028		Run ID: GC-1_010922A		SeqNo: 42582		LowLimit		HighLimit	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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				

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: 0109028

Project: 4-1377; Conoco Salmon 1

Test No: SW8021B

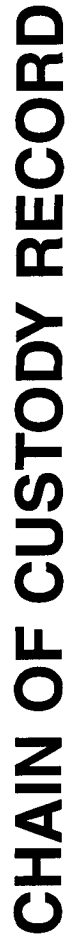
QC SUMMARY REPORT SURROGATE RECOVERIES

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	93.8	106	95
0109025-12A	96.7	99.7	101
0109025-13A	95.7	107	96.2
0109026-01A	92.8	108	94.8
0109026-03A	95.5	107	97
0109027-01A	96	104	96.9
0109027-03A	91.9	105	93.7
0109027-04A	92.5	106	93.6
0109028-01A	89.6	104	90.8
0109030-19A	96.3	106	96.9
CCV1 BTEX_01070	94.3	105	94.6
CCV2 BTEX_01070	94.6	104	95.1
CCV3 BTEX_01070	94.2	105	95.2
LCS WATER	94.6	105	95
MB1	95.4	102	95.7

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: 1 of 1

Distribution: White - On Site	Yellow - LAB	Pink - Sampler	Goldenrod - Client
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CHAIN OF CUSTODY RECORD

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

Date: 1/19/01

Page: 1 of 1

Purchase Order No.:		Project No. <u>11-337</u>		Name <u>John T. ...</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:				LAB ID							
SAMPLE IDENTIFICATION											
DATE		TIME						MATRIX		PRES.	
Relinquished by:		Date/Time <u>1/19/01</u>		Received by:		Date/Time <u>1/19/01</u>					
Relinquished by:		Date/Time		Received by:		Date/Time					
Relinquished by:		Date/Time		Received by:		Date/Time					
Method of Shipment:				Rush		24-48 Hours					
				10 Working Days		By Date					
Special Instructions / Remarks:											
Authorized by: <u>[Signature]</u> Date <u>1/19/01</u>				(Client Signature Must Accompany Request)							

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



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

December 17, 2001

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

RE: 4-1377; Conoco Salmon 1

Order No.: 0112016

Dear John Hagstrom,

On Site Technologies, LTD. received 1 sample on 12/13/2001 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to be "DC" or "D Cox", written over a horizontal line.

David Cox

P.O. BOX 2606 • FARMINGTON, NM 87499

EMAIL: ONSITE@ONSITELTD.COM

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

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



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

On Site Technologies, LTD.

Date: 17-Dec-01

CLIENT: On Site Technologies Limited
Project: 4-1377; Conoco Salmon 1
Lab Order: 0112016

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 Salmon 1
Work Order:	0112016	Client Sample ID:	DG-2
Lab ID:	0112016-01A	Matrix:	AQUEOUS
Project:	4-1377; Conoco Salmon 1	Collection Date:	12/13/2001 1:45:00 PM
		COC Record:	11696

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	Surr: - Surrogate

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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: 0112016
 Project: 4-1377; Conoco Salmon 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:	0112016	Run ID: GC-1_011215A		SeqNo: 45894	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Benzene	ND	0.5			
Ethylbenzene	ND	0.5			
m,p-Xylene	ND	1			
Methyl tert-Butyl Ether	ND	1			
o-Xylene	ND	0.5			
Toluene	ND	0.5			
1,4-Difluorobenzene	102.1	0			
4-Bromochlorobenzene	112.6	0			
Fluorobenzene	102	0			

Qualifiers:

ND - Not Detected at the Reporting Limit
 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: 0112016
Project: 4-1377; Conoco Salmon I

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: 0112016		Run ID: GC-1_011215A	PQL	SPK value	SPK Ref Val	SeqNo: 45895	
Analyte	Result					LowLimit	HighLimit
Benzene	1866	25	2000	20		70	130
Ethylbenzene	1793	25	2000	10		70	130
m,p-Xylene	2279	50	4000	10		70	130
Methyl tert-Butyl Ether	2575	50	2000	560		70	130
o-Xylene	1829	25	2000	0		70	130
Toluene	1833	25	2000	30		70	130
1,4-Difluorobenzene	5131	0	5500	0		77	112
4-Bromochlorobenzene	5752	0	5500	0		88	116
Fluorobenzene	5209	0	5500	0		87	102

Sample ID: 0112009-09AMSD		Batch ID: GC-1_011215	Test Code: SW8021B	Units: µg/L	Analysis Date 12/15/2001		Prep Date: 12/15/01
Client ID: 0112016		Run ID: GC-1_011215A	PQL	SPK value	SPK Ref Val	SeqNo: 45896	
Analyte	Result					LowLimit	HighLimit
Benzene	1812	25	2000	20		70	130
Ethylbenzene	1753	25	2000	10		70	130
m,p-Xylene	2226	50	4000	10		70	130
Methyl tert-Butyl Ether	2549	50	2000	560		70	130
o-Xylene	1783	25	2000	0		70	130
Toluene	1771	25	2000	30		70	130
1,4-Difluorobenzene	5130	0	5500	0		77	112
4-Bromochlorobenzene	5702	0	5500	0		88	116
Fluorobenzene	5171	0	5500	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

On Site Technologies, Ltd.

Date: 17-Dec-01

CLIENT: On Site Technologies Limited
Work Order: 0112016
Project: 4-1377; Conoco Salmon 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:		0112016		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: 0112016
Project: 4-1377; Conoco Salmon I

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:		0112016		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:		0112016		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: 0112016
 Project: 4-1377; Conoco Salmon 1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV3_011215		Batch ID: GC-1_011215		Test Code: SW8021B		Units: µg/L		Analysis Date 12/15/2001			Prep Date: 12/15/01	
Client ID:		0112016		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:	0112016	Run ID:	GC-1_011215A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte	Result												
Benzene	19.11			0.5	20	0	95.5%	85	115				
Ethylbenzene	19.15			0.5	20	0	95.8%	85	115				
m,p-Xylene	39.66			1	40	0	99.2%	85	115				
Methyl tert-Butyl Ether	21.18			1	20	0	105.9%	85	115				
o-Xylene	20.19			0.5	20	0	100.9%	85	115				
Toluene	18.72			0.5	20	0	93.6%	85	115				
1,4-Difluorobenzene	103.2			0	110	0	93.9%	77	112				
4-Bromochlorobenzene	111.2			0	110	0	101.1%	88	116				
Fluorobenzene	104.9			0	110	0	95.3%	87	102				

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

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

B - Analyte detected in the associated Method Blank

CLIENT: On Site Technologies Limited
Work Order: 0112016
Project: 4-1377; Conoco Salmon 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:	0112016	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

On Site Technologies, LTD.

Date: 17-Dec-01

CLIENT: On Site Technologies Limited

Work Order: 0112016

Project: 4-1377; Conoco Salmon 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
4BCBZ = 4-Bromochlorobenzene
FLBZ = Fluorobenzene

77-112
88-116
87-102

* Surrogate recovery outside acceptance limits



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

Date:

Page: _____ of _____

Purchase Order No.:

Project No.

**SEND
INVOICE
TO**

Name .

Company

Address

City, State, Zip

Dept.

PROJECT LOCATION:

SAMPLER'S SIGNATURE:

SAMPLE IDENTIFICATION

SAMPLE

DATE _____

TIME

MATRIX

PRES.

ANALYSIS REQUESTED

LAB ID:

Relinquished by:

Relinquished by:

Relinquished by:

Method of Shipment:

Authorized by:

(Client Signature Must Accompany Request)

Date _____

Received by:

Date/Time: 1.3.6

Received by:

Date/Time

Received by:

Date/Time

Bush

1-48 Hours

10 Working Days

By Date

Special Instructions / Remarks:

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



CHAIN OF CUSTODY RECORD

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

Date: _____

Page: _____ of _____

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

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

February 04, 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: 4-1377; Conoco Salmon 1

Order No.: 0201021

Dear John Hagstrom,

On Site Technologies, LTD. received 3 samples on 01/18/2002 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,

David Cox

P.O. BOX 2606 • FARMINGTON, NM 87499

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- TECHNOLOGY SERVING INDUSTRY WITH THE ENVIRONMENT -

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On Site Technologies, LTD.

Date: 04-Feb-02

CLIENT: On Site Technologies Limited
Project: 4-1377; Conoco Salmon 1
Lab Order: 0201021

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-Feb-02

Client:	On Site Technologies Limited	Client Sample Info:	Salmon 1
Work Order:	0201021	Client Sample ID:	DG 1
Lab ID:	0201021-01A	Matrix:	AQUEOUS
Project:	4-1377; Conoco Salmon 1	Collection Date:	01/18/2002 11:40:00 AM
		COC Record:	11741

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DDM		
Benzene	ND	0.5		µg/L	1	01/29/2002
Toluene	ND	0.5		µg/L	1	01/29/2002
Ethylbenzene	ND	0.5		µg/L	1	01/29/2002
m,p-Xylene	ND	1		µg/L	1	01/29/2002
o-Xylene	ND	0.5		µg/L	1	01/29/2002

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

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ANALYTICAL REPORT

Date: 04-Feb-02

Client:	On Site Technologies Limited	Client Sample Info:	Salmon 1
Work Order:	0201021	Client Sample ID:	DG 3
Lab ID:	0201021-02A	Matrix:	AQUEOUS
Project:	4-1377; Conoco Salmon 1	Collection Date:	01/18/2002 11:55:00 AM
		COC Record:	11741

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DDM		
Benzene	ND	0.5		µg/L	1	01/29/2002
Toluene	ND	0.5		µg/L	1	01/29/2002
Ethylbenzene	ND	0.5		µg/L	1	01/29/2002
m,p-Xylene	ND	1		µg/L	1	01/29/2002
o-Xylene	ND	0.5		µg/L	1	01/29/2002

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

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ANALYTICAL REPORT

Date: 04-Feb-02

Client:	On Site Technologies Limited	Client Sample Info:	Salmon 1
Work Order:	0201021	Client Sample ID:	DG 2
Lab ID:	0201021-03A	Matrix:	AQUEOUS
Project:	4-1377; Conoco Salmon 1	Collection Date:	01/18/2002 12:15:00 PM
		COC Record:	11741

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DDM		
Benzene	ND	0.5		µg/L	1	01/29/2002
Toluene	ND	0.5		µg/L	1	01/29/2002
Ethylbenzene	ND	0.5		µg/L	1	01/29/2002
m,p-Xylene	ND	1		µg/L	1	01/29/2002
o-Xylene	ND	0.5		µg/L	1	01/29/2002

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

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EMAIL: ONSITE@ONSITELTD.COM

- TECHNOLOGY SERVING INDUSTRY WITH THE ENVIRONMENT -

On Site Technologies, LTD.

Date: 04-Feb-02

CLIENT: On Site Technologies Limited
Work Order: 0201021
Project: 4-1377; Conoco Salmon 1

QC SUMMARY REPORT

Method Blank

Sample ID: MB_020129	Batch ID: GC-1_020129	Test Code: SW8021B	Units: µg/L	Analysis Date 01/29/2002	Prep Date:
Client ID: 0201021	Run ID: GC-1_020129A	PQL	SPK value	SeqNo: 46947	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
Benzene	.062	0.5			LowLimit
Ethylbenzene	.1225	0.5			HighLimit
m,p-Xylene	.2795	1			RPD Ref Val
Methyl tert-Butyl Ether	ND	1			%RPD
o-Xylene	.1166	0.5			RPDLimit
Toluene	.3566	0.5			Qual
1,4-Difluorobenzene	98.11	0			
4-Bromochlorobenzene	123.6	0			
Fluorobenzene	96.29	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: 04-Feb-02

CLIENT: On Site Technologies Limited
Work Order: 0201021
Project: 4-1377: Conoco Salmon 1

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0201020-10AMS	Batch ID: GC-1_020129	Test Code: SW8021B	Units: µg/L	Analysis Date 01/29/2002		Prep Date:					
Client ID:	0201021	Run ID: GC-1_020129A		SeqNo: 46948							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	232.3	2.5	200	43	94.6%	70	130				
Ethylbenzene	842	2.5	200	650	96.0%	70	130				
m,p-Xylene	524.4	5	400	120	101.1%	70	130				
Methyl tert-Butyl Ether	263.4	5	200	90	86.7%	70	130				
o-Xylene	217.2	2.5	200	12	102.6%	70	130				
Toluene	213.3	2.5	200	62	75.6%	70	130				
1,4-Difluorobenzene	480	0	550	0	87.3%	70	130				
4-Bromochlorobenzene	629.7	0	550	0	114.5%	70	130				
Fluorobenzene	485.2	0	550	0	88.2%	70	130				

Sample ID: 0201020-10AMSD		Batch ID: GC-1_020129	Test Code: SW8021B	Units: µg/L	Analysis Date 01/29/2002		Prep Date:			
Client ID:		0201021	Run ID:	GC-1_020129A	SeqNo:	46949				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	RPDLimit	Qual
Benzene	222.6	2.5	200	43	89.8%	70	130	232.3	4.3%	15
Ethylbenzene	790.2	2.5	200	650	70.1%	70	130	842	6.4%	15
m,p-Xylene	492.1	5	400	120	93.0%	70	130	524.4	6.4%	15
Methyl tert-Butyl Ether	252.8	5	200	90	81.4%	70	130	263.4	4.1%	15
o-Xylene	201.4	2.5	200	12	94.7%	70	130	217.2	7.5%	15
Toluene	206.7	2.5	200	62	72.4%	70	130	213.3	3.1%	15
1,4-Difluorobenzene	489.7	0	550	0	89.0%	70	130	0	0.0%	0
4-Bromochlorobenzene	601.4	0	550	0	109.3%	70	130	0	0.0%	0
Fluorobenzene	476.1	0	550	0	86.6%	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: 04-Feb-02

CLIENT: On Site Technologies Limited
Work Order: 0201021
Project: 4-1377; Conoco Salmon I

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS_020129		Batch ID: GC-1_020129		Test Code: SW8021B		Units: µg/L		Analysis Date 01/29/2002		Prep Date:	
Client ID:		0201021		Run ID: GC-1_020129A				SeqNo: 46946			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	41.35	0.5	40	0.062	103.2%	80	120				
Ethylbenzene	43.21	0.5	40	0.1225	107.7%	80	120				
m,p-Xylene	87.04	1	80	0.2795	108.5%	80	120				
Methyl tert-Butyl Ether	42.14	1	40	0	105.3%	80	120				
o-Xylene	44.83	0.5	40	0.1166	111.8%	80	120				
Toluene	41.86	0.5	40	0.3566	103.8%	80	120				
1,4-Difluorobenzene	98.73	0	110	0	89.8%	70	130				
4-Bromochlorobenzene	117.3	0	110	0	106.7%	70	130				
Fluorobenzene	95.86	0	110	0	87.1%	70	130				

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

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

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

CLIENT: On Site Technologies Limited
 Work Order: 0201021
 Project: 4-1377; Conoco Salmon I

Date: 04-Feb-02

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1_020129	Batch ID: GC-1_020129	Test Code: SW8021B	Units: µg/L	Analysis Date 01/29/2002	Prep Date:						
Client ID:	0201021	Run ID:	GC-1_020129A	SeqNo: 46943							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.11	0.5	20	0	100.6%	85	115				
Ethylbenzene	20.9	0.5	20	0	104.5%	85	115				
m,p-Xylene	42.58	1	40	0	106.5%	85	115				
Methyl tert-Butyl Ether	21.26	1	20	0	106.3%	85	115				
o-Xylene	21.62	0.5	20	0	108.1%	85	115				
Toluene	20.43	0.5	20	0	102.1%	85	115				
1,4-Difluorobenzene	98.36	0	110	0	89.4%	70	130				
4-Bromochlorobenzene	120.4	0	110	0	109.5%	70	130				
Fluorobenzene	95.96	0	110	0	87.2%	70	130				

Sample ID: CCV2_020129		Batch ID: GC-1_020129		Test Code: SW8021B		Units: µg/L		Analysis Date 01/29/2002		Prep Date:	
Client ID:		0201021		Run ID:		GC-1_020129A		SeqNo: 46944			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.32	0.5	20	0	96.6%	85	115				
Ethylbenzene	20.57	0.5	20	0	102.9%	85	115				
m,p-Xylene	42.05	1	40	0	105.1%	85	115				
Methyl tert-Butyl Ether	19.58	1	20	0	97.9%	85	115				
o-Xylene	20.86	0.5	20	0	104.3%	85	115				
Toluene	19.53	0.5	20	0	97.7%	85	115				
1,4-Difluorobenzene	96.9	0	110	0	88.1%	70	130				
4-Bromochlorobenzene	119.5	0	110	0	108.7%	70	130				
Fluorobenzene	95.3	0	110	0	86.6%	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: 0201021
Project: 4-1377; Conoco Salmon 1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV3_020129		Batch ID: GC-1_020129		Test Code: SW8021B		Units: µg/L		Analysis Date 01/29/2002			Prep Date:	
Client ID:		0201021		Run ID: GC-1_020129A		PQL		SPK value		SeqNo: 46945		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	39.74	0.5	40	0	99.3%	85	115					
Ethylbenzene	41.33	0.5	40	0	103.3%	85	115					
m,p-Xylene	83.42	1	80	0	104.3%	85	115					
Methyl tert-Butyl Ether	39.75	1	40	0	99.4%	85	115					
o-Xylene	43.04	0.5	40	0	107.6%	85	115					
Toluene	39.96	0.5	40	0	99.9%	85	115					
1,4-Difluorobenzene	97.92	0	110	0	89.0%	70	130					
4-Bromochlorobenzene	118	0	110	0	107.3%	70	130					
Fluorobenzene	94.83	0	110	0	86.2%	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-Feb-02

CLIENT: On Site Technologies Limited

Work Order: 0201021

Project: 4-1377; Conoco Salmon 1

Test No: SW8021B

**QC SUMMARY REPORT
SURROGATE RECOVERIES**

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0201020-10A	83.4	107	86.3
0201020-10AMS	87.3	114	88.2
0201020-10AMSD	89	109	86.6
0201020-12A	88.7	104	86.5
0201021-01A	85.4	105	83.5
0201021-02A	89.7	109	87.3
0201021-03A	89.2	109	87.1
0201026-01A	90.2	108	88.2
0201026-02A	90.8	104	88.2
0201026-03A	90	110	87.2
0201026-04A	88.8	105	87.1
0201026-05A	89.7	108	87.3
0201032-01A	89.1	112	88
0201032-19A	89.8	108	87.7
0201032-20A	90.8	113	88.3
CCV1_020129	89.4	109	87.2
CCV2_020129	88.1	109	86.6
CCV3_020129	89	107	86.2
LCS_020129	89.8	107	87.1
MB_020129	89.2	112	87.5

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

* Surrogate recovery outside acceptance limits



Page:

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

Distribution:	White - On Site	Yellow - LAB	Pink - Sampler	Goldenrod - Client
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Date: _____
Page: _____ of _____

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