

District I
P.O. Box 1980, Hobbs, NM
District II
P.O. Box 1980, Hobbs, NM
District III
P.O. Box 1980, Hobbs, NM
1000 Rio Bravo Rd., Aztec, NM

VUL
State of New Mexico
Energy, Minerals and Natural Resources Department

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

Risk
Bedrock
RECEIVED
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EST. 3

B1057
SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

PIT REMEDIATION AND CLOSURE REPORT

30-045-24839

Operator: BP AMERICA PRODUCTION CO. Telephone: (505) 326-9200
Address: 200 ENERGY COURT, FARMINGTON, NM 87401
Facility or Well Name: GLU # 189E
Location: Unit or Qtr/Qtr Sec K Sec 36 T 29 N R 13 W 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 X, other ☐
Footage from reference: 180'
Direction from reference: 19 Degrees ☐ East of North ☒
☒ West of 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) 0

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 100 feet (20 points)
100 feet to 1000 feet (10 points)
Greater than 1000 feet (0 points) 0

RANKING SCORE (TOTAL POINTS): 10 KAG

Sep Pit B1057

Date Remediation Started: _____

Date Completed: 9-9-02

Remediation Method: Excavation X

Approx. cubic yards NA

(Check all appropriate sections)

Landfarmed _____

Insitu 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.

Bed rock 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 41 (Test hole bottom)

Sample date 9-4-02 Sample time 1240

Sample Results

Soil: Benzene	(ppm) <u>0.144</u>	Water: Benzene	(ppb) _____
Total BTEX	(ppm) <u>1.908</u>	Toluene	(ppb) _____
Field Headspace	(ppm) <u>260</u>	Ethylbenzene	(ppb) _____
TPH	(ppm) <u>10,300</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 9-9-02 PRINTED NAME Jeffrey C. Blagg

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

CLIENT: BP
BLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199
LOCATION NO: 81057COCR NO: 10099**FIELD REPORT: PIT CLOSURE VERIFICATION**PAGE No: 1 of 1LOCATION: NAME: GCM WELL #: 189E TYPE: SEPDATE STARTED: 9/4/02

DATE FINISHED:

QUAD/UNIT: K SEC: 36 TWP: 29N RNG: 13W PM: NM CNTY: SJ ST: NMENVIRONMENTAL SPECIALIST: NVQTR/FOOTAGE: 1560'S/2025'W NE/SW CONTRACTOR: FLINT (BEN)EXCAVATION APPROX. NA FT. X NA FT. X NA FT. DEEP. CUBIC YARDAGE: NADISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: CLOSE AS ISLAND USE: RANGE LEASE: STATE FORMATION: DRFIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 180 FT. 519W FROM WELLHEAD.DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: <1000' NEAREST SURFACE WATER: >1000'NMOCD RANKING SCORE: 20 NMOCD TPH CLOSURE STD: 100 PPMSOIL AND EXCAVATION DESCRIPTION: 5925
OVM CALIB. READ. = 53.5 ppm
OVM CALIB. GAS = 100 ppm RF = 0.52
TIME: 12:30 am/pm DATE: 9/3/02
SOIL TYPE: SAND / SILTY SAND / SILT / SILTY CLAY / CLAY GRAVEL OTHER BEDROCK (SANDSTONE)SOIL COLOR: DR. YEL. ORANGE TO BLACK BEDROCK - BLACKCOHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVECONSISTENCY (NON COHESIVE SOILS): LOOSE / FIRM / DENSE / VERY DENSE

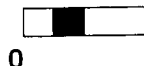
PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC

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

MOISTURE: DRY / SLIGHTLY MOIST MOIST / WET / SATURATED / SUPER SATURATEDDISCOLORATION/STAINING OBSERVED: YES NO EXPLANATION - NEAR BEDROCK SURFACEHC ODOR DETECTED: YES NO EXPLANATION - BEDROCK SURFACE & OVM SAMPLESAMPLE TYPE: GRAB COMPOSITE - # OF PTS. 1ADDITIONAL COMMENTS: SAMPLE COLLECTED FROM BEDROCK SURFACE. BEDROCK - VERY HARD, COMPETENT,
BEDROCK
BOTTOM
GRAVEL SITUATED ON SURFACE
RISK ASSESSED

FIELD 418.1 CALCULATIONS

SCALE

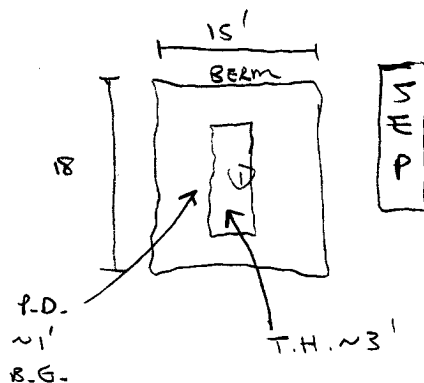


0 FT

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

PIT PERIMETER

↑ N

↑ TO
WELL
HEADOVM
READING

SAMPLE ID	FIELD HEADSPACE (ppm)
1 @ 4'	260
2 @	
3 @	
4 @	
5 @	

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
1 @ 4'	TPH (8015 B)	1240
"	BTEX (8021 B)	"
TPH	PASSED	
BTEX	PASSED	

PIT PROFILE

NOT APPLICABLE

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

TRAVEL NOTES:

CALLOUT: 9/4/02 - MORN. ONSITE: 9/4/02 - AFTER.

Operator:	BP America Production Company (BP)
Well Name:	GCU #189
Well Site location:	1560 ft. FSL, 2025 ft. FWL, Unit K, Sec. 36, T29N, R13W
Pit Type:	Separator Pit
Producing Formation:	Basin Dakota
Pit Category:	Vulnerable
Horizontal Distance to Surface Water:	< 1000 ft.
Vicinity Groundwater Depth:	> 100 ft.
Topographic Map:	Farmington South, New Mexico (photo revised 1979)

RISK ASSESSMENT (vulnerable area)

Pit remediation activities were terminated when backhoe encountered competent sandstone bedrock at three (3) feet below pit bottom [four (4) 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 400 feet (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 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 AMOCO's (formerly Amoco Production Company) report "Post Excavation Pit Closure Investigation Summary, July, 1995", with cover letter dated November 30, 1995). BP therefore request pit closure approval on this location.

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / BP
Sample ID: 1 @ 4'
Laboratory Number: 23766
Chain of Custody No: 10099
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

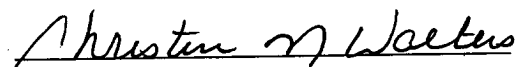
Project #: 94034-010
Date Reported: 09-09-02
Date Sampled: 09-04-02
Date Received: 09-05-02
Date Extracted: 09-05-02
Date Analyzed: 09-06-02
Analysis Requested: 8015 TPH

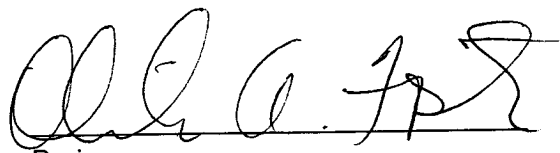
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	836	0.2
Diesel Range (C10 - C28)	9,480	0.1
Total Petroleum Hydrocarbons	10,300	0.2

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 #189E Separator Pit Grab Sample.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: Blagg / BP
Sample ID: 1 @ 4'
Laboratory Number: 23766
Chain of Custody: 10099
Sample Matrix: Soil
Preservative: Cool
Condition: Cool & Intact

Project #: 94034-010
Date Reported: 09-09-02
Date Sampled: 09-04-02
Date Received: 09-05-02
Date Analyzed: 09-06-02
Date Extracted: 09-05-02
Analysis Requested: BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	144	1.8
Toluene	330	1.7
Ethylbenzene	77.9	1.5
p,m-Xylene	1,010	2.2
o-Xylene	346	1.0
Total BTEX	1,908	

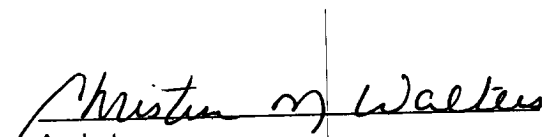
ND - Parameter not detected at the stated detection limit.

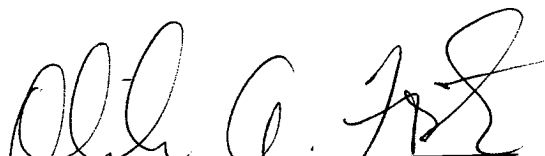
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	95 %
	1,4-difluorobenzene	95 %
	Bromochlorobenzene	95 %

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: GCU #189E Separator Pit Grab Sample.


Analyst


Review