

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

Form C-144
June 1, 2004

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

For drilling and production facilities, submit to
appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe
office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☒ No ☐

Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☒

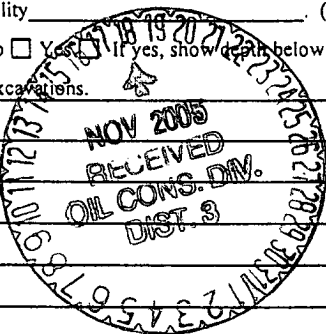
Operator: BP America Production Company Telephone: (505)326-9200 e-mail address: _____
Address: 200 Energy Ct, Farmington, NM 87401
Facility or well name: Ludwick LS #20 API #: 3004513113 U/L or Qtr/Qtr K Sec 29 T 30N R 10W
County: San Juan Latitude _____ Longitude _____ NAD: 1927 ☐ 1983 ☐
Surface Owner: Federal ☐ State ☐ Private ☐ Indian ☐

Pit Type: Drilling <input type="checkbox"/> Production <input checked="" type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input type="checkbox"/> Thickness _____ mil Clay <input type="checkbox"/> Pit Volume _____ bbl	Below-grade tank Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not: _____
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet (20 points) 50 feet or more, but less than 100 feet (10 points) 100 feet or more (0 points)
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)
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet (20 points) 200 feet or more, but less than 1000 feet (10 points) 1000 feet or more (0 points)
Ranking Score (Total Points)	

If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite ☐ offsite ☐ If offsite, name of facility _____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface _____ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments:

See Attached Documentation



2 of 2

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Date: 11/01/2005

Printed Name/Title Jeffrey C. Blagg, Agent

Signature Jeffrey C. Blagg

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:

Printed Name/Title _____

Signature Denny Taut

Date: _____

District I

P.O. Box 1980, Hobbs, NM

District II

P.O. Drawer DD, Artesia, NM 88211

District III

) Rio Brazos Rd, Aztec, NM 87410

State of New Mexico

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

B0769

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

PIT REMEDIATION AND CLOSURE REPORT**Operator:** Amoco Production Company **Telephone:** (505) - 326-9200**Address:** 200 Amoco Court, Farmington, New Mexico 87401**Facility Or:** LUDWICK LS # 20**Well Name****Location:** Unit or Qtr/Qtr Sec K Sec 29 T 30N R 10W County SAN JUAN**Pit Type:** ^{ABANDONED} Separator ☒ Dehydrator ☐ Other ☐**Land Type:** BLM ☒, State ☐, Fee ☐, Other ☐**Pit Location:** Pit dimensions: length 15', width 13', depth 11'
(Attach diagram)Reference: wellhead ☒, other ☐Footage from reference: 29'Direction from reference: 63 Degrees ☒ East North ☐
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>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)	<u>0</u>
No	(0 points)	

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

Date Remediation Started: _____ Date Completed: 7/21/00

Remediation Method: Excavation ☒ Approx. cubic yards 60
(Check all appropriate sections) Landfarmed ☒ Insitu Bioremediation _____
Other _____

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

General Description Of Remedial Action: _____

Excavation

Ground Water Encountered: No ☒ Yes _____ Depth _____Final Pit: Sample location see Attached Documents

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

Sample depth 7' (SOUTH SIDEWALL)Sample date 7/19/00 Sample time 1145

Sample Results

Benzene(ppm) 0.0725Total BTEX(ppm) 6.580Field headspace(ppm) 4,578TPH 99.9 ppmGround Water Sample: Yes _____ No ☒ (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 7/21/00

SIGNATURE

B. ShawPRINTED NAME
AND TITLEBuddy D. Shaw
Environmental Coordinator

CLIENT: AMOCOBLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199LOCATION NO: 80769C.D.C. NO: 6591

FIELD REPORT: CLOSURE VERIFICATION

PAGE No: 1 of 1LOCATION: NAME: LUDWICK LS WELL #: 20 PIT: ABAND. SEP.DATE STARTED: 7/19/00QUAD/UNIT: K SEC: 29 TWP: 30N RNG: 10W PM: NM CNTY: SJ ST: NM

DATE FINISHED: _____

QTR/FOOTAGE: 1460'S/1600'W NESW CONTRACTOR: FLINTENVIRONMENTAL
SPECIALIST: NVEXCAVATION APPROX. 15 FT. x 13 FT. x 11 FT. DEEP. CUBIC YARDAGE: 60DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: LANDFARMLAND USE: RANGE LEASE: SF 07894 FORMATION: DKFIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 29 FT. 563E FROM WELLHEAD.DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'NMOC RANKING SCORE: 0 NMOC TPH CLOSURE STD: 5000 PPMSOIL AND EXCAVATION EXU. 6074'OVM CALIB. READ. 53.5 ppm

DESCRIPTION:

TIME: 0730 am/pm 7/19/00

CHECK ONE:

☒ PIT ABANDONED☐ STEEL TANK INSTALLED☐ FIBERGLASS TANK INSTALLED

SOIL COLOR VARYING FROM DK. YELL. ORANGE TO BLACK (SOUTH SIDEWALL ONLY) SAND,
NON COHESIVE, SLIGHTLY MOIST, FIRM, STRONG HC ODOR DETECTED THROUGHOUT
ENTIRE EXCAVATION.

CLOSED

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	ML. FREON	DILUTION	READING	CALC. ppm
1145							

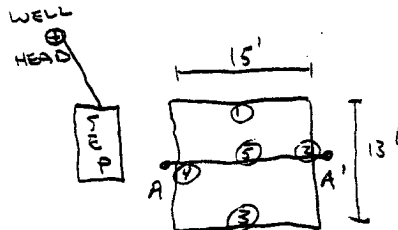
SCALE



0 FT

PIT PERIMETER ↑

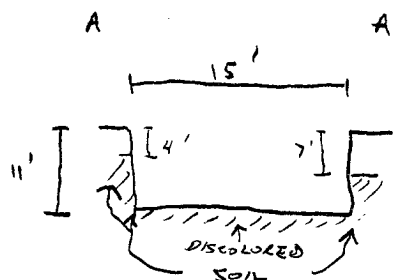
PIT PROFILE

OVM
RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 7'	77.9
2 @ 7'	306
3 @ 7'	4,578
4 @ 6'	2,274
5 @ 13'	4,082

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
② @ 7'	QTEX (8021)	1145
"	TPH (8015)	"
BOTH PASSED		



TRAVEL NOTES:

CALLOUT: 7/17/00 - MORN. ONSITE: 7/17/00 - AFTER.

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

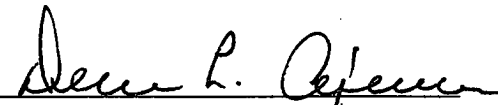
Client:	Blagg / BP Amoco	Project #:	403410
Sample ID:	3 @ 7'	Date Reported:	07-21-00
Laboratory Number:	H793	Date Sampled:	07-19-00
Chain of Custody No:	6591	Date Received:	07-20-00
Sample Matrix:	Soil	Date Extracted:	07-21-00
Preservative:	Cool	Date Analyzed:	07-21-00
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

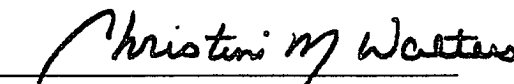
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	80.9	0.2
Diesel Range (C10 - C28)	19.0	0.1
Total Petroleum Hydrocarbons	99.9	0.1

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: Ludwick LS #20 Abandoned Separator Pit.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP Amoco	Project #:	403410
Sample ID:	3 @ 7'	Date Reported:	07-21-00
Laboratory Number:	H793	Date Sampled:	07-19-00
Chain of Custody:	6591	Date Received:	07-20-00
Sample Matrix:	Soil	Date Analyzed:	07-21-00
Preservative:	Cool	Date Extracted:	07-21-00
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	72.5	1.8
Toluene	1,460	1.7
Ethylbenzene	568	1.5
p,m-Xylene	2,260	2.2
o-Xylene	2,220	1.0
Total BTEX	6,580	

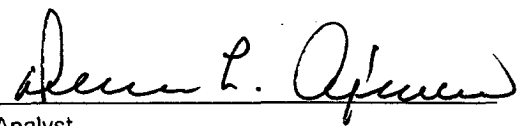
ND - Parameter not detected at the stated detection limit.

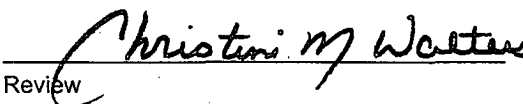
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	100 %
	Bromofluorobenzene	100 %

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: Ludwick LS #20 Abandoned Separator Pit.


Analyst


Review

CLIENT <u>BP</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO <u>80769</u> C.O.C. NO: <u>9705</u>
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME <u>LOWICK</u> <u>LS</u> WELL #: <u>20</u> PITS: <u>SEP</u> QUAD/UNIT: <u>K</u> SEC: <u>29</u> TWP: <u>30N</u> RNG: <u>10W</u> PM: <u>Nm</u> CNTY: <u>SJ</u> ST: <u>NM</u> QTR/FOOTAGE: <u>NELSW</u> CONTRACTOR: <u>FLINT</u>	DATE STARTED: <u>12/26/01</u> DATE FINISHED: _____ ENVIRONMENTAL SPECIALIST: <u>NV</u>
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SOIL REMEDIATION:

REMEDICATION SYSTEM: <u>LANDFARM</u>	APPROX. CUBIC YARDAGE: <u>60</u>
LAND USE: <u>RANGE-BURN</u>	LIFT DEPTH (ft): <u>0.5</u>

FIELD NOTES & REMARKS:

NMOC D RANKING SCORE: 0 NMOC D TPH CLOSURE STD: 5000 ppm

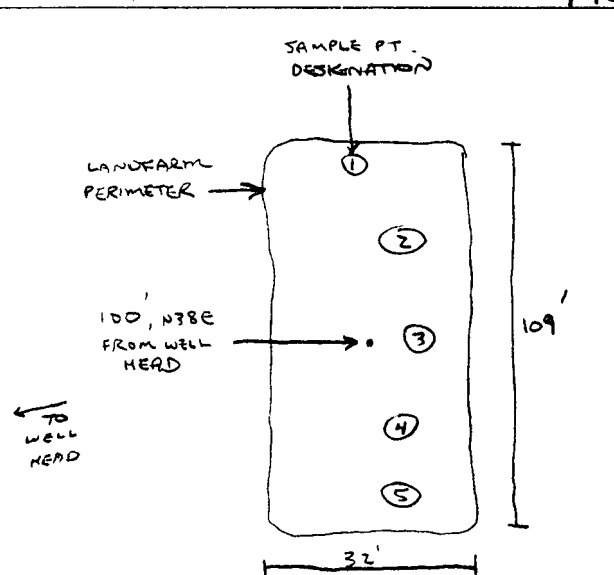
DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'

SOIL TYPE: (SAND) / SILTY SAND / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER _____
 SOIL COLOR: MDD. YELL. BROWN
 COHESION (ALL OTHERS): (NON COHESIVE) / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE
 CONSISTENCY (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 SATURATED
 DISCOLORATION/STAINING OBSERVED: YES / (NO) EXPLANATION - _____
 HC ODOR DETECTED: YES / (NO) EXPLANATION - _____
 SAMPLING DEPTHS (LANDFARMS): 4-6 (INCHES)
 SAMPLE TYPE: GRAB / (COMPOSITE) - # OF PTS. 5
 ADDITIONAL COMMENTS: _____

FIELD 418.1 CALCULATIONS

SAMP. TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

SKETCH/SAMPLE LOCATIONS



OVM CALIB. READ. 51.2 ppm
 OVM CALIB. GAS = 100 ppm; RF = 0.52
 TIME: 12:30 am/pm DATE: 12/20/01

OVM RESULTS LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	0.0	LF-1	TPH (80/150)	1100	ND

P.C. 7/19/00

SCALE

 0 FT

TRAVEL NOTES: CALLOUT: N/A ONSITE: 12/26/01

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

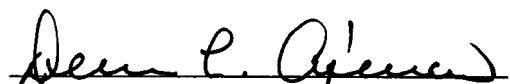
Client:	Blagg / BP	Project #:	94034-010
Sample ID:	LF - 1	Date Reported:	12-27-01
Laboratory Number:	21742	Date Sampled:	12-26-01
Chain of Custody No:	9705	Date Received:	12-26-01
Sample Matrix:	Soil	Date Extracted:	12-27-01
Preservative:	Cool	Date Analyzed:	12-27-01
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

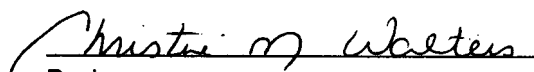
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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: Ludwick LS #20 Landfarm 5 Pt. Composite.


Analyst


Review