

3R - 81

REPORTS

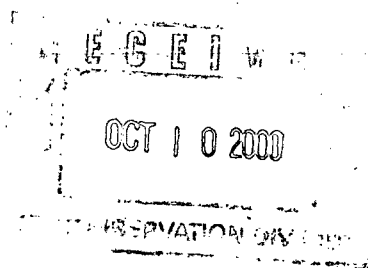
DATE:

10/5/2000



Conoco Inc.
3315 Bloomfield Highway
Farmington, New Mexico 87401

October 5, 2000



Mr. Denny G. Foust
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

Re: Report - Sheen On Animas River, 105 Meadow View Drive,
Farmington, New Mexico

Dear Mr. Foust:

Attached, you will find a copy of a report prepared by On Site Technologies, Ltd. concerning the September 1, 2000 incident in the Animas River. According to our consultant's analyses, the sheen in the Animas River was not petroleum in origin. Tests failed to detect benzene, toluene, ethylbenzene, or xylenes. Tests for hydrocarbons indicated that hydrocarbons present in the river are from biological decomposition.

Should you have questions or require additional information please do not hesitate to call me at 505-324-5846.

Sincerely,

John E. Cofer
Environmental Coordinator - San Juan Basin

cc: W. Olson

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



COPY

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

Conoco, Inc.
Attn.: Mr. John Cofer
3315 Bloomfield Highway
Farmington, NM 87401

September 25, 2000

RE: Sheen on River Near B Com 1 Location

Dear Mr. Cofer:

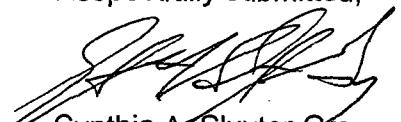
Enclosed please find results of laboratory analytical testing of samples taken 9-1-00 as directed by Conoco, Inc. in response to a request from New Mexico Oil Conservation Division related to a citizen concern. Mr. Don Roquemore of 105 Meadow View Drive, in the mobile home park adjacent to the Farmington B Com 1, had telephoned NMOCDD Aztec office and reported a sheen along the bank of the Animas River. He was concerned that the sheen and apparent petroleum presence might be related to the B Com 1 or associated pipelines.

David Cox and Cynthia Sluyter-Gray responded to the site, met with Mr. Roquemore, and were shown the area of concern on the river. An iridescent sheen was evident floating in several areas of slow flow. Attempts were made to sample the water for Total Petroleum Hydrocarbons, BTEX (Benzene, Toluene, Ethyl-benzene, and Xylene), and PAH. However, only enough water was recovered to analyze for BTEX. During that effort, significantly discolored soils were noted beneath a thin layer of river sediment. Samples were taken of the discolored soils. A "septic" odor was noted during the sampling.

As can be seen from the attached laboratory results, the water analysis was negative for BTEX compounds. To differentiate between hydrocarbons in the soils from a petroleum-related source and products of biological decomposition, the soils were tested for Diesel Range Organics (Method 8015B), Total Petroleum Hydrocarbons (Method 418.1), and Total Oil and Grease (Method 413.2). Positive results were obtained for both the Diesel Range and Total Recoverable Oil and Grease methods, indicating the minimal presence of hydrocarbon compounds in the larger chain molecules. However, the 418.1 method, specific for petroleum-type hydrocarbons with Benzene ring configurations, yielded results below detection limits, indicating that the hydrocarbon compounds present are from biological decomposition. Furthermore, the chromatogram produced by the 8015B Diesel Range Organics was compared to a typical diesel (petroleum-based) chromatogram, showing no correlation between the two.

All laboratory analytical results as well as the two chromatograms are attached to this letter. Please do not hesitate to contact either Dave Cox, Laboratory Manager, or myself, if further information or explanation is needed, or if we can be of service.

Respectfully submitted,



Cynthia A. Sluyter-Gray
On Site Technologies, Ltd.

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



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

September 18, 2000

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

RE: 4-1754; 105 Meadow View Drive

Order No.: 0009003

Dear Cindy Gray,

On Site Technologies, LTD. received 3 samples on 9/1/2000 for the analyses presented in the following report.

The Samples were analyzed for the following tests:

- Aromatic Volatiles by GC/PID (SW8021B)
- Diesel Range Organics (SW8015B)
- Percent Moisture (D2216)
- SOPREP SONICATION: TPH 418.1 (SW3550A)
- Total Oil and Grease (E413.2)
- TPH, T/R Soil (E418.1)

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

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



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

On Site Technologies, LTD.

Date: 18-Sep-00

CLIENT: On Site Technologies Limited
Project: 4-1754; 105 Meadow View Drive
Lab Order: 0009003

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.

Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1983.

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: 18-Sep-00

Client:	On Site Technologies Limited	Client Sample Info:	Behind 105 Meadow View Drive
Work Order:	0009003	Client Sample ID:	Bank of River; Aqueous Phase
Lab ID:	0009003-01A	Matrix:	AQUEOUS
Project:	4-1754; 105 Meadow View Drive	Collection Date:	9/1/2000 4:15:00 PM
		COC Record:	10898

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

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

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

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



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

ANALYTICAL REPORT

Date: 18-Sep-00

Client:	On Site Technologies Limited	Client Sample Info:	Behind-105-Meadow View Drive
Work Order:	0009003	Client Sample ID:	Bank of River; Solid Phase
Lab ID:	0009003-02A	Matrix:	SOIL
Project:	4-1754; 105 Meadow View Drive	Collection Date:	9/1/2000 4:20:00 PM
		COC Record:	10898

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL OIL AND GREASE		E413.2				Analyst: DM
Oil & Grease, Total Recoverable	120	120		mg/Kg	1	9/8/2000
TPH, T/R SOIL		E418.1				Analyst: DM
Petroleum Hydrocarbons, T/R	ND	25		mg/Kg	1	9/8/2000
DIESEL RANGE ORGANICS		SW8015B				Analyst: DM
T/R Hydrocarbons: C10-C28	72	50		mg/Kg	2	9/5/2000
PERCENT MOISTURE		D2216				Analyst: HR
Percent Moisture	36	0.1		wt%	1	9/11/2000

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

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

Software Version: 4.1<2F12>

Date: 9/7/00 11:31 AM

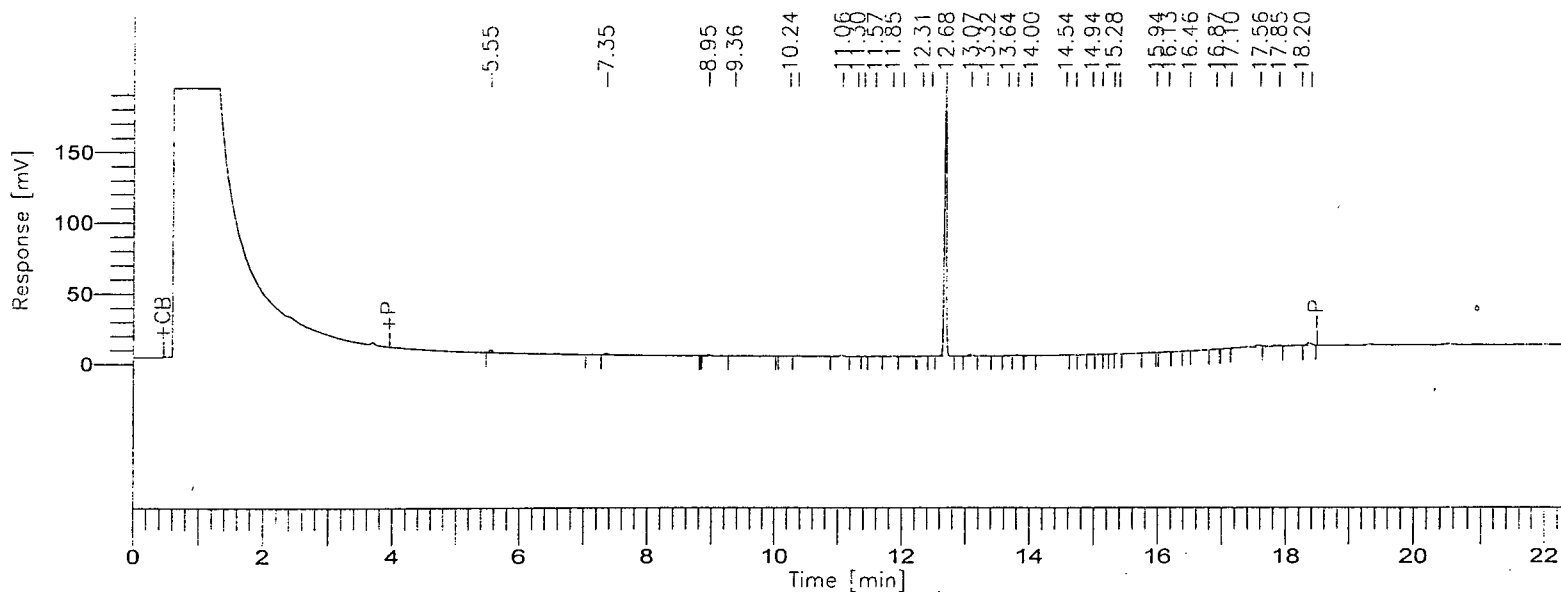
Sample Name : SAMP 0009003-02A D-1X

Data File : C:\TC4\DATA2\D3900302.RAW Date: 9/7/00 11:09 AM

Sequence File: C:\TC4\8015DR2S.SEQ Cycle: 53 Channel : A

Instrument : AUTOSYSTEM Rack/Vial: -6400/0 Operator: manager

Sample Amount : 1.0000 Dilution Factor : 1.00



Diesel Range Organics (Diesel#2) - EPA 8015B C10-C28

Test: 8015DR2_S

Time [min]	Area [$\mu\text{V}\cdot\text{s}$]	Height [μV]	BL	Amount mg/L	Cal. Range	Component Name
11.218	607609.38	239816.28		54.8738		C10-C28
	607609.38	239816.28		54.8738	16.8807×35.9931	

Report stored in ASCII file: C:\TC4\DATA2\D3900302.TX0

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



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

ANALYTICAL REPORT

Date: 18-Sep-00

Client:	On Site Technologies Limited	Client Sample Info:	Behind 105 Meadow View Drive
Work Order:	0009003	Client Sample ID:	Trip Blank
Lab ID:	0009003-03A	Matrix:	AQUEOUS
Project:	4-1754; 105 Meadow View Drive	Collection Date:	9/1/2000 3:30:00 PM
		COC Record:	10898

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

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

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

On Site Technologies, LTD.

Date: 18-Sep-00

CLIENT: On Site Technologies Limited

Work Order: 0009003

Project: 4-1754; 105 Meadow View Drive

QC SUMMARY REPORT

Method Blank

Sample ID: MB1	Batch ID: GC-1_000901	Test Code: SW8021B	Units: µg/L	Analysis Date: 9/1/2000	Prep Date:
Client ID: 0009003	Run ID: GC-1_000901A	PQL	SPK value	SeqNo: 30988	
Analyte	Result	PQL	SPK value	%REC	LowLimit
Benzene	ND	0.5			HighLimit
Ethylbenzene	ND	0.5			RPD Ref Val
m,p-Xylene	ND	1			%RPD
o-Xylene	ND	0.5			RPDLimit
Toluene	ND	0.5			Qual

Qualifiers: ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 18-Sep-00

CLIENT: On Site Technologies Limited

Work Order: 0009003

Project: 4-1754; 105 Meadow View Drive

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0008054-01AMS	Batch ID: GC-1_000901	Test Code: SW8021B	Units: µg/L	Analysis Date 9/1/2000	Prep Date:
Client ID: 0009003	Run ID: GC-1_000901A	PQL	SPK value	SeqNo: 30989	
Analyte	Result	PQL	SPK Ref Val	LowLimit	HighLimit
Benzene	192.9	2.5	0	88	112
Ethylbenzene	210.7	2.5	5.1	86	113
m,p-Xylene	1029	5	600	85	108
o-Xylene	237.8	2.5	29	92	110
Toluene	210.5	2.5	9.8	88	116
				%REC	%RPD
				96.4%	
				102.8%	
				107.3%	
				104.4%	
				100.4%	
				RPD Ref Val	RPDLimit
					Qual

Sample ID: 0008054-01AMSD	Batch ID: GC-1_000901	Test Code: SW8021B	Units: µg/L	Analysis Date 9/1/2000	Prep Date:
Client ID: 0009003	Run ID: GC-1_000901A	PQL	SPK value	SeqNo: 30990	
Analyte	Result	PQL	SPK Ref Val	LowLimit	HighLimit
Benzene	192	2.5	0	88	112
Ethylbenzene	209.7	2.5	5.1	86	113
m,p-Xylene	1031	5	600	85	108
o-Xylene	244.2	2.5	29	92	110
Toluene	212.2	2.5	9.8	88	116
				%REC	%RPD
				96.0%	0.4%
				102.3%	0.5%
				107.8%	0.2%
				107.6%	2.7%
				101.2%	0.8%
				RPD Ref Val	RPDLimit
					Qual
					6
					6
					6
					6
					6

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

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

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 18-Sep-00

CLIENT: On Site Technologies Limited
 Work Order: 0009003
 Project: 4-1754; 105 Meadow View Drive

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS WATER	Batch ID: GC-1_000901	Test Code: SW8021B	Units: µg/L	Analysis Date 9/1/2000	Prep Date:
Client ID: 0009003	Run ID: GC-1_000901A	PQL	SPK value	SeqNo: 30987	
Analyte	Result	%REC	LowLimit	HighLimit	RPD Ref Val
Benzene	39.05	97.6%	0	96	111
Ethylbenzene	41.7	104.2%	0	96	111
m,p-Xylene	82.75	103.4%	0	92	105
o-Xylene	41.44	103.6%	0	97	110
Toluene	40.64	101.6%	0	97	109

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

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

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 18-Sep-00

CLIENT: On Site Technologies Limited

Work Order: 0009003

Project: 4-1754; 105 Meadow View Drive

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 BTEX_0007	Batch ID: GC-1_000901	Test Code: SW8021B	Units: µg/L	Analysis Date 9/1/2000	Prep Date:
Client ID: 0009003	Run ID: GC-1_000901A	PQL	SPK value	SPK Ref Val	SeqNo: 30985
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Benzene	20.34	0.5	20	0	101.7% 85 115
Ethylbenzene	21.8	0.5	20	0	109.0% 85 115
m,p-Xylene	43.51	1	40	0	108.8% 85 115
o-Xylene	21.7	0.5	20	0	108.5% 85 115
Toluene	21.16	0.5	20	0	105.8% 85 115
1,4-Difluorobenzene	88.03	0	100	0	88.0% 79 101
4-Bromochlorobenzene	90.8	0	100	0	90.8% 78 99
Fluorobenzene	86.95	0	100	0	86.9% 76 103

Sample ID: CCV2 BTEX_0007	Batch ID: GC-1_000901	Test Code: SW8021B	Units: µg/L	Analysis Date 9/1/2000	Prep Date:
Client ID: 0009003	Run ID: GC-1_000901A	PQL	SPK value	SPK Ref Val	SeqNo: 30986
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Benzene	19.74	0.5	20	0	98.7% 85 115
Ethylbenzene	20.95	0.5	20	0	104.7% 85 115
m,p-Xylene	41.89	1	40	0	104.7% 85 115
o-Xylene	20.96	0.5	20	0	104.8% 85 115
Toluene	20.47	0.5	20	0	102.4% 85 115
1,4-Difluorobenzene	88.44	0	100	0	88.4% 79 101
4-Bromochlorobenzene	86.46	0	100	0	86.5% 78 99
Fluorobenzene	87.57	0	100	0	87.6% 76 103

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

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

B - Analyte detected in the associated Method Blank

CLIENT: On Site Technologies Limited
Work Order: 0009003
Project: 4-1754; 105 Meadow View Drive
Test No: SW8021B

QC SUMMARY REPORT SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ					
0008052-01A	88	88	86.4					
0008053-02A	87.4	85.1	86.7					
0008054-01A	88.3	82.6	87.6					
0008054-01AMS	87.1	91.4	87					
0008054-01AMSD	87.1	90.3	87					
0008054-02A	90	90.3	89.2					
0008054-04A	87.6	88.3	87.8					
0009001-01A	88.8	89	87.8					
0009003-01A	89	89.4	87.7					
0009003-03A	88.8	89.1	87.9					
CCV1 BTEX_00070	88	90.8	86.9					
CCV2 BTEX_00070	88.4	86.5	87.6					
LCS WATER	88	90.6	86.7					
MB1	88.8	90.7	87.2					

Acronym	Surrogate	QC Limits
14FBZ	= 1,4-Difluorobenzene	79-101
4BCBZ	= 4-Bromochlorobenzene	78-99
FLBZ	= Fluorobenzene	76-103

* Surrogate recovery outside acceptance limits

On Site Technologies, LTD.

Date: 18-Sep-00

CLIENT: On Site Technologies Limited
Work Order: 0009003
Project: 4-1754; 105 Meadow View Drive

QC SUMMARY REPORT
Method Blank

Sample ID: MBlank Batch ID: 8015DR2_S-9 Test Code: SW8015B Units: mg/Kg Analysis Date 9/5/2000 Prep Date:
Client ID: 0009003 Run ID: GC-2_000905A SeqNo: 31106
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
T/R Hydrocarbons: C10-C28 10.77 25 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: 18-Sep-00

CLIENT: On Site Technologies Limited

Work Order: 0009003

Project: 4-1754; 105 Meadow View Drive

QC SUMMARY REPORT

Sample Duplicate

Sample ID: 0008050-01AD	Batch ID: 8015DR2_S-9	Test Code: SW8015B	Units: mg/Kg	Analysis Date 9/5/2000	Prep Date:						
Client ID: 0009003	Run ID: GC-2_000905A	SeqNo: 31126									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C10-C28	47280	500	0	0	0.0%	0	0	48000	1.5%	34	

Qualifiers:

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

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

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 18-Sep-00

CLIENT: On Site Technologies Limited

Work Order: 0009003

Project: 4-1754; 105 Meadow View Drive

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0008049-02BMS	Batch ID: 8015DR2_S-9	Test Code: SW8015B	Units: mg/Kg	Analysis Date 9/5/2000	Prep Date:
Client ID: 0009003	Run ID: GC-2_000905A	PQL	SPK value	SeqNo: 31125	
Analyte	Result	%REC	LowLimit	HighLimit	RPD Ref Val
T/R Hydrocarbons: C10-C28	398	75.6%	61	119	%RPD RPDLimit Qual

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

On Site Technologies, LTD.

Date: 18-Sep-00

CLIENT: On Site Technologies Limited

Work Order: 0009003

Project: 4-1754; 105 Meadow View Drive

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS Soil	Batch ID: 8015DR2_S-9	Test Code: SW8015B	Units: mg/Kg	Analysis Date 9/5/2000	Prep Date:						
Client ID:	0009003	Run ID: GC-2_000905A		SeqNo: 31108							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C10-C28	372	25	501.9	10.77	72.0%	62	110				

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

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

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 18-Sep-00

CLIENT: On Site Technologies Limited

Work Order: 0009003

Project: 4-1754; 105 Meadow View Drive

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 DROT_0008		Batch ID: 8015DR2_S-9	Test Code: SW8015B	Units: mg/Kg		Analysis Date 9/5/2000		Prep Date:	
Client ID: 0009003		Run ID: GC-2_000905A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	SeqNo: 31107
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD
T/R Hydrocarbons: C10-C28	486.3	25	501.9	0	96.9%	85	115		
o-Terphenyl	18	1	20	0	90.0%	0.1	119		

Sample ID: CCV2 DROT_0008		Batch ID: 8015DR2_S-9	Test Code: SW8015B	Units: mg/Kg		Analysis Date 9/5/2000		Prep Date:	
Client ID: 0009003		Run ID: GC-2_000905A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	SeqNo: 31127
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD
T/R Hydrocarbons: C10-C28	479	25	501.9	0	95.5%	85	115		
o-Terphenyl	18.18	1	20	0	90.9%	0.1	119		

Sample ID: CCV3 DROT_0008		Batch ID: 8015DR2_S-9	Test Code: SW8015B	Units: mg/Kg		Analysis Date 9/5/2000		Prep Date:	
Client ID: 0009003		Run ID: GC-2_000905A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	SeqNo: 31128
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD
T/R Hydrocarbons: C10-C28	539.2	25	501.9	0	107.4%	85	115		
o-Terphenyl	20.96	1	20	0	104.8%	0.1	119		

Sample ID: CCV4 DROT_0008		Batch ID: 8015DR2_S-9	Test Code: SW8015B	Units: mg/Kg		Analysis Date 9/5/2000		Prep Date:	
Client ID: 0009003		Run ID: GC-2_000905A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	SeqNo: 31129
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD
T/R Hydrocarbons: C10-C28	549.9	25	501.9	0	109.6%	85	115		
o-Terphenyl	21.78	1	20	0	108.9%	0.1	119		

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

CLIENT: On Site Technologies Limited

Work Order: 0009003

Project: 4-1754; 105 Meadow View Drive

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV5 DROT_0008 Batch ID: 8015DR2_S-9 Test Code: SW8015B Units: mg/Kg Analysis Date 9/5/2000 Prep Date:
Client ID: 0009003 Run ID: GC-2_000905A SeqNo: 31130
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
T/R Hydrocarbons: C10-C28 562.1 25 501.9 0 112.0% 85 115
o-Terphenyl 22.06 1 20 0 110.3% 0.1 119

Sample ID: CCV6 DROT_0008 Batch ID: 8015DR2_S-9 Test Code: SW8015B Units: mg/Kg Analysis Date 9/5/2000 Prep Date:
Client ID: 0009003 Run ID: GC-2_000905A SeqNo: 31131
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
T/R Hydrocarbons: C10-C28 494 25 501.9 0 98.4% 85 115
o-Terphenyl 19.89 1 20 0 99.4% 0.1 119

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits 2 of 2

On Site Technologies, LTD.

Date: 18-Sep-00

CLIENT: On Site Technologies Limited

Work Order: 0009003

Project: 4-1754; 105 Meadow View Drive

QC SUMMARY REPORT

Method Blank

Sample ID: MB1-9/8/2000	Batch ID: 181	Test Code: E418.1	Units: mg/Kg	Analysis Date 9/8/2000	Prep Date: 9/8/00
Client ID:	0009003	Run ID: TPH_000908B		SeqNo: 31160	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Petroleum Hydrocarbons, T/R	ND				25

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

On Site Technologies, LTD.

Date: 18-Sep-00

CLIENT: On Site Technologies Limited
Work Order: 0009003
Project: 4-1754; 105 Meadow View Drive

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS1-9/8/2000	Batch ID: 181	Test Code: E418.1	Units: mg/Kg	Analysis Date 9/8/2000	Prep Date: 9/8/00
Client ID:	0009003	Run ID: TPH_000908B		SeqNo: 31162	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Petroleum Hydrocarbons, T/R	784.3	25	799	0	98.2% 80 120
Sample ID: LCS1-9/8/2000	Batch ID: 181	Test Code: E418.1	Units: mg/Kg	Analysis Date 9/8/2000	Prep Date: 9/8/00
Client ID:	0009003	Run ID: TPH_000908B		SeqNo: 31166	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Petroleum Hydrocarbons, T/R	803.9	25	783.3	0	102.6% 80 120 784.3 2.5% 20

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

On Site Technologies, LTD.

Date: 18-Sep-00

CLIENT: On Site Technologies Limited

Work Order: 0009003

Project: 4-1754, 105 Meadow View Drive

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1	Batch ID: 181	Test Code: E418.1	Units: mg/Kg	Analysis Date 9/8/2000	Prep Date:
Client ID:	0009003	Run ID: TPH_000908B		SeqNo: 31161	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Petroleum Hydrocarbons, T/R	120	25	122	0	98.4% 85 115

Sample ID: CCV2	Batch ID: 181	Test Code: E418.1	Units: mg/Kg	Analysis Date 9/8/2000	Prep Date:
Client ID:	0009003	Run ID: TPH_000908B		SeqNo: 31165	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Petroleum Hydrocarbons, T/R	119	25	122	0	97.5% 85 115

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

On Site Technologies, LTD.

Date: 18-Sep-00

CLIENT: On Site Technologies Limited

Work Order: 0009003

Project: 4-1754; 105 Meadow View Drive

QC SUMMARY REPORT

Method Blank

Sample ID: MB-9/8/2000	Batch ID: 180	Test Code: E413.2	Units: mg/Kg	Analysis Date 9/8/2000	Prep Date: 9/8/00
Client ID:	0009003	Run ID: TPH_000908A		SeqNo: 31146	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val
Oil & Grease, Total Recoverable	ND	25			%RPD RPDLimit Qual

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

On Site Technologies, LTD.

Date: 18-Sep-00

CLIENT: On Site Technologies Limited

Work Order: 0009003

Project: 4-1754; 105 Meadow View Drive

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS-9/8/2000	Batch ID: 180	Test Code: E413.2	Units: mg/Kg	Analysis Date 9/8/2000	Prep Date: 9/8/00
Client ID:	0009003	Run ID: TPH_000908A		SeqNo: 31148	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Oil & Grease, Total Recoverable	789.2	25	799	0	98.8% 80 120

Sample ID: LCSD-9/8/2000	Batch ID: 180	Test Code: E413.2	Units: mg/Kg	Analysis Date 9/8/2000	Prep Date: 9/8/00
Client ID:	0009003	Run ID: TPH_000908A		SeqNo: 31152	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Oil & Grease, Total Recoverable	799	25	783.3	0	102.0% 80 120 789.2 1.2% 20

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

On Site Technologies, LTD.

Date: 18-Sep-00

CLIENT: On Site Technologies Limited
Work Order: 0009003
Project: 4-1754; 105 Meadow View Drive

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1	Batch ID: 180	Test Code: E413.2	Units: mg/Kg	Analysis Date 9/8/2000	Prep Date:
Client ID:	0009003	Run ID: TPH_000908A		SeqNo: 31147	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Oil & Grease, Total Recoverable	120	25	122	0	98.4% 85 115
Sample ID: CCV2	Batch ID: 180	Test Code: E413.2	Units: mg/Kg	Analysis Date 9/8/2000	Prep Date:
Client ID:	0009003	Run ID: TPH_000908A		SeqNo: 31151	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Oil & Grease, Total Recoverable	121	25	122	0	99.2% 85 115

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

CHAIN OF CUSTODY RECORD

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

Date: 9/16
Page: 1 of 1

[illegible]

Bill Olsen
2040 S. Pacheco St
Santa Fe 87505