

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Approved
Outside
vulnerable
Submit 1 copy to appropriate District Office and 1 copy to the Santa Fe Office

(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

30645-11613

Operator: ConocoPhillips Company Telephone: (505)599-3400

Address: 5525 Hwy. 64 Farmington, NM 87401

Facility Or: Storey C #3
Well Name

Location: Unit or Qtr/Qtr Sec B Sec 27 T 28N R 9W County San Juan

Pit Type: Separator Dehydrator Other Production

Land Type: BLM X, State , Fee Other

Pit Location: Pit dimensions: length 15', width 11', depth 3'
(Attach diagram)

Reference: wellhead X, other

Footage from reference: 152'

Direction from reference: 90 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	(20 points)
	50 feet to 99 feet	(10 points)
	Greater than 100 feet	(0 points) <u>0</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): 0 pts.

Date Remediation Started: 10/15/03 Date completed: 10/15/03

Remediation Method: Excavation N/A Approx. cubic yards _____
(Check all appropriate sections.) Landfarmed N/A Insitu Bioremediation _____
Other _____

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

General Description of Remedial Action: _____

A soil sample was extracted at 6-ft below ground level (3-ft. below pit bottom). The sample was analyzed for
GRO/DRO and BTEX analysis. All analyses were within BLM and NMOCD requirements. Risk Evaluation
Form Attached.

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 Center of pit, 6-ft below surface level (3-ft. below pit bottom)

Sample depth 3-ft. below pit bottom

Sample Date 10/15/03 Sample time 14:00

Sample Results

Benzene(ppm) 0.140

Total BTEX(ppm) 5.480

Field headspace(ppm) N/A

TPH 7910

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 11/14/03

Signature



Printed Name Larry Trujillo
and Title Environmental Specialist

Location: Storey C # 3
Footages: 1065' FNL & 1850' FEL
Unit Letter: B **Sec.** 27 **Twn.** 28N **Rng** 9W
Latitude: 36degrees38.2' **Longitude:** 107degrees26.4'
Lease Num. SF-077111 **Land Type:** BLM

Pit Type: Production

Pit Reference

Reference: Wellhead **Footage:** 152-ft
Direction: N or S 90 Degrees E or W
Initial size: 15' X 11' X 3' deep
Final Size: 15' x 11' x 3' deep
Total Cubic Yards: 0

Distances from (ft):

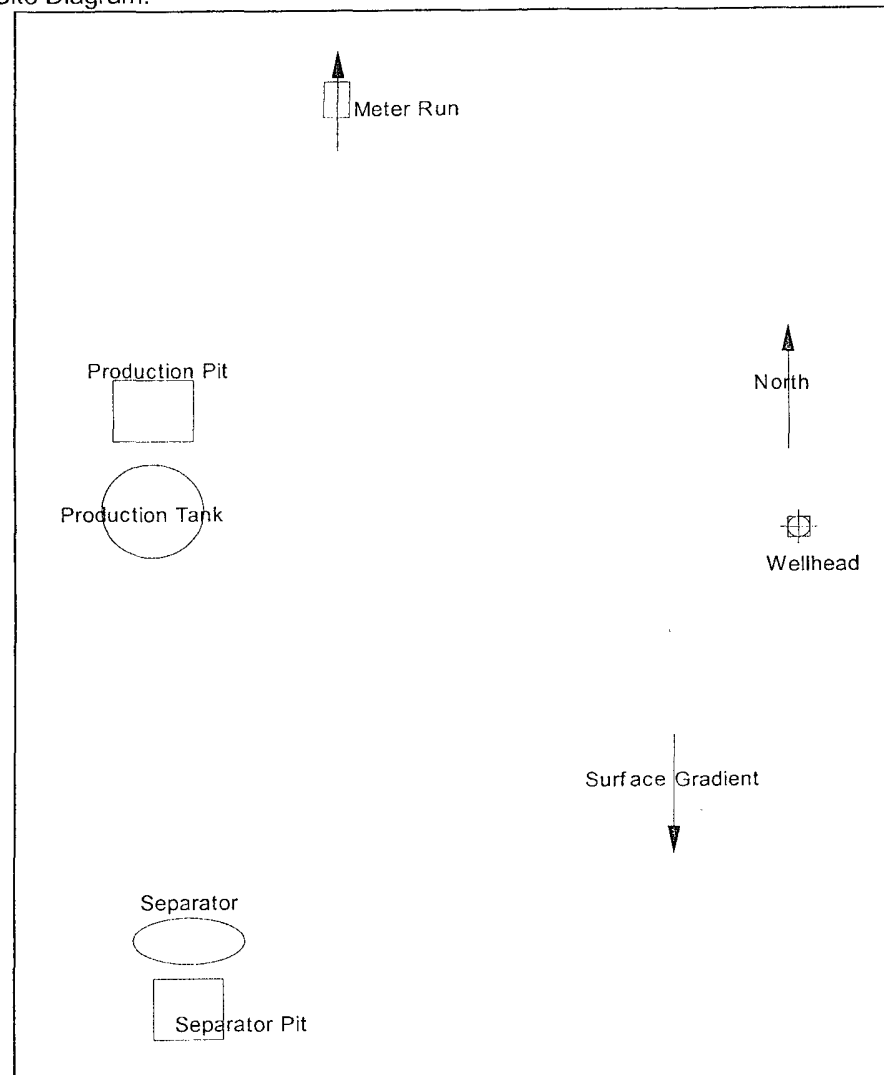
Groundwater: >100 feet
Wellhead Protection Area: No
Nearest Surface Water: >1000 feet
Distance to ephemeral stream: N/A

(Navajo/Jicarilla only)

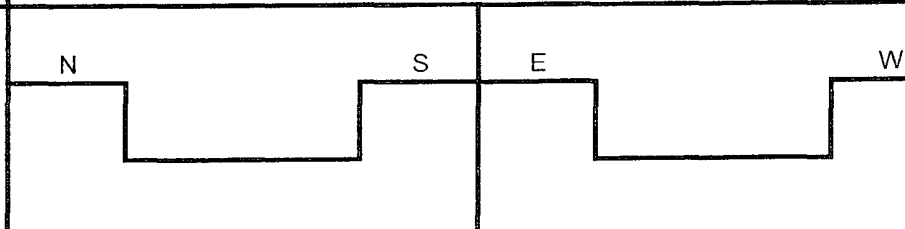
Ranking Score (points):

Sample ID	Description	OVM Reading
1		

Comments:

Site Diagram:

Not to Scale



EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

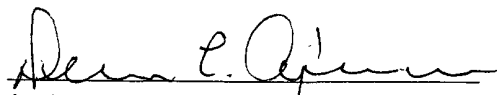
Client:	ConocoPhillips	Project #:	96052-026-043
Sample ID:	Tank Drain Pit	Date Reported:	10-22-03
Laboratory Number:	26930	Date Sampled:	10-15-03
Chain of Custody No:	11471	Date Received:	10-17-03
Sample Matrix:	Soil	Date Extracted:	10-20-03
Preservative:	Cool	Date Analyzed:	10-21-03
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

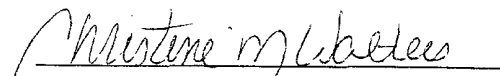
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	7,730	0.2
Diesel Range (C10 - C28)	176	0.1
Total Petroleum Hydrocarbons	7,910	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Storey C #3.**


Analyst


Review

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips	Project #:	96052-026-043
Sample ID:	Tank Drain Pit	Date Reported:	10-21-03
Laboratory Number:	26930	Date Sampled:	10-15-03
Chain of Custody:	11471	Date Received:	10-17-03
Sample Matrix:	Soil	Date Analyzed:	10-21-03
Preservative:	Cool	Date Extracted:	10-20-03
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	140	1.8
Toluene	1,510	1.7
Ethylbenzene	469	1.5
p,m-Xylene	1,580	2.2
o-Xylene	1,780	1.0
Total BTEX	5,480	

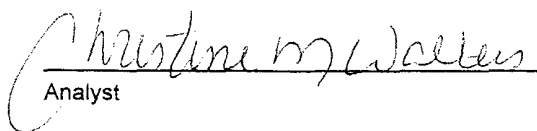
ND - Parameter not detected at the stated detection limit.

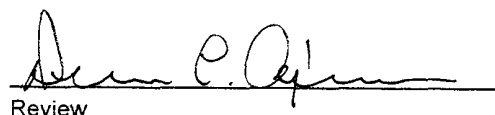
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	95 %
	1,4-difluorobenzene	95 %
	Bromochlorobenzene	95 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Storey C #3.


Analyst


Review

Operator: ConocoPhillips
Location Name: Storey C # 3
Location: Unit: B, Section 27, T 28 N, R 9 W
Risk Ranking: 0

RATIONAL FOR RISK-BASED CLOSURE OF PRODUCTION LOCATIONS OUTSIDE OF THE VULNERABLE ZONE IN SAN JUAN BASIN

This production location was ranked according to the criteria in the New Mexico Oil Conservation Division's Unlined Surface Impoundment Closure Guidelines and received a ranking score of zero. The estimated depth to groundwater is greater than 100-feet beneath ground surface (bgs), the pit is not in a well head protection area, and there is no surface water bodies within 1,000 horizontal feet of the pit location.

The primary source of contamination from the spill has been removed, and soils were excavated.

The excavation was back filled with clean soil and graded in a manner to divert precipitation away from excavated area. Minimal infiltration of rainfall is expected. Any rainfall that does infiltrate the ground surface must migrate through clean backfill before reaching the residual hydrocarbons.

There is no source material at the ground surface, so direct contact with livestock and populous is not likely.

In general, outside of the vulnerable area and alluvial valleys, bedrock material is generally encountered within twenty (20) feet of the ground surface. Bedrock material in the San Juan Basin consists of interbedded sandstone, shale and clays. According to Freeze and Cherry, 1979, the hydraulic conductivity of the bedrock material are as follows:

Sandstone	10^{-9} to 10^{-13} cm/sec
Shale	10^{-12} to 10^{-16} cm/sec
Clay	10^{-12} to 10^{-15} cm/sec

Based on this information, the residual hydrocarbons should not migrate to groundwater.

Natural process (bioremediation) is degrading the residual hydrocarbon to carbon dioxide and water and will continue until source is gone, therefore minimizing any impact to the environment.

Based on the above information, it is highly unlikely that any source material will impact groundwater or ever find an exposure pathway to effect human health, therefore

ConocoPhillips requests closure of this pit location.

Biosphere Environmental Sciences & Technologies L.L.C.