

District I
Benjamin S. Frost
District II
DEPT. OF ENERGY & NATURAL RESOURCES
District III
1000 Rio Brava Rd. Aztec, NM 87410
001-01-1997

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)

Approved
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 # 173 Pit # 3

Well Name

Location: Unit or Qtr/Qtr I Sec 17 T27N R7W County San Juan

Pit Type: Separator X Dehydrator Other

Land Type: BLM X State Fee Other

Pit Location: Pit dimensions: length 12', width 9', depth 5'

(Attach diagram)

Reference: wellhead X, other

Footage from reference: 18'

Direction from reference: 22 Degrees X East North X
of
 West South

Depth To Ground Water:

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

RECEIVED

OCT - 1 1997

Less than 50 feet	(20 points)
50 feet to 99 feet	(10 points)
Greater than 100 feet	(0 points)

10

Wellhead Protection Area:

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

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DIST. 3

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): 10

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 7-16-9.

Conoco's sampler encountered bedrock at six inches below bottom of the pit.

Sample headspace reading using PID = 176.96 ppm, Lab results of sample for
TPH using EPA Method 418.1 were Non detect. Contamination is below NMOCD soil
action levels for Volatile Organics of 100 ppm and TPH of 1000 ppm. Pit
closed by backfilling during P&A and site rehabilitation.

Ground Water Encountered: No X Yes _____ Depth _____

Final Pit:

Sample location: Samples take at center and SW corner of pit

Closure Sampling:

(if multiple samples,
attach sample results
and diagram of sample
locations and depths)

Sample depth Six inches below bottom of the pit at bedrock

Sample date 7-16-1996 Sample time 1540 hours

Sample Results

Benzene (ppm) _____

Total BTEX (ppm) _____

Field headspace (ppm) 172.96

TPH ND

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

PRINTED NAME

AND TITLE

SITE SPECIFIC RISK EVALUATION SUMMARY

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

Conoco 28-7 # 173 Pit #3
Unit I, Sec 17, T27N, R7W
Separator Pit
Basin Dakota/Mesa Verde

Conclusion/ Recommendation:

Based upon the information given and risk assessment, we conclude that the residual hydrocarbon contamination resulting in soil 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: 10 - 19
Horizontal Distance to Surface Water: >1000 ft.
Ground Water Depth: 50-100 ft.
Lateral Extent of Contamination: Confined to immediate area of pit (12'X9')
Vertical Extent of Contamination: 5 to 6 ft. 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-point composite (7/16/96)	ND	172.96	—	—	—	—

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 closed during site rehabilitation and re-seeding during spring of 1997

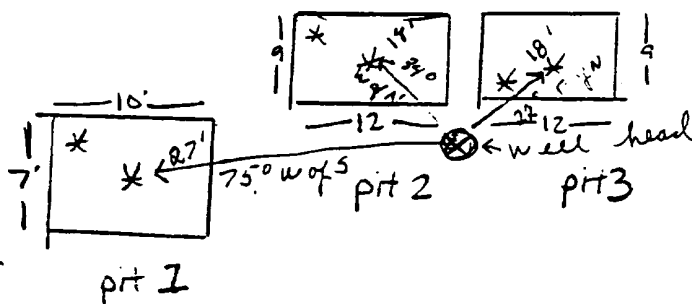
Submitted by:
Larry Trujillo
On Site Technologies, Ltd.

PIT LOCATION AND COMPOSITE SAMPLE PROFILE MAP

WELL LOCATION: 28-7 #173 S 17 T 27 R 7 UNIT 1

DATE STARTED: 7/16/96 DATE COMPLETED: _____

- ①. took TPH sample 6'
- pit looks good
no strings
- OUM - after factor
= .94 ppm



- ② • took TPH sample 6"
 - pit looks good - no staining
 - OUM - after factor - .94 ppm
- ③ • took TPH sample 6"
 - pit has strong odor
 - soil has some discolor
 - OUM - after factor - 172.96 ppm

N

* denotes sample prt.

0 SOIL SAMPLE LOCATION

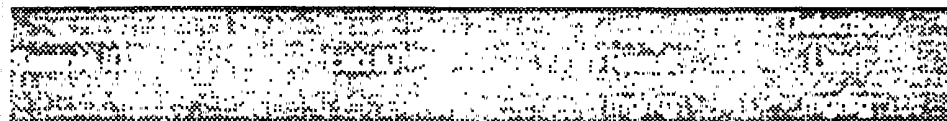
A BACKGROUND SAMPLE LOCATION

Pit 1
2
3 173

**TOTAL PETROLEUM HYDROCARBONS
EPA METHOD 418.1**

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



28-7 #170 Pit 1	0396G01358	44.4	20.0
28-7 #170 Pit 2	0396G01359	952	39.8
28-7 #122 Pit 1	0396G01360	324	20.0
28-7 #173 Pit 1	0396G01361	146	19.9
28-7 #173 Pit 2	0396G01362	ND	20.0
→ 28-7 #173 Pit 3	0396G01363	ND	20.0
28-7 #196 Pit 1	0396G01364	ND	20.0
28-7 #196 Pit 2	0396G01365	ND	19.7

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: df

Reviewed: GP

PIT CLOSURE DOCUMENTATION - SAMPLING RESULTS NOTES

LOCATION OF PIT 28-7 # 173 TYPE OF PIT: Pit 3

DESCRIPTION OF SAMPLE	SAMPLE EVENT #	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	Pit 3								
TYPE OF SAMPLE (GRAB/COMPOSITE)	Composite 2 pit								
DEPTH OF SAMPLE(S)	6"								
TEMPERATURE OF SAMPLE	78°								
FIELD METHOD RESULTS (PPMS)									
TPH VAPORS (EQUIV UNITS)	368 ppm								
BENZENE RESPONSE FACTOR	.47								
ADJUSTED FOR BENZENE EQUIV UNITS	172.96 ppm								
ALL RESULTS IN PPM:									
METHOD (418.1 OR MOD 8018)	418.1								
TPH	ND								
NOTES	Bedrock								

NOTES: Pit 3

28-7 #173

7/14/96 340 pm - sampled 6" w/ hand auger - 2pt composite

↳ hit bedrock/casing @ 6"

QVM: 368 ppm (before factor) 172.96 (after factor) @ 78°