

District I
P.O. Box 1980, Hobbs, NM
District II
P.O. Drawer DD, Artesia, NM 88211
District III
1000 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

Sep - Risk - non vulnerable
80128
SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

Deviated 12/5/96 Due THT + BTEX

PIT REMEDIATION AND CLOSURE REPORT

Operator: Amoco Production Company Telephone: (505) - 326-9200
Address: 200 Amoco Court, Farmington, New Mexico 87401
Facility Or: MARTIN C. FEDERAL 1
Well Name
Location: Unit or Qtr/Qtr Sec B Sec 3 T7N R10W County SAN JUAN
Pit Type: Separator ☒ Dehydrator ☐ Other ☐
Land Type: BLM ☒, State ☐, Fee ☐, other COM. AGMT.

Pit Location: Pit dimensions: length 20', width 20', depth 17'
(Attach diagram) Reference: wellhead ☒, other ☐
Footage from reference: 122'
Direction from reference: 10 Degrees ☐ East North ☐
☒ West of 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) 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 200 feet (20 points)
200 feet to 1000 feet (10 points)
Greater than 1000 feet (0 points) 0

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: _____ Date Completed: 10/20/94

Remediation Method: Excavation ☒ Approx. cubic yards 290
 (Check all appropriate sections) Landfarmed _____ Insitu Bioremediation _____
 Other COMPOSTED

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

General Description Of Remedial Action: _____
 Excavation. RISK ASSESSED.

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 20'

Sample date 10/20/94 Sample time 1305

Sample Results

Benzene(ppm) _____

Total BTEX(ppm) _____

Field headspace(ppm) 817

TPH 7,900 PPM

Ground 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 10/20/94 5/24/98

SIGNATURE B. Shaw

PRINTED NAME
AND TITLE

Buddy D. Shaw
Environmental Coordinator

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>80128</u> C.D.C. NO: _____
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FIELD REPORT: CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>
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LOCATION: NAME: <u>MARTIN C FEDERAL WELL # 1</u> PIT: <u>SEP</u>	DATE STARTED: <u>10/20/94</u>
QUAD/UNIT: <u>8</u> SEC: <u>3</u> TWP: <u>27N</u> RNG: <u>10W</u> PM: <u>NM</u> CNTY: <u>ST</u> ST: <u>NM</u>	DATE FINISHED: _____
QTR/FOOTAGE: <u>NW1/4 NE1/4</u> CONTRACTOR: <u>EPC</u>	ENVIRONMENTAL SPECIALIST: <u>NV</u>

EXCAVATION APPROX. <u>20</u> FT. x <u>20</u> FT. x <u>17</u> FT. DEEP. CUBIC YARDAGE: <u>290</u>
DISPOSAL FACILITY: <u>ON-SITE</u> REMEDIATION METHOD: <u>COMPOSTED</u>
LAND USE: <u>RANGE</u> LEASE: <u>SF-077382</u> FORMATION: <u>DK</u>

FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY <u>122</u> FT. <u>SLOW</u> FROM WELLHEAD.
DEPTH TO GROUNDWATER: <u>7100'</u>	NEAREST WATER SOURCE: <u>71000'</u> NEAREST SURFACE WATER: <u>71000'</u>
NMDCD RANKING SCORE: <u>0</u>	NMDCD TPH CLOSURE STD: <u>5000</u> PPM

CHECK ONE:
☐ PIT ABANDONED
☒ STEEL TANK INSTALLED

SOIL AND EXCAVATION DESCRIPTION:	
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MOSTLY DR. YELL. BROWN SAND EXCEPT BLACK DISCOLORATION TOWARD BOTTOM, NORTH, & SOUTH SIDEWALLS (SEE PIT PROFILE BELOW), NON-COHESIVE, SLIGHTLY MOIST, FIRM, STRONG HC ODOR IN OVM SAMPLES w/ HIGH READINGS.

CONDITIONAL ~~CLOSURE~~ RISK ASSESSED NV

FIELD 418.1 CALCULATIONS							
TIME	SAMPLE ID	LAB NO.	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1305	⑤ @ 20'	TPH-1207	5	20	10:1	198	7,920

SCALE

0 FT

PIT PERIMETER

PIT PROFILE

OVM RESULTS		
SAMPLE ID	FIELD HEADSPACE PID (ppm)	
1 @ 13'	1171	
2 @ 12'	17.5	
3 @ 12'	472	
4 @ 11'	4.7	
5 @ 20'	817	
6 @ 10'	344	

LAB SAMPLES		
SAMPLE ID	ANALYSIS	TIME

TRAVEL NOTES:	CALLOUT: <u>10/20/94</u> ONSITE: <u>10/20/94</u>
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Well Name:	Martin C. Federal #1
Well Site location:	Unit B, Sec. 3, T27N, R10W
Pit Type:	Separator Pit
Producing Formation:	Basin Dakota
Pit Category:	Non Vulnerable
Horizontal Distance to Surface Water:	> 1000 ft.
Vicinity Groundwater Depth:	> 100 ft.

RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when trackhoe reached practical extent for abandoned pit at 20 ft. below grade and for safety concerns (underground piping and surface equipment).

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

1. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below presumed shallow sandstone bedrock (based on informal site observation of adjacent sandstone outcrop).
2. Topographic information does not indicate off site lateral fluid migration near the earthen pit.
3. Daily discharge into the earthen pit has been terminated (pit abandoned). Prior discharge into the pit is believed to be under 5 barrels per day.
4. Well site located within the **non-vulnerable area** and is approximately 0.52 miles west of the nearest vulnerable area boundary (Armenta Canyon wash).

(Refer to East Fork Kutz Canyon Quadrangle, New Mexico - Rio Arriba County, 7.5 Minute Series (Topographic), provisional edition 1985, (vulnerable area boundary developed by Mr. William C. Olson, Hydrogeologist, Environmental Bureau, New Mexico Oil Conservation Division).

Based upon the information given, we conclude that the subsurface vertical and lateral impact to groundwater is very unlikely. AMOCO requests pit closure approval on this location.

BLAGG ENGINEERING, INC.

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

**FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS**

Client:	Amoco	Project #:	
Sample ID:	5 @ 20'	Date Analyzed:	10-20-94
Project Location:	Martin C. Federal 1	Date Reported:	10-20-94
Laboratory Number:	TPH-1207	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	7,900	200

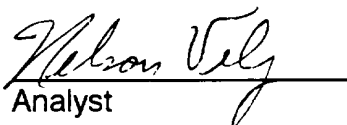
ND = Not Detectable at stated detection limits.

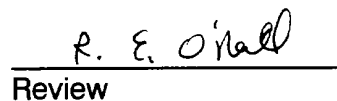
QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% * Diff.
	1024	1044	1.93

* Administrative Acceptance limits set at 30%.

Method: Modified Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

Comments: Separator Pit - B0128


Analyst


Review

BLAGG ENGINEERING, INC.

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

Field TPH-Worksheet

Max Characters:

Client:

Amoco

Project #:

Sample ID:

5 @ 20'

Date Analyzed:

10-20-94

Project Location:

Martin C. Federal 1

Date Reported:

10-20-94

Laboratory Number:

TPH-1207

Sample Matrix:

Soil

Sample Weight:

5.00 grams

Volume Freon:

20.00 mL

Dilution Factor:

10 (unitless)

TPH Reading:

198 mg/kg

TPH Result:

7920.0 mg/kg

Reported TPH Result:

7900 mg/kg

Actual Detection Limit:

200.0 mg/kg

Reported Detection Limit:

200 mg/kg

QA/QC:

Original
TPH mg/kg

Duplicate
TPH mg/kg

%
Diff.

1024

1044

1.93

Comments:

*****Max Characters*****

Comments:

Separator Pit - B0128

CLIENT: <u>Amoco</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>80128</u> C.O.C. NO: _____
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: <u>MARTIN C FEDERAL I</u>	LEASE: <u>SF 077382</u>	DATE STARTED: <u>5-6-96</u>
QUAD/UNIT: <u>B</u> SEC: <u>3</u> TWP: <u>27 N</u> RNG: <u>10 W</u> BM: <u>NM</u> CNTY: <u>SJ</u> ST: <u>NM</u>		DATE FINISHED: _____
QTR/FOOTAGE: <u>NW/NE</u>	CONTRACTOR: <u>EPL</u>	ENVIRONMENTAL SPECIALIST: <u>RES</u>

SOIL REMEDIATION:

REMEDICATION SYSTEM: LAND FARM APPROX. CUBIC YARDAGE: 290

LAND USE: RANGE

FIELD NOTES & REMARKS:

DEPTH TO GROUNDWATER: 7100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'

NMDCD RANKING SCORE: 0 NMDCD TPH CLOSURE STD: 5000 PPM

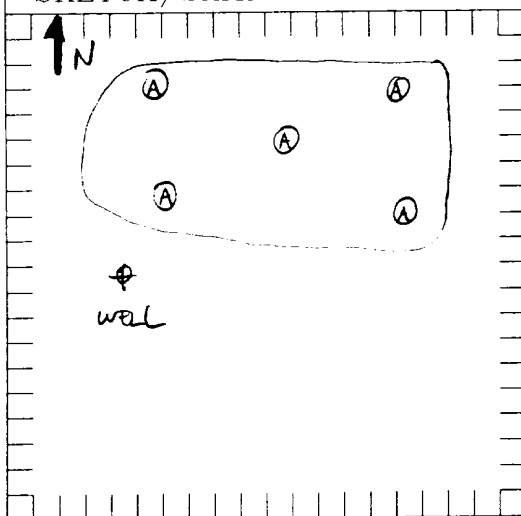
SOIL CONSISTS OF DRY SANDY SILT. NO STAIN, NO ODOR.

FIELD 418.1 CALCULATIONS

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

CLOSE L.F.

SKETCH/SAMPLE LOCATIONS



OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
Comp. A	0

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME	RESULTS
Comp. A	8015	1015	ND

SCALE



TRAVEL NOTES CALLOUT: _____ ONSITE: 5-6-96 10 00

TOTAL VOLATILE PETROLEUM HYDROCARBONS**Gasoline Range Organics****Blagg Engineering, Inc.**

Project ID: Martin C Federal 1
Sample Matrix: Soil
Preservative: Cool
Condition: Intact

Report Date: 05/22/96
Date Sampled: 05/06/96
Date Received: 05/06/96
Date Extracted: 05/17/96
Date Analyzed: 05/17/96

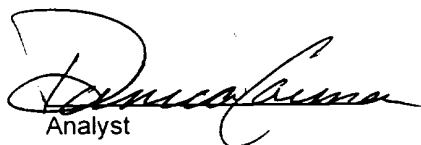
Sample ID	Lab ID	Concentration (mg/kg)	Detection Limit (mg/kg)
Comp. A	3362	ND	17.7

ND- Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	93%	50 - 150%

Reference: Method for the Determination of Gasoline Range Organics,
State of Tennessee, Department of Environment and Conservation, Division
of Underground Storage Tanks.

Comments:


Analyst


Review

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS**Diesel Range Organics****Blagg Engineering, Inc.**

Project ID: Martin C Federal 1
Sample Matrix: Soil
Preservative: Cool
Condition: Intact

Report Date: 05/22/96
Date Sampled: 05/06/96
Date Received: 05/06/96
Date Extracted: 05/20/96
Date Analyzed: 05/21/96

Sample ID	Lab ID	Concentration (mg/kg)	Detection Limit (mg/kg)
Comp. A	3362	ND	17.5

ND- Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptance Limits</u>
	o - Terphenyl	101%	50 - 150%

Reference: EPA Method 8015A, modified. "Nonhalogenated Volatile Organics by Gas Chromatography." Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Ed, Final Update I, July, 1992. USEPA.

Comments:


Analyst


Review

PROJECT MANAGER:

Analytica Lab I.D.:

Company:

Address:

Phone:

Fax:

Bill To:

Company:

Address:

CHAIN OF CUSTODY

Page 2 of 2

COMMENTS

[illegible]