

District I
P.O. Box 1980, Hobbs, NM

District II
P.O. Drawer 100, Artesia, NM 88210

District III
1000 Rio DEPUTY OIL & GAS INSPECTOR

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 1 COPY TO
SANTA FE OFFICE

(Revised 3/9/94)

OCT 6 1 1997

PIT REMEDIATION AND CLOSURE REPORT

Operator: Conoco, Inc Telephone: 915-686-5453

Address: 10 Destra Drive, Suite 100W, Midland, TX 79705-4500

Facility Or: 28-7 # 67

Well Name

Location: Unit or Qtr/Qtr 0 Sec 5 T27N R7W County San Juan

Pit Type: Separator X Dehydrator Other

Land Type: BLM X State Fee Other

RECEIVED
JUL 31 1997

OIL CON. DIV.
DIST. 3

Pit Location: Pit dimensions: length 9' width 9' depth 3'

(Attach diagram)

Reference: wellhead X other

Footage from reference: 36

Direction from reference: 26 Degrees X East North X

of

 West South

Depth To Ground Water:

(Vertical distance from
contaminants to seasonal
high water elevation of
ground water)

Less than 50 feet (20 points)

50 feet to 99 feet (10 points)

Greater than 100 feet (0 points)

0

Wellhead Protection Area:

(Less than 200 feet from a private
domestic water source, or; less than
1000 feet from all other water sources)

Yes (20 points)

No (0 points)

0

Distance To Surface Water:

(Horizontal distance to perennial
lakes, ponds, rivers, streams, creeks,
irrigation canals and ditches)

Less than 200 feet (20 points)

200 feet to 1000 feet (10 points)

Greater than 1000 feet (0 points)

0

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 7- 16 - 1996 Date Completed: _____

Remediation Method: Excavation _____ Approx. cubic yards _____
(Check all appropriate sections) Landfarmed _____ Insitu Bioreediation _____
Other Natural attenuation _____

Remediation Location: Onsite X Offsite _____
(ie. landfarmed onsite,
name and location of
offsite facility) _____

General Description Of Remedial Action: Pit sampled by Conoco on 7-16-96.
Conoco's sampler encountered bedrock at six inches below bottom of the pit.
Sample headspace reading using PID = 250, Lab results of sample for TPH using
EPA Method 418.1 were 9190 ppm. Pit closed by backfilling during P&A and
Follow up grab sample taken on 10/09/96 by On Site Technologies at center of
pit at a depth of 3.5' below backfilled surface.

Ground Water Encountered: No X Yes _____ Depth _____

Final Pit: Sample location: Samples take at NW corner and center of pit
Closure Sampling: Follow up grab sample taken at center, 3.5' below backfilled
(if multiple samples, surface
attach sample results
and diagram of sample
locations and depths) Sample depth Six inches below bottom of the pit at bedrock
Follow up sample taken at 3.5' below backfilled surface
Sample date 7-16-1996 Sample time 1330 hours

Sample Results	Follow up Sample
Benzene (ppm) _____	<u>0.51</u>
Total BTEX (ppm) _____	<u>8.7</u>
Field headspace (ppm) <u>250</u>	
TPH <u>9190</u>	<u>5170.4</u>

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 _____

SIGNATURE Carl J. Coy PRINTED NAME CARL J. COY
AND TITLE FIELD SHEAR SPEC.

SITE SPECIFIC RISK EVALUATION SUMMARY

Well Name:
Well Site Location:
Pit Type:
Producing Formation:

Conoco 28-7 # 67 Pit #1
Unit O Sec. 5 T27N R7W
Separator Pit
Mesa Verde/Dakota Basin

Conclusion/ Recommendation:

Based upon the information given and risk assessment, we conclude that the residual hydrocarbon contamination in soil resulting from the subject earthen pit is very limited and the subsurface conditions (i.e. bedrock) are enough of a barrier to preclude impact to ground water. Refer to NMOCD's policy for pit closures with shallow bedrock and no ground water impact. Conoco requests pit closure approval on this site.

Pit Assessment:

Ranking Score: 0 - 9
Horizontal Distance to Surface Water: >1000 ft. 25.2877
Ground Water Depth: >100 ft.
Lateral Extent of Contamination: Confined to immediate pit area (9'X9')
Vertical Extent of Contamination: 0.5 ft. below bottom of pit (bedrock)
Land Use: BLM rangeland and grazing
Ground Water Impact: None Identified as of (11/11/96)
Surface Water Impact: None Identified as of (11/11/96). Topographic information does not indicate probability of off site lateral fluid migration near earthen pit.

Field and Lab Soil Sample Results:

Sample Location	TPH (ppm)	PID (units)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Total Xylene (ppm)
Conoco 2-pt Composite (7/16/96)	9190.0	250				
Follow up grab Sample (10/09/96)	5170.4		0.51	8.7	1.1	25.28

Notes: TPH: Total Petroleum Hydrocarbons per EPA Method 418.1 or EPA Method 8015m.
PID: Results of field headspace test ng.
BTEX: Volatile Organic Hydrocarbons per EPA Method 8020.
ppm: Parts per Million, equivalent to mg/Kg.

Remediation Summary:

Pit backfilled on March 26, 1997 by Rosenbaum Construction during site rehabilitation and re-seeding.

Submitted by:
Larry Trujillo

On Site Technologies Limited Partnership

CARBONS

67 pit 1

Client: Conoco, Inc.
Project: Not Given
Matrix: Soil
Condition: Intact/Cool

Date Reported: 07/26/96
Date Sampled: 07/17/96
Date Received: 07/17/96
Date Extracted: 07/19/96
Date Analyzed: 07/19/96

Sample ID	Lab ID	Result mg/kg	Detection Limit mg/kg
28-7 #72 A - LF	0396G01350	822	20.0
28-7 #72 - LF	0396G01351	94.9	19.9
28-7 #167 Pit 1	0396G01352	20,700	1002
28-7 #167 Pit 2	0396G01353	29,700	1002
28-7 #167 Pit 3	0396G01354	82.1	19.9
28-7 #202 Pit 2	0396G01355	44.3	20.0
28-7 #202 Pit 1	0396G01356	478	20.0
→ 28-7 #67 Pit 1	0396G01357	9,190	996

ND - Analyte not detected at stated detection level.

References: Method 418.1: Petroleum Hydrocarbons, Total Recoverable, USEPA Chemical Analysis of Water and Waste, 1978.

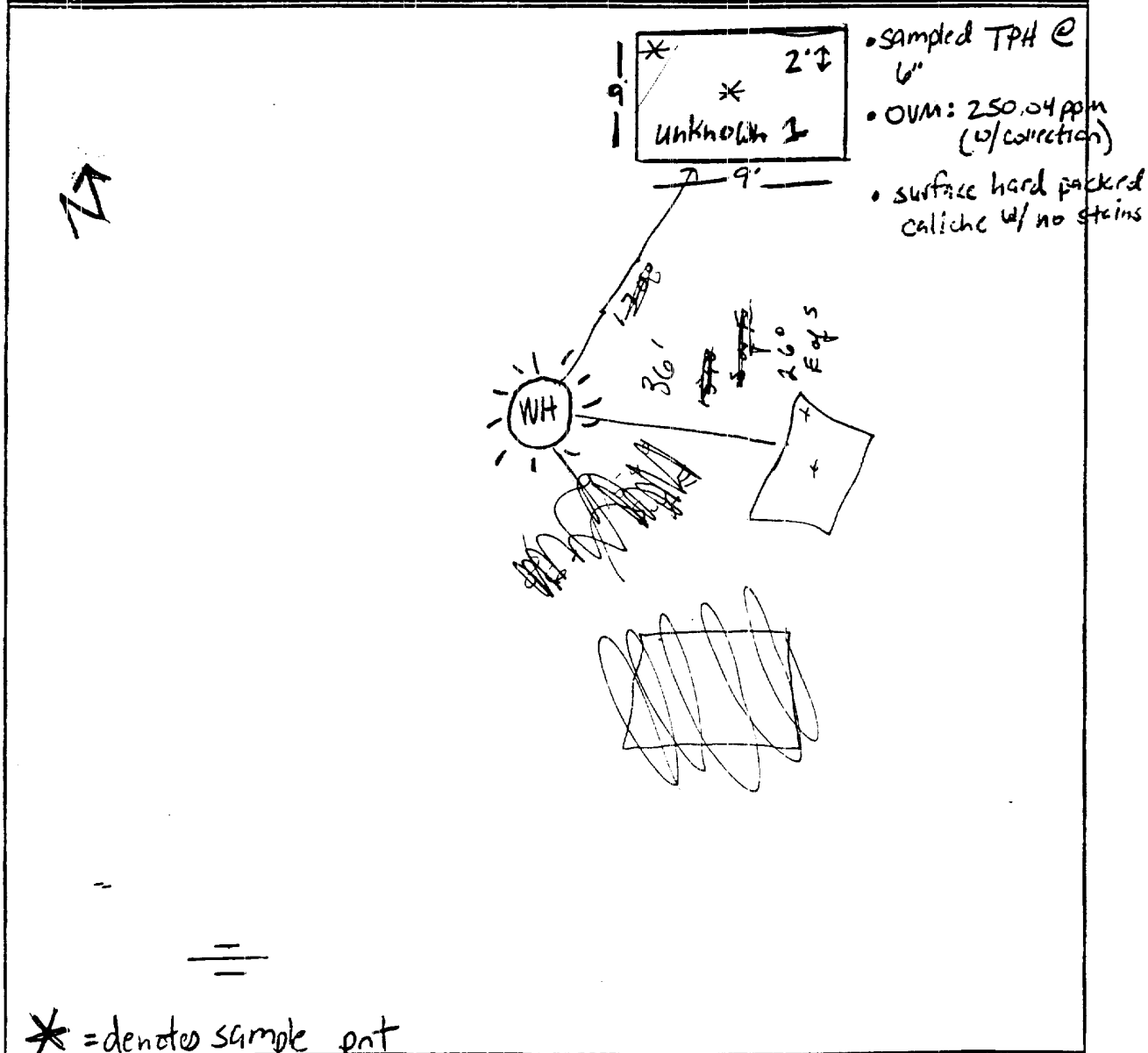
Method 3550: Ultrasonic Extraction of Non-Volatile and Semi-Volatile Organic Compounds from Solids, USEPA SW-846, Rev. 1, July 1992.

Analyst: dkReviewed: GP

PIT LOCATION AND COMPOSITE SAMPLE PROFILE MAP

WELL LOCATION: SJ 28-7 #67 S 5 T 27 R 7 UNIT 0

DATE STARTED: 7/16/96 DATE COMPLETED:



- Sampled TPH @ 6"
- OVM: 250.04 ppm (w/correction)
- surface hard packed caliche w/ no stains

0 SOIL SAMPLE LOCATION
 Δ BACKGROUND SAMPLE LOCATION

NOTES:

unknown Pit 1

SJ. #67

7/16/96 [1:30 pm] sampled 6" w/ hand Auger - hit rock @ 6" - 2 pt. composite

- surface is hard packed caliche - clean - no string

- OVM = 532 ppm (before factor) 250.04 ppm (after factor) @ 70°

OFF: (505) 325-5667



LAB: (505) 325-1556

AROMATIC VOLATILE ORGANICS

Attn: **Bobby Crabb**
Company: **On Site Technologies, Ltd.**
Address: **612 E. Murray Drive**
City, State: **Farmington, NM 87401**

Date: **15-Oct-96**
COC No.: **4499**
Sample No. **12504**
Job No. **4-1303**


Project Name: **Conoco #67**
Project Location: **Pit #67**
Sampled by: **RLC**
Analyzed by: **DC**
Sample Matrix: **Soil**

Date: **9-Oct-96** Time: **15:00**
Date: **14-Oct-96**

Laboratory Analysis

Component	Result	Units of Measure	Detection Limit	Units of Measure
Benzene	512.7	ug/kg	0.2	ug/kg
Toluene	8706.7	ug/kg	0.2	ug/kg
Ethylbenzene	1089.9	ug/kg	0.2	ug/kg
m,p-Xylene	21168.6	ug/kg	0.2	ug/kg
o-Xylene	4119.1	ug/kg	0.2	ug/kg
TOTAL		35597.0	ug/kg	

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: 
Date: **10/15/96**

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TECHNICAL & BUSINESS INQUIRIES: (505) 325-5667

OFF: (505) 325-5667



LAB: (505) 325-1556

QUALITY ASSURANCE REPORT

for EPA Method 8020

Date Analyzed: 14-Oct-96

Internal QC No.: 0486-QC

Surrogate QC No.: 0488-QC

Reference Standard QC No.: 0417-QC

Method Blank

Analyte	Result	Units of Measure
Average Amount of All Analytes In Blank	<0.2	ppb

Calibration Check

Analyte	Units of Measure	True Value	Analyzed Value	% Diff	Limit
Benzene	ppb	20.0	19.3	4	15%
Toluene	ppb	20.0	19.9	0	15%
Ethylbenzene	ppb	20.0	20.1	1	15%
m,p-Xylene	ppb	40.0	39.8	0	15%
o-Xylene	ppb	20.0	20.0	0	15%

Matrix Spike

Analyte	1 - Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Benzene	105	99	(39-150)	4	20%
Toluene	103	97	(46-148)	4	20%
Ethylbenzene	98	93	(32-160)	4	20%
m,p-Xylene	96	90	(35-145)	4	20%
o-Xylene	96	91	(35-145)	4	20%

Surrogate Recoveries

Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered
Limit Percent Recovery	(70-130)	
12504-4499	83	

S1: Fluorobenzene

DC

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- Technology Serving Industry with the Difference

OFF: (505) 325-5667



LAB: (505) 325-1556

TPH - Gasoline / Diesel Range Organics

Attn: **Myke Lane**
 Company: **On Site Technologies, Ltd.**
 Address: **612 E. Murray Drive**
 City, State: **Farmington, NM 87401**

Date: **11-Oct-96**
 COC No.: **4499**
 Sample No. **12504**
 Job No. **4-1303**

Project Name: **Conoco #67**
 Project Location: **Pit #67**
 Sampled by: **RLC**
 Analyzed by: **DC/HR**
 Sample Matrix: **Soil**

Date: **9-Oct-96** Time: **15:00**
 Date: **11-Oct-96**

Laboratory Analysis

Parameter	Result	Unit of Measure	Detection Limit	Unit of Measure
Gasoline Range Organics (C5 - C9)	1014.9	mg/kg	5.0	mg/kg
Diesel Range Organics (C10 - C28)	4155.6	mg/kg	5.0	mg/kg
TOTAL	5170.4	mg/kg		

Quality Assurance Report

GRC QC No.: **0493-STD**
 DRC QC No.: **0489-STD**

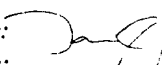
Calibration Check

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	% Diff	Limit
Gasoline Range (C5 - C9)	<50	ppb	1,350	1,235	8.5	15%
Diesel Range (C10 - C28)	<5.0	ppm	100	108	8.5	15%

Matrix Spike

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Gasoline Range (C5-C9)	113	111	(70-130)	1	20%
Diesel Range (C10-C28)	116	119	(70-130)	2	20%

Method - SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography

Approved by: Date: **10/11/96**

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657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

CHAIN OF CUSTODY RECORD

4499

Date: 10.9.96

Page 1 of 1

Purchase Order No.:		Job No. 4-1303	
Name: Conoco		Dept.	
Company:		Address:	
City, State, Zip:		Telephone No.:	
SEND INVOICE TO		REPORT RESULTS TO	
Name: Myla Kayne		Title:	
Company:		Mailing Address:	
City, State, Zip:		City, State, Zip:	
Telephone No.:		Telefax No.:	
Sampling Location: #67		ANALYSIS REQUESTED	
Sampler: RLC		Number of Containers: 1	
SAMPLE IDENTIFICATION		LAB ID	
DATE		TIME	
10.9.1500		50.1	
PRES.		✓	
Relinquished by: [Signature]		Received by: [Signature]	
Date/Time: 10.9.1907		Date/Time: 1.6.96	
Relinquished by:		Received by:	
Date/Time:		Date/Time:	
Relinquished by:		Received by:	
Date/Time:		Date/Time:	
Method of Shipment:		Rush	
Authorized by: [Signature]		24-48 Hours	
(Client Signature Must Accompany Request)		10 Working Days	
Date: 10.9.96		Special Instructions:	