District I
P.O. Box 1980, Hobbs, NM
District II
P.O. Drawer DD, Artesia, NM 88211
District III
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 1 COPY TO SANTA FE OFFICE

(Revised 3/9/94)

DEPUTY OIL & GAS INSPECTOR

OCT 0 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 # 167 Pit #1
Well Name

Location: Unit or Qtr/Qtr K 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: (Attach diagram)
Pit dimensions: length 8', width 8', depth 3'

Reference: wellhead X, other ____

Footage from reference: 24

Direction from reference: 38 Degrees ____ East North X of
X West South ____

Depth To Ground Water: (Vertical distance from contaminants to seasonal high water elevation of ground water)	Less than 50 feet 50 feet to 99 feet Greater than 100 feet 0	(20 points) (10 points) (0 points)
Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources)	Yes No 0	(20 points) (0 points)
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 200 feet 200 feet to 1000 feet Greater than 1000 feet 0	(20 points) (10 points) (0 points)

RANKING SCORE (TOTAL POINTS): 0

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

Remediation Method: (Check all appropriate sections) Excavation _____ Approx. cubic yards_____

Landfarmed _____ Insitu Bioreediation _____

Other Natural attenuation _____

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

General Description Of Remedial Action: Pit sampled by Conoco on 7-16-96. Conoco's sampler enccuntered bedrock at 1.5 feet below bottom of the pit. Sample headspace reading using PID = no reading given in field notes, Lab results of sample for TPH using EPA Method 418.1 were 20,700 ppm. Pit closed by backfilling during P&A and site rehabilitation. Follow up grab sample taken on 10/09/96 by On Site Technologies in center of. at 4.5' below backfilled surface at bedrock.

Ground Water Encountered: No X Yes ____ Depth_____

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

Sample location: Samples take at NE corner and E side of pit Follow up grab sample taken in center of pit 4.5' below backfilled surface.

Sample depth Eighteen inches below bottom of the pit at bedrock
Follow up sample taken at bedrock 4.5'
Sample date 7-16-1996 Sample time 1230 hours

Sample Results	Follow up Sample
Benzene (ppm) _____	3.3
Total BTEX (ppm) _____	56.1
Field headspace (ppm) _____	
TPH 20,700	11912.9

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 AND TITLE Carl J. Coy Field Super Spec.

SITE SPECIFIC RISK EVALUATION SUMMARY

Well Name:	Conoco 28-7 # 167 Pit #1
Well Site Location:	Unit K Sec. 5 T27N R7W
Pit Type:	Separator Pit
Producing Formation:	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 approval 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.
Ground Water Depth:	>1000 ft.(well location on top of Mesa)
Lateral Extent of Contamination:	Confined to immediate pit area (8'X8')
Vertical Extent of Contamination:	1-2 ft. below bottom of pit (limited at 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)	20700.0	<2400				
Follow up grab Sample (10/09/96)	11912.9		3.3	10.77	4.85	37.13

Notes:
TPH: Total Petroleum Hydrocarbons per EPA Method 418.1 or EPA Method 8015m.
PID: Results of field headspace testing.
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

Mountain Laboratories, Inc.

2508 W. Main Street
Farmington, New Mexico 87401

TOTAL PETROLEUM HYDROCARBONS
EPA METHOD 418.1

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.

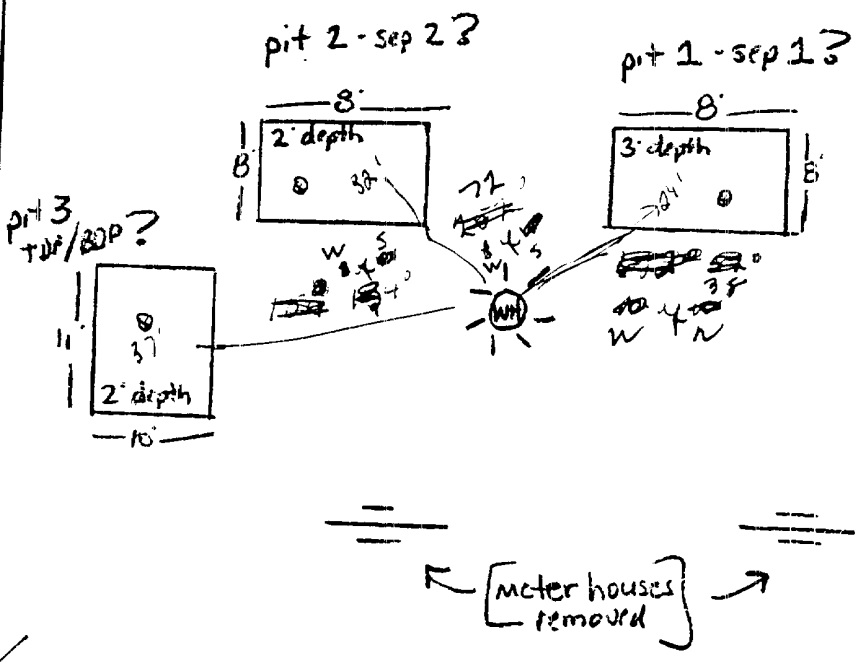
Analyst: _____ Reviewed: _____

conoco

PIT LOCATION AND COMPOSITE SAMPLE PROFILE MAP

WELL LOCATION: 28-7 #167 S 5 T 27 R 7 UNIT K

DATE STARTED: 7/16/96 DATE COMPLETED:



⊗ = sample

① • fluid standing (black, oily)
• soil severly stained along walls
• sampled 1'½' w/ hand augar. TPH
• OVM:

② • fluid standing (rusty liquid)
• soil severly stained along walls
• sampled TPH @ 1'½'
• OVM: 273.07 ppm - after factor

③ • sampled TPH w/ hand Augar - 6"
• surface clean - very hard caliche
• OVM: 7.99 ppm - after factor

DITTO AS FAR AS SURFACE ie: oil, staining etc.

0 SOIL SAMPLE LOCATION
▲ BACKGROUND SAMPLE LOCATION

PIT CLOSURE DOCUMENTATION – SAMPLING RESULTS NOTES

LOCATION OF PIT: SJ 28-7 #167 — TYPE OF PIT: SEP 1 — Pit #1

DESCRIPTION OF SAMPLE	SAMPLE EVENT #	SAMPLE EVENT #	SAMPLE EVENT #	SAMPLE EVENT #	SAMPLE EVENT #	SAMPLE EVENT #	SAMPLE EVENT #	SAMPLE EVENT #
DATE OF SAMPLE	7/16/96							
LOCATION OF SAMPLE	2 pit 1½'							
TYPE OF SAMPLE: (GRAB/COMPOSITE)	Composite							
DEPTH OF SAMPLE(S)	1½'							
TEMPERATURE OF SAMPLE								
FIELD METHOD RESULTS (PPMS)								
TPH VAPORS (EQUIV UNITS)								
BENZENE RESPONSE FACTOR	.47							
ADJUSTED FOR BENZENE EQUIV UNITS								
LAB RESULTS IN PPM:								
METHOD (418.1 OR MOD 8015)	418.1							
TPH	20,700							
NOTES	H.T BED Rock @ 1½' LIQUIDS							

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

AROMATIC VOLATILE ORGANICS

Attn:	*Bobby Crabb*	Date:	15-Oct-96
Company:	*On Site Technologies, Ltd.*	*COC No.:*	*4496*
Address:	*612 E. Murray Drive*	*Sample No.*	*12497*
City, State:	*Farmington, NM 87401*	*Job No.*	*4-1303*

Project Name:	***Conoco #167***				
Project Location:	***Pit #1***				
Sampled by:	RLC	Date:	9-Oct-96	Time:	15:50
Analyzed by:	DC	Date:	14-Oct-96		
Sample Matrix:	*Soil*				

Laboratory Analysis

Component	*Result*	*Units of Measure*	*Detection Limit*	*Units of Measure*
Benzene	3377.5	ug/kg	0.2	ug/kg
Toluene	10774.5	ug/kg	0.2	ug/kg
Ethylbenzene	4853.8	ug/kg	0.2	ug/kg
m,p-Xylene	30860.3	ug/kg	0.2	ug/kg
o-Xylene	6278.6	ug/kg	0.2	ug/kg
TOTAL	56144.7	ug/kg		

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

Approved by:
Date: 10/15/96

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

TPH - Gasoline / Diesel Range Organics

Attn:	*Myke Lane*	Date:	11-Oct-96
Company:	*On Site Technologies, Ltd.*	*COC No.:*	*4496*
Address:	*612 E. Murray Drive*	*Sample No.*	*12497*
City, State:	*Farmington, NM 87401*	*Job No.*	*4-1303*

Project Name:	***Conoco #167***				
Project Location:	***Pit #1***				
Sampled by:	RLC	Date:	9-Oct-96	Time:	15:50
Analyzed by:	DC/HR	Date:	10-Oct-96		
Sample Matrix:	*Soil*				

Laboratory Analysis

Parameter	*Result*	*Unit of Measure*	*Detection Limit*	*Unit of Measure*
Gasoline Range Organics (C5 - C9)	1673.4	mg/kg	5.0	mg/kg
Diesel Range Organics (C10 - C28)	10239.5	mg/kg	5.0	mg/kg
TOTAL	11912.9	mg/kg		

Quality Assurance Report

GRO QC No.: *0493-STD*
DRO 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	111	10.8	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

CHAIN OF CUSTODY RECORD

4496

ON SITE TECHNOLOGIES, LTD.

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

Date: 10-9-96

Page 1 of 1

Purchase Order No.:

Job No. 4-1303

SEND INVOICE TO

Name Conoco

Company

Dept.

Address

City, State, Zip

REPORT RESULTS TO

Name Mike Kaylor / B. Crabb

Title

Company

Mailing Address

City, State, Zip

Telephone No.

Telefax No.

Sampling Location: #167

Sampler: RLC

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	8015	LAB ID
PIT #1	10-9	1550	soil	✓	1	✓	
PIT #2	"	1600	"	✓	1	✓	
PIT #3	"	1605	"	✓	1	✓	

Relinquished by: Robert Smith	Date/Time 10-9/1500	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

Authorized by: Robert Smith Date 10-9-96

(Client Signature Must Accompany Request)

Rush	24-48 Hours	10 Working Days	Special Instructions:

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