

OK

Dis Kearney & Faust  
P.O. Box 1980, Hobbs, NM  
**DEPUTY OIL & GAS INSPECTOR**  
District 1  
P.O. Drawer DD, Artesia, NM 88211  
District JAN 27 1998  
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico  
Energy, Minerals and Natural Resources Department  
**OIL CONSERVATION DIVISION**  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

SUBMIT 1 COPY TO  
APPROPRIATE  
DISTRICT OFFICE  
AND COPY TO  
SANTA FE OFFICE  
(Revised 3/9/94)

**RECEIVED**  
SEP 15 1998  
**OIL CON. DIV.**  
OIL 3

*Approval*

**PIT REMEDIATION AND CLOSURE REPORT**

Operator: UNOCAL Corporation Telephone: (505) 568-4436

Address: P.O. Box 850, Bloomfield, NM 87413

Facility Or: Rincon #117  
Well Name

Location: Unit or Qtr/Qtr Sec I Sec 21 T27N R06W County Rio Arriba

Pit Type: Separator X Dehydrator      Other     

Land Type: BLM X, State     , Fee     , Other     

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Pit Location: Pit dimensions: length 12 ft, width 12 ft, depth 3 ft  
(Attach diagram)  
Reference: wellhead X, other     

Footage from reference: 45 ft

Direction from reference: 45 Degrees X East North X  
of  
     West South     

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Depth To Ground Water:	Less than 50 feet	(20 points)
(Vertical distance from	50 feet to 99 feet	(10 points)
contaminants to seasonal	Greater than 100 feet	(0 points)
	<u>0</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	(0 points)
	<u>0</u>	
irrigation canals and ditches)		
	<b>RANKING SCORE (TOTAL POINTS):</b>	
	<u>0</u>	

Date Remediation Started: 7/10/98 Date Completed: 7/10/98

Remediation Method: Excavation \_\_\_\_\_ Approx. cubic yards \_\_\_\_\_  
(Check all appropriate sections) Landfarmed \_\_\_\_\_ Insitu Bioremediation X  
Other \_\_\_\_\_

Remediation Location: Onsite X Offsite \_\_\_\_\_  
(i.e. landfarmed onsite, name and location of offsite facility) \_\_\_\_\_

**General Description Of Remedial Action:**  
Pit covered and closed in place as soil sampling and testing indicated residual hydrocarbon contamination below current NMOCD/BLM cleanup standards.

Ground Water Encountered: No X Yes \_\_\_\_\_ Depth \_\_\_\_\_

Final Pit: Sample location Three test holes advanced around center perimeter of pit bottom

Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)  
Sample depth 3 feet  
Sample date 7/10/98 Sample time 11:00

See attached field notes & Lab package  
Sample Results  
Benzene (ppm) \_\_\_\_\_  
Total BTEX (ppm) \_\_\_\_\_  
Field headspace (ppm) Non-detect  
TPH Below Lab Detect Levels( 3 point composite)

Ground Water Sample: Yes \_\_\_\_\_ No X (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 9-4-98 PRINTED NAME MIKE TABET  
SIGNATURE Mike Tabet AND TITLE PRODUCTION FOREMAN

UNOCAL CORPORATION

RINCON 117

1750' FSL & 990' FGL

S21-T27N-R6W

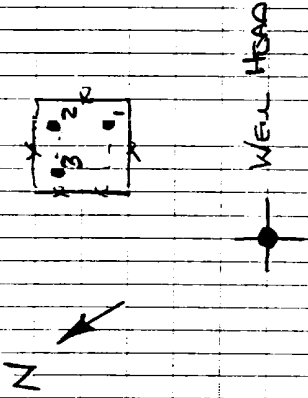
SEP. PIT ASSESSMENT

7/10/98 BY: AL

No EVIDENCE OF SOIL DISCOLORATION  
OR ODR.

SAMPLE	DEPTH	PID
T <sub>1</sub>	3'	ND
T <sub>2</sub>	3'	ND
T <sub>3</sub>	3'	ND

COMPOSITE SAMPLE FOR  
TPH.



OFF: (505) 325-5667



LAB: (505) 325-1556

July 28, 1998

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

RE: 4-1495

Order No.: 9807030

Dear Michael Lane,

On Site Technologies, LTD. received 2 samples on 7/10/98 for the analyses presented in the following report.

The Samples were analyzed for the following tests:

- Diesel Range Organics (SW8015)
- Gasoline Range Organics (SW8015)

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "D Cox", written in a cursive style.

David Cox



**On Site Technologies, LTD.**

Date: 28-Jul-98

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**CLIENT:** On Site Technologies, Limited Partnership  
**Project:** 4-1495  
**Lab Order:** 9807030

**CASE NARRATIVE**

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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.

OFF: (505) 325-5667



LAB: (505) 325-1556

**ANALYTICAL REPORT**

**Date:** 28-Jul-98

<b>Client:</b>	On Site Technologies, Limited Partnership	<b>Client Sample Info:</b>	Unocal Rincon Unit
<b>Work Order:</b>	9807030	<b>Client Sample ID:</b>	Rincon 117
<b>Lab ID:</b>	9807030-01A	<b>Matrix:</b>	SOIL
<b>Project:</b>	4-1495	<b>Collection Date:</b>	7/10/98 11:00:00 AM
		<b>COC Record:</b>	5174

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>		<b>SW8015</b>				Analyst: <b>HR</b>
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	7/23/98
<b>GASOLINE RANGE ORGANICS</b>		<b>SW8015</b>				Analyst: <b>DC</b>
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	7/21/98

**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

**P.O. BOX 2606 • FARMINGTON, NM 87499**

- TECHNOLOGY BLENDING AND TESTING WITH THE ENVIRONMENT -

**On Site Technologies, LTD.**

Date: 28-Jul-98

CLIENT: On Site Technologies, Limited Partnership

Work Order: 9807030

Project: 4-1495

**QC SUMMARY REPORT**

Sample Duplicate

Sample ID: 9807046-01AD Batch ID: 8015DR2\_S-7 Test Code: SW8015 Units: mg/Kg Analysis Date: 7/23/98 Prep Date: 7/23/98  
Client ID: 9807030 Run ID: GC-2\_980722A SeqNo: 4902  
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual  
T/R Hydrocarbons: C10-C28 710.5 25 0 0 0.0% 0 0 728.5 2.5% 15

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: 28-Jul-98

**CLIENT:** On Site Technologies, Limited Partnership

**Work Order:** 9807030

**Project:** 4-1495

**QC SUMMARY REPORT**  
Method Blank

<b>Sample ID:</b> MBLK	<b>Batch ID:</b> 8015DR2_S-7	<b>Test Code:</b> SW8015	<b>Units:</b> mg/Kg	<b>Analysis Date:</b> 7/22/98	<b>Prep Date:</b> 7/22/98
<b>Client ID:</b>	9807030	<b>Run ID:</b> GC-2_980722A		<b>SeqNo:</b> 4879	
<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>SPK value</b>	<b>SPK Ref Val</b>	<b>%REC</b>
T/R Hydrocarbons: C10-C28	ND	25			
				<b>HighLimit</b>	<b>RPD Ref Val</b>
				<b>LowLimit</b>	<b>%RPD</b>
					<b>RPDLimit</b>
					<b>Qual</b>

**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      1 of 1



**On Site Technologies, LTD.**

Date: 28-Jul-98

**CLIENT:** On Site Technologies, Limited Partnership  
**Work Order:** 9807030  
**Project:** 4-1495

**QC SUMMARY REPORT**  
Sample Matrix Spike

Sample ID: 9807045-07AMS Batch ID: 8015DR2\_S-7 Test Code: SW8015 Units: mg/Kg Prep Date: 7/23/98  
Client ID: 9807030 Run ID: GC-2\_980722A Analysis Date: 7/23/98 SeqNo: 4903  
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual  
T/R Hydrocarbons: C10-C28 427.1 25 502 0 85.1% 70 130

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

**On Site Technologies, LTD.**

Date: 28-Jul-98

**QC SUMMARY REPORT**  
Laboratory Control Spike - generic

**CLIENT:** On Site Technologies, Limited Partnership  
**Work Order:** 9807030  
**Project:** 4-1495

**Sample ID:** LCS      **Batch ID:** 8015DR2\_S-7      **Test Code:** SW8015      **Units:** mg/Kg      **Analysis Date:** 7/22/98      **Prep Date:** 7/22/98  
**Client ID:** 9807030      **Run ID:** GC-2\_980722A      **SeqNo:** 4881

**Analyte:** T/R Hydrocarbons: C10-C28      **Result:** 417      **PQL:** 25      **SPK value:** 502      **SPK Ref Val:** 0      **%REC:** 83.1%      **LowLimit:** 70      **HighLimit:** 130      **RPD Ref Val:**      **%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: 28-Jul-98

**CLIENT:** On Site Technologies, Limited Partnership  
**Work Order:** 9807030  
**Project:** 4-1495

**QC SUMMARY REPORT**  
 Continuing Calibration Verification Standard

Sample ID: **CCV1 QC0602** Batch ID: **8015DR2\_S-7** Test Code: **SW8015** Units: **mg/Kg** Analysis Date: **7/22/98** Prep Date:  
 Client ID: **9807030** Run ID: **GC-2\_980722A** SeqNo: **4880**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C10-C28	517.1	25	502	0	103.0%	85	115				

Sample ID: **CCV2 QC0602** Batch ID: **8015DR2\_S-7** Test Code: **SW8015** Units: **mg/Kg** Analysis Date: **7/22/98** Prep Date:  
 Client ID: **9807030** Run ID: **GC-2\_980722A** SeqNo: **4904**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C10-C28	534.7	25	502	0	106.5%	85	115				

Sample ID: **CCV3 QC0602** Batch ID: **8015DR2\_S-7** Test Code: **SW8015** Units: **mg/Kg** Analysis Date: **7/23/98** Prep Date:  
 Client ID: **9807030** Run ID: **GC-2\_980722A** SeqNo: **4905**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C10-C28	515.3	25	502	0	102.7%	85	115				

Sample ID: **CCV4 QC0602** Batch ID: **8015DR2\_S-7** Test Code: **SW8015** Units: **mg/Kg** Analysis Date: **7/23/98** Prep Date:  
 Client ID: **9807030** Run ID: **GC-2\_980722A** SeqNo: **4906**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C10-C28	519	25	502	0	103.4%	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: 28-Jul-98

**CLIENT:** On Site Technologies, Limited Partnership

**Work Order:** 9807030

**Project:** 4-1495

**QC SUMMARY REPORT**

Sample Matrix Spike

Sample ID: 9807036-02AMS Batch ID: GC-1\_980721 Test Code: SW8015 Units: mg/Kg Analysis Date: 7/21/98 Prep Date: 7/21/98  
 Client ID: 9807030 Run ID: GC-1\_980721A SeqNo: 4844  
 Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual  
 T/R Hydrocarbons: C6-C10 1.7 0.18 1.801 0 94.4% 52 123

Sample ID: 9807036-02AMS Batch ID: GC-1\_980721 Test Code: SW8015 Units: mg/Kg Analysis Date: 7/21/98 Prep Date: 7/21/98  
 Client ID: 9807030 Run ID: GC-1\_980721A SeqNo: 4845  
 Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual  
 T/R Hydrocarbons: C6-C10 1.665 0.18 1.801 0 92.5% 52 123 1.7 2.0% 14

**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: 28-Jul-98

**CLIENT:** On Site Technologies, Limited Partnership  
**Work Order:** 9807030  
**Project:** 4-1495

**QC SUMMARY REPORT**  
Laboratory Control Spike - generic

Sample ID: LCS Soil Batch ID: GC-1\_980721 Test Code: SW8015 Units: mg/Kg Analysis Date: 7/21/98 Prep Date: 7/21/98  
Client ID: 9807030 Run ID: GC-1\_980721A SeqNo: 4832  
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual  
T/R Hydrocarbons: C6-C10 2.007 0.18 1.801 0.0718 107.5% 52 123

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantization 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: 28-Jul-98

**CLIENT:** On Site Technologies, Limited Partnership  
**Work Order:** 9807030  
**Project:** 4-1495

**QC SUMMARY REPORT**  
 Continuing Calibration Verification Standard

Sample ID:	CCV1 QC0593	Batch ID:	GC-1_980721	Test Code:	SW8015	Units:	mg/Kg	Analysis Date:	7/21/98	Prep Date:	
Client ID:	9807030	Run ID:	GC-1_980721A	SeqNo:	4831	LowLimit		HighLimit		RPDLimit	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	RPD Ref Val	%RPD	RPDLimit	Qual		
T/R Hydrocarbons: C6-C10	2.03	0.18	1.801	0	112.7%	115					
Trifluorotoluene	.0895	0	0.09	0	99.4%	70					

Sample ID:	CCV2 QC0593	Batch ID:	GC-1_980721	Test Code:	SW8015	Units:	mg/Kg	Analysis Date:	7/21/98	Prep Date:	
Client ID:	9807030	Run ID:	GC-1_980721A	SeqNo:	4846	LowLimit		HighLimit		RPDLimit	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	RPD Ref Val	%RPD	RPDLimit	Qual		
T/R Hydrocarbons: C6-C10	2.103	0.18	1.801	0	116.8%	115			S		
Trifluorotoluene	.09	0	0.09	0	100.0%	70					

Sample ID:	CCV3 QC0593	Batch ID:	GC-1_980721	Test Code:	SW8015	Units:	mg/Kg	Analysis Date:	7/21/98	Prep Date:	
Client ID:	9807030	Run ID:	GC-1_980721A	SeqNo:	4847	LowLimit		HighLimit		RPDLimit	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	RPD Ref Val	%RPD	RPDLimit	Qual		
T/R Hydrocarbons: C6-C10	2.056	0.18	1.801	0	114.1%	115					
Trifluorotoluene	.0951	0	0.09	0	105.7%	70					

Sample ID:	CCV4 QC0593	Batch ID:	GC-1_980721	Test Code:	SW8015	Units:	mg/Kg	Analysis Date:	7/22/98	Prep Date:	
Client ID:	9807030	Run ID:	GC-1_980721A	SeqNo:	4848	LowLimit		HighLimit		RPDLimit	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	RPD Ref Val	%RPD	RPDLimit	Qual		
T/R Hydrocarbons: C6-C10	1.602	0.18	1.801	0	89.0%	115					
Trifluorotoluene	.0781	0	0.09	0	86.8%	70					

**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 Partnership  
**Work Order:** 9807030  
**Project:** 4-1495

**QC SUMMARY REPORT**  
 Continuing Calibration Verification Standard

**Sample ID:** CCV5 QC0593    **Batch ID:** GC-1\_980721    **Test Code:** SW8015    **Units:** mg/Kg    **Analysis Date:** 7/22/98    **Prep Date:**

**Client ID:** 9807030    **Run ID:** GC-1\_980721A    **SeqNo:** 4849

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C10	1.942	0.18	1.801	0	107.8%	85	115				
Trifluorotoluene	.0871	0	0.09	0	96.8%	70	130				

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



