

District I

P.O. Box 1988, Hobbs, NM

District II

P.O. Box 1988, Hobbs, NM

District III

1000 Rio Bravo Rd., Alamogordo, NM

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

Outside
VA 81216
bedrock

SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

PIT REMEDIATION AND CLOSURE REPORT

30-045-24172

Operator: BP AMERICA PRODUCTION CO. Telephone: (505) 326-9200

Address: 200 ENERGY COURT, FARMINGTON, NM 87401

Facility or Well Name: GOU # 187E

Location: Unit or Qtr/Qtr Sec 7 Sec 30 T 29N R 12W County San Juan

Pit Type: Separator ☒ Dehydrator ☐ Other ☐

Land Type: BLM ☒ State ☐ Fee ☒ Other ☐

Pit Location: (Attach diagram) Pit dimensions: length NA, width NA, depth NA

Reference: wellhead ☒ other ☐

Footage from reference: 114'

Direction from reference: 2 Degrees East of North
☒ West ☒ South

Depth To Groundwater: (Vertical distance from contaminants to seasonal high water elevation of groundwater)

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 100 feet	(20 points)	
100 feet to 1000 feet	(10 points)	
Greater than 1000 feet	(0 points)	<u>0</u>

RANKING SCORE (TOTAL POINTS): 0

B1216

Sept 11

Date Remediation Started: _____

Date Completed: 5-28-03

Remediation Method: Excavation X

Approx. cubic yards NA

(Check all appropriate sections)

Landfarmed _____

In situ Bioremediation _____

Other CLOSE AS IS.

Remediation Location: Onsite X Offsite _____

(i.e. landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action: Excavation. Test hole advanced. No remediation necessary.

Bedrock Bottom, Risk assessed

Groundwater Encountered: No X Yes _____ Depth _____

Final Pit Closure Sampling:

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

Sample location see Attached Documents

Sample depth 2' (Test hole bottom)

Sample date 5-16-03 Sample time 0916

Sample Results

Soil: Benzene	(ppm)	<u>0.71</u>	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	<u>39.61</u>	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>354</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>18,340</u>	Total Xylenes	(ppb)	_____

Groundwater 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 5-28-03 PRINTED NAME Jeffrey C. Blagg

SIGNATURE Jeffrey C. Blagg AND TITLE President P.E. # 11607

CLIENT: - BPBLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199LOCATION NO: B1216COCR NO: 10874

FIELD REPORT: PIT CLOSURE VERIFICATION

PAGE No: 1 of 1LOCATION: NAME: GCM WELL#: 187E TYPE: SEP.DATE STARTED: 5/16/03QUAD/UNIT: N SEC: 30 TWP: 29N RNG: 12W PM: NM CNTY: SJ ST: NM

DATE FINISHED:

QTR/FOOTAGE: 805'N/1600'W SE/SW CONTRACTOR: BEI (SELF)ENVIRONMENTAL SPECIALIST: NVEXCAVATION APPROX. NA FT. x NA FT. x NA FT. DEEP. CUBIC YARDAGE: NADISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: CLOSE AS ISLAND USE: RANGE LEASE: FEE FORMATION: DRFIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 114 FT. SW FROM WELLHEAD.DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'NMOC D RANKING SCORE: 0 NMOC D TPH CLOSURE STD: 5000 PPM

SOIL AND EXCAVATION DESCRIPTION:

OVM CALIB. READ. = 53.6 ppm
OVM CALIB. GAS = 100 ppm RF = 0.52
TIME: 8:54 am DATE: 5/15/03SOIL TYPE: (SAND) / SILTY SAND / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER BEDROCK (SANDSTONE)SOIL COLOR: MOD. YEL. BROWN TO DR. GRAY BEDROCK - LT. TO DR. GRAYCOHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVECONSISTENCY (NON COHESIVE SOILS): LOOSE (FIRM) / DENSE / VERY DENSE - BEDROCK?

PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC

DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD

MOISTURE: (DRY) / SLIGHTLY MOIST / MOIST / WET / SATURATED / SUPER SATURATEDDISCOLORATION/STAINING OBSERVED: YES / NO EXPLANATION: BETWEEN 1.5-2' BELOW GRADE (LT. TO DR. GRAY)HC ODOR DETECTED: YES / NO EXPLANATION: DISCOLORED SOIL NOTED ABOVE.SAMPLE TYPE: (GRAB) COMPOSITE - # OF PTS. -ADDITIONAL COMMENTS: PIT HAD BEEN BACKFILLED DURING ADJACENT STEEL TANK PIT INSTALLATION.BEADROCK
BOTTOMADVANCED TEST HOLE W/ HAND AUGER + SHOVEL. ENCOUNTERED VERY HARD LAYER @
2 FT. BELOW GRADE (ASSUMED BEDROCK). ORIGINAL PIT DIMENSION ~ 15X15X3'RISK ASSESSED

SCALE



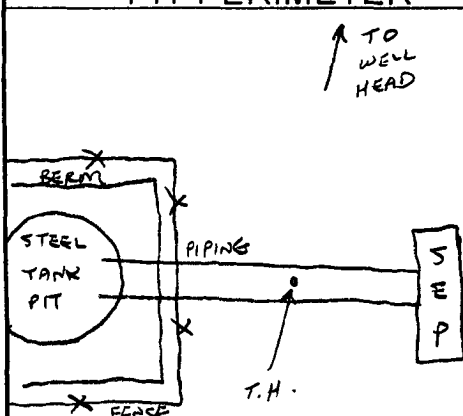
FIELD 418.1 CALCULATIONS According to PIT INVENTORY INFO.

SAMP. TIME	SAMP. ID	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. (ppm)

PIT PERIMETER

N

PIT PROFILE

OVM
READING

SAMPLE ID	FIELD HEADSPACE (ppm)
1 @ 2'	354
2 @	
3 @	
4 @	
5 @	

NOT APPLICABLE

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
1 @ 2'	TPH (80158)	09/16
"	BTX (80218)	"
	TPH - FAILED	
	BTX - PASSED	

P.D. = PIT DEPRESSION; B.G. = BELOW GRADE; B = BELOW
T.H. = TEST HOLE; ~ = APPROX.; T.B. = TANK BOTTOM

TRAVEL NOTES:

CALLOUT: N/AONSITE: 5/16/03 - MORN.

Operator:	BP America Production Company (BP)
Well Name:	GCU #187E
Well Site location:	805 ft. FSL, 1600 ft. FWL, Unit N, Sec. 30, T29N, R12W
Pit Type:	Separator Pit
Producing Formation:	Basin Dakota
Pit Category:	Non vulnerable
Horizontal Distance to Surface Water:	> 1000 ft.
Vicinity Groundwater Depth:	> 100 ft.
Topographic Map:	Farmington South, New Mexico (photo revised 1979)

RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when competent sandstone bedrock was encountered at two (2) feet below grade.

No past or future threat to surface water or groundwater is likely based on the following considerations:

1. Past production fluids were contained locally by the relatively shallow sandstone bedrock. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below the bedrock.
2. Site inspection did not indicate off site lateral fluid migration from the earthen pit toward any down gradient surface water area estimated at greater than 0.12 miles (reference: topographic map listed above).
3. Daily discharge into the earthen pit has been terminated (abandoned). Prior discharge into the pit is believed to be under 5 barrels per day.

Based upon the information given, we conclude that the subsurface vertical and lateral impact from the earthen pit is very limited and that the sandstone bottom creates enough of a impermeable barrier as to subdue impact to groundwater below it (please refer to BP's (formerly Amoco Production Company) report "Post Excavation Pit Closure Investigation Summary, July, 1995", with cover letter dated November 30, 1995). BP therefore request closure approval for this specific pit.

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons


Client:	Blagg / BP	Project #:	94034-010
Sample ID:	1 @ 2'	Date Reported:	05-20-03
Laboratory Number:	25686	Date Sampled:	05-16-03
Chain of Custody No:	10874	Date Received:	05-19-03
Sample Matrix:	Soil	Date Extracted:	05-19-03
Preservative:	Cool	Date Analyzed:	05-20-03
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

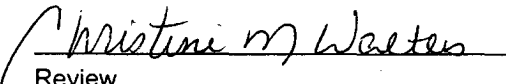
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	89.3	0.2
Diesel Range (C10 - C28)	881	0.1
Total Petroleum Hydrocarbons	970	0.2

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: GCU #187E Separator Pit Grab Sample.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	1 @ 2'	Date Reported:	05-20-03
Laboratory Number:	25686	Date Sampled:	05-16-03
Chain of Custody:	10874	Date Received:	05-19-03
Sample Matrix:	Soil	Date Analyzed:	05-20-03
Preservative:	Cool	Date Extracted:	05-19-03
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	69.6	1.8
Toluene	460	1.7
Ethylbenzene	554	1.5
p,m-Xylene	1,760	2.2
o-Xylene	829	1.0
Total BTEX	3,670	


ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99 %
	1,4-difluorobenzene	99 %
	Bromochlorobenzene	99 %

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: GCU #187E Separator Pit Grab Sample.


Analyst


Review