

District I

P.O. Box 1980, Hobbs, NM

District II

P.O. Drawer DD, Artesia, NM 88211

District III DEPUTY OIL & GAS INSPECTOR

1000 Rio Brazos Rd, Aztec, NM 87410

OCT 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)

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 # 122

Well Name

Location: Unit or Qtr/Qtr N Sec 18 T27N R7W County San Juan

Pit Type: Separator X Dehydrator Other

Land Type: BLM X State Fee Other

Pit Location: Pit dimensions: length 7', width 7', depth 5'

(Attach diagram)

Reference: wellhead X, other

Footage from reference: 35'

Direction from reference: 4 Degrees X East North X

of

 West South

RECEIVED
JUL 31 1997

OIL CON. DIV.
DIST. 3

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)

10

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): 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 = 2.35 ppm, Lab results of sample for TPH
using EPA Method 418.1 were 324 ppm. Contamination is below NMOC 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 NW 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 1400 hours

Sample Results

Benzene (ppm) _____

Total BTEX (ppm) _____

Field headspace (ppm) 2.35

TPH 324

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. Gay

PRINTED NAME
AND TITLE

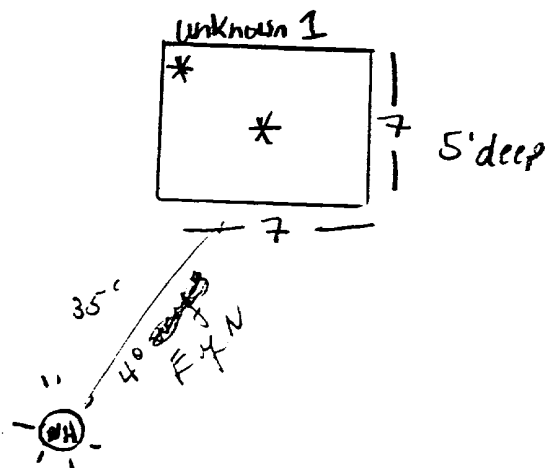
Carl J. Gay
Field Screen Spec.

PIT LOCATION AND COMPOSITE SAMPLE PROFILE MAP

WELL LOCATION: 28-7 #122 S 18 T 27 R 7 UNIT N

DATE STARTED: 7/16/96 DATE COMPLETED:

- Sample @ 6" w/ hand auger
- OVM after factor = 2.35 ~~mm~~
- pit looks good - no stains



* Denotes sample pit

0 SOIL SAMPLE LOCATION
 ▲ BACKGROUND SAMPLE LOCATION

TOTAL PETROLEUM HYDROCARBONS
EPA METHOD 418.1Client: Conoco, Inc.
Project: Not Given
Matrix: Soil
Condition: Intact/CoolDate 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 #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: dtReviewed: SP



Environmental Sample Chain of Custody and Log
Research and Engineering

No. 10145

Project Number

Facility Name CONOCO		Telephone Number (505) 324-5813		Transporter Name		
Facility Address 3315 Bloomfield Hwy				Transporter Address		
Facility Supervisor John Gay				Method of Shipping		
Process Producing Sample		Special Shipping Instructions				
Employee(s) Sampling Neal Gates / Brent Dunejan		Remarks				
Other Employee(s) Handling						
Type or Print Date						
Sample I.D. No. and Description	Date	Time	Sample Type	Total Volume	Containers Type No.	Analysis Req. Preservative
28-7 # 47 MW 1	7-16-96	9:30am	Wtr.	40 mL	Glass 1	HCL 1:1
28-7 # 72A-LF	7-16-96	9:45am	soil	8 oz	Glass 1	none
28-7 # 72-LF	7-16-96	10:00am	soil	8 oz	Glass 1	none
28-7 # 19-MW 1	7-16-96	11:00am	Wtr.	40 mL	Glass 1	HCL 1:1
28-7 # 167 pit 1	7-16-96	1:00pm	soil	8 oz	Glass 1	none
28-7 # 167 pit 2	7-16-96	1:05pm	soil	8 oz	Glass 1	none
28-7 # 167 pit 3	7-16-96	1:10pm	soil	8 oz	Glass 1	none
28-7 # 202 pit 2	7-16-96	1:15pm	soil	8 oz	Glass 1	none
28-7 # 202 pit 1	7-16-96	1:40pm	soil	8 oz	Glass 1	none
28-7 # 67 pit 1	7-16-96	1:50pm	soil	8 oz	Glass 1	none
28-7 # 170 pit 1	7-16-96	2:30pm	soil	8 oz	Glass 1	none
28-7 # 170 pit 2	7-16-96	2:35pm	soil	8 oz	Glass 1	none
28-7 # 122 pit 1	7-16-96	3:00pm	soil	8 oz	Glass 1	none
28-7 # 173 pit 1	7-16-96	3:30pm	soil	8 oz	Glass 1	none
28-7 # 173 pit 2	7-16-96	3:35pm	soil	8 oz	Glass 1	none
28-7 # 173 pit 3	7-16-96	3:40pm	soil	8 oz	Glass 1	none
28-7 # 196 pit 1	7-16-96	4:30pm	soil	8 oz	Glass 1	none
28-7 # 196 pit 2	7-16-96	4:35pm	soil	8 oz	Glass 1	none
28-7 # 120 MW 1	7-16-96	5:45pm	Wtr.	40 mL	Glass 1	HCL 1:1
Bottle Relinquished by B. Gates Date/Time 7/17/96 8:30am Condition of Samples Upon Arrival at Final Destination						
Relinquished by	Date/Time	Bottles Received by John Gay		Date/Time	Condition of Samples Upon Arrival at Final Destination	
Relinquished by	Date/Time	Received by		Date/Time	Signature	
Relinquished by	Date/Time	Received by		Date/Time	Temp. of Samples on Arrival (Temp. sensitive analysis only)	
Relinquished by	Date/Time	Received by		Date/Time	Signature	
Relinquished by	Date/Time	Received by		Date/Time	Date	

PIT CLOSURE DOCUMENTATION - SAMPLING RESULTS NOTES

LOCATION OF PIT

28.7 #122

TYPE OF PIT:

Pit 1

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 1								
TYPE OF SAMPLE: (3RAB/COMPOSITE)	Composite 2-pit								
DEPTH OF SAMPLE(S)	6"								
TEMPERATURE OF SAMPLE	74°								
FIELD METHOD RESULTS (PPMS)									
TPH VAPORS (EQUIV UNITS)	5 ppm								
BENZENE RESPONSE FACTOR	.47								
ADJUSTED FOR BENZENE EQUIV UNITS	235 ppm								
AD RESULTS IN PPM: METHOD (4.1 OR MOD 8015)	418.1								
TPH	384								
NOTES	Base rock c. 500 ppm								

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.

RECEIVED
JUL 31 1997

OIL CON. DIV.
DIST. 3

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(Revised 3/9/94)

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)

Less than 50 feet	(20 points)
50 feet to 99 feet	(10 points)
Greater than 100 feet	(0 points)
<u>10</u>	

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)
<u>0</u>	

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)
<u>0</u>	

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

Carl J. Coy

PRINTED NAME
AND TITLE

Carl J. Coy
FIELD SHEAR SPEC.

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

-
- Diagram showing two rectangular pits, Pit 2 and Pit 3, with dimensions and a well head. Pit 2 is 12 units wide and 9 units high. Pit 3 is 12 units wide and 9 units high. A well head is located between them, with a line connecting it to Pit 3. The distance from the well head to Pit 2 is 75.0 units.

- ② • took TPH sample 6"
 - pit looks good - no strings
 - 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 pt.

0 SOIL SAMPLE LOCATION

Δ BACKGROUND SAMPLE LOCATION

pit 1
2
3 173TOTAL PETROLEUM HYDROCARBONS
EPA METHOD 418.1Project: Not Given
Matrix: Soil
Condition: Intact/CoolDate 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
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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: dkReviewed: SP

NOTES: Pit 3

28-7 #173

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

↳ hit bedrock/clay @ 6"

OVM: 368 psi (before factor) 172.96 (after factor) @ 78°