bedvay

District I
P.O. Box 1980, Hobbs, NM
District II
Drawer DD, Artesia, NM 88211
Strict III
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

SUBMIT 1 COPY TO APPROPRIATE DISTRICT OFFICE AND 1 COPY TO

OIL CONSERVATION DIVISION

P.O. Box 2088 Santa Fe, New Mexico 87504-2088 DECENTA PE OFFICE
OCI

PIT REMEDIATION AND CLOSURE REPORT

| Denieo | 1/6/97 |
|---|--|
| Operator: Amoco Production Company Address: 200 Amoco Court, Farmingt | Telephone: (505) - 326-9200 |
| Facility Or: UCU # 26 Well Name | |
| Pit Type: Separator Dehydrator Land Type: BLM X, State, Fee | |
| Reference: wellhead_ Footage from reference | |
| 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) |
| 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>O</u> |
|)istance 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) |

| Date Remediation Started: 4/14/94 Date Completed: 4/22/94 | | |
|---|--|--|
| emediation Method: Excavation $\frac{\chi}{\chi}$ Approx. cubic yards $\frac{33}{\chi}$ | | |
| (Check all appropriate Landfarmed X Insitu Bioremediation | | |
| Other | | |
| | | |
| Remediation Location: Onsite X Offsite | | |
| General Description Of Remedial Action: | | |
| Excavation BEDROCK BOTTOM . BISK ASSESSED. | | |
| | | |
| | | |
| | | |
| | | |
| Fround Water Encountered: No $\underline{\chi}$ Yes Depth | | |
| Final Pit: Sample location see Attached Documents Closure Sampling: (if multiple samples, | | |
| attach sample results and diagram of sample Sample depth / (PIT Bottomy) | | |
| locations and depths) Sample date 4/22/94 Sample time | | |
| Sample Results | | |
| Benzene(ppm) | | |
| Total BTEX(ppm) | | |
| Field headspace(ppm) 653 | | |
| TPH 14, 660 | | |
| 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 | | |
| SIGNATURE BUSHAW AND TITLE ENVIRONMENTAL COORDINATOR | | |

| CLIENT: AMOCO | ENVIROTECH Inc. | PIT NO: <u><4970</u> | | |
|--|--|---|--|--|
| | S HWY. 64, FARMINGTON, NM 87401 (505) 632-0615 | C.O.C. NO: | | |
| FIELD REPORT: CLOS | URE VERIFICATION | JOB No: 92140 PAGE No: 1 of 1 | | |
| UNIT: D SEC: 22 TWP: 28 N RNG: | WELL #: 26 PIT: BLOW YW BM: NM CNTY: R.A. ST: NM | DATE STARTED: 4-14-94 DATE FINISHED: 4-22-19 ENVIRONMENTAL RESPECIALIST: | | |
| CONTRACTOR: VAUGHT W.S. | | | | |
| SOIL REMEDIATION: EXCAVATION APPROX. 30 FT. x 30 FT. x 1 FT. DEEP. DISPOSAL FACILITY: LAMPARM ON SITE - SE OF PIT, SOUTH OF WELL LAND USE: BLM - RANGE | | | | |
| | | AST EDOM VELLUEAD | | |
| FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 160 FEET WEST FROM WELLHEAD. DEPTH TO GROUNDWATER: > 100 NEAREST SURFACE WATER: > 1000 NEAREST WATER SOURCE: > 1000 | | | | |
| NMOCD RANKING SCORE: O NMOCD TPH | CLOSURE STD. 5000 PPM | | | |
| SOIL AND EXCAVATION DESCRIPTION: PIT EX CAVATION ~ ONE FOOD DESP - PIT APPEARS TO BE SET ON SOLLD BENECK WITH A SOILS BERM FOR CONTAINMENT. | | | | |
| NO SIDELALIS ARE AUTIL | ASLE FOR SAMPLE | 1000 | | |
| SOIL: SILTY, SANDY CHERAPULS. BROWN/ GRAY - BROBOCK HAS GRAY/BLACK STAINING. (1) BEDROCK SCAPPINGS - BOTTOM COMPOSITE. (2) CALIFFREM COMPOSITE SOIL REMARKS FIELD 418.1 CALCULATIONS SAMPLE I.D. LAB NO: WEIGHT (9) ML. FREON DILUTION READING CALC. ppm (1) B- comp 6AC 42 9 10.00 20 10:1 733 14,660 | | | | |
| 2 LF-6mp GAC 430 | | 2,120 | | |
| SCALE O 10 20 FEET PIT PERIMETER SURFACE GRADENT A ENERGY STORE | OVM RESULTS SAMPLE FIELD HEADSPACE PID (PPPM) O B - Comp 653 | PROFILE | | |
| 7 000 | (3) LF-104 276 | BASICALLY = | | |
| THE PARTY OF THE P | | FLAT = | | |
| | 8 can | "PIT" | | |
| | | BEDROCK | | |
| To wee = | | | | |
| = = | | _ _ | | |
| - | | | | |
| = |] | | | |
| | | | | |
| TRAVEL NOTES: CALLOUT: 4-21-99 | НоLLU V. ONSITE: 4-22-94 | 1100 AAS | | |

Well Name:
Well Site location:

Pit Type:

Producing Formation:

Pit Category:

Horizontal Distance to Surface Water:

Vicinity Groundwater Depth:

Valencia Canyon Unit #26 Unit D, Sec. 22, T28N, R4W Blow Pit

Blow Pit
Pictured Cliffs
Non Vulnerable

> 1000 ft. > 100 ft.

RISK ASSESSMENT (non-vulnerable area)

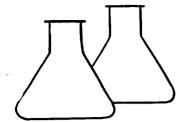
Pit remediation activities were terminated when loader encountered sandstone bedrock at 1 feet below grade.

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

- Past production fluids were contained locally by a relatively shallow sandstone bedrock located 1 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below sandstone bedrock.
- 2. Topographic information does not indicate off site lateral fluid migration near the earthen pit.
- 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.
- Well site located within the <u>non-vulnerable area</u> and is approximately 0.30 miles northwest of the nearest vulnerable area boundary (Geffen Canyon wash).

(Refer to Leandro Canyon Quadrangle, New Mexico - Rio Arriba County, 7.5 Minute Series (Topographic), photorevised 1982, (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 lateral and vertical impact from the earthen pit is very limited and that the sandstone bottom creates enough of an impermeable barrier as to subdue impact to groundwater below it (please refer to AMOCO's report "Post Excavation Pit Closure Investigation Summary, July, 1995", with cover letter dated November 30, 1995). AMOCO requests pit closure approval on this location.



ENVIROTECH LABS

5796 US Highway 64-3014 • FARMINGTON, NEW MEXICO 87401 PHONE: (505) 632-0615 • FAX: (505) 632-1865

FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:

Amoco

Project #:

92140

Sample ID:

Pit Btm Comp

Date Analyzed:

4-22-94 4-22-94

Project Location: Laboratory Number: **VCU 26** GAC0429 Date Reported: Sample Matrix:

Soil

Parameter

Result, mg/kg

Detection

Limit, mg/kg

Total Recoverable

Petroleum Hydrocarbons

14700

100

ND = Not Detectable at stated detection limits.

OA/QC:

QA/QC Sample

Duplicate

%

TPH mg/kg

TPH mg/kg

*Diff.

510

490

4

*Administrative Acceptance limits set at 30%.

Method:

Modified Method 418.1, Petroleum Hydrocarbons, Total

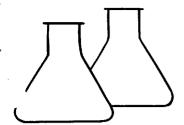
Recoverable. Chemical Analysis of Water and Waste,

USEPA Storet No.4551, 1978

Comments:

Blow Pit C4970

R. E. O'Nall Analyst



ENVIROTECH LABS

5796 US Highway 64-3014 • Farmington, New Mexico 87401 Phone: (505) 632-0615 • Fax: (505) 632-1865

FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:

Amoco

92140

Sample ID:

Landfarm Comp

4-22-94

Project Location: Laboratory Number: VCU 26 GAC0430 Date Analyzed: Date Reported:

4-22-94

Sample Matrix:

Project #:

Soil

Parameter

Result, mg/kg

Detection Limit, mg/kg

Total Recoverable

Petroleum Hydrocarbons

12100

100

ND = Not Detectable at stated detection limits.

QA/QC:

QA/QC Sample TPH mg/kg Duplicate TPH mg/kg %

510

490

*Diff.

4

*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:

Blow Pit C4970 Landfarm

RE ONAL

Review Journal of the Review

| CLIENT: AMOCO BLAGG ENGINEERING, INC. LOCATION NO: C4070 | | | | |
|--|--|--|--|--|
| P.O. BOX 87, BLOOMFIELD, NM 87413 c.d.c. ND: | | | | |
| FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION | | | | |
| LOCATION: NAME: 1/C() WELL #: 26 PITS: BLOW DATE STARTED: 1/-18-97 | | | | |
| QUAD/UNIT: D SEC: ZZ TWP: Z8 N RNG: 4W PM: NM CNTY: KA ST: NM ENVIRONMENTAL () | | | | |
| OTR/FOOTAGE: CONTRACTOR: SPECIALIST: 200 | | | | |
| SOIL REMEDIATION: | | | | |
| REMEDIATION SYSTEM: LANDFARM APPROX. CUBIC YARDAGE: 33 | | | | |
| LAND USE: RANGE LIFT DEPTH (ft): | | | | |
| FIELD NOTES & REMARKS: | | | | |
| DEPTH TO GROUNDWATER: 700 NEAREST WATER SOURCE: 7000 NEAREST SURFACE WATER: 7000 | | | | |
| NMOCD RANKING SCORE: NMOCD TPH CLOSURE STD: PPM | | | | |
| | | | | |
| | | | | |
| | | | | |
| FIELD 418.1 CALCULATIONS | | | | |
| SAMP. TIME SAMPLE I.D. LAB No: WEIGHT (g) ML. FREON DILUTION READING CALC. ppm | | | | |
| 1340 LF-1 1931 5.0 ZO.0 4x 20 80 | | | | |
| | | | | |
| | | | | |
| | | | | |
| SKETCH/SAMPLE LOCATIONS | | | | |
| | | | | |
| OVM RESULTS LAB SAMPLES | | | | |
| PIT K SAMPLE FIELD HEADSPACE SAMPLE ANALYSIS TIME RESULTS | | | | |
| TANK SEP RUMB (2) (2) (3) (4) (5) (4) (5) (5) (7) (7) (7) (7) (7) (7 | | | | |
| TANK BEDUNEDUNG 3 LANDERNENGS | | | | |
| | | | | |
| | | | | |
| TANK) | | | | |
| SCALE | | | | |
| | | | | |
| O FT | | | | |
| TRAVEL NOTES: ONSITE: | | | | |

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

Sample ID:

Landfarm

Project Location: Laboratory Number: VCU # 26

TPH-1931

Project #:

Date Analyzed:

11-19-97

Date Reported:

11-19-97

Sample Matrix: Soil

| Parameter | Result, mg/kg | Detection Limit, mg/kg – – – – – |
|--|---------------|--|
| Total Recoverable Petroleum Hydrocarbons | 80 | 20 |

ND = Not Detectable at stated detection limits.

QA/QC:

QA/QC Sample
TPH mg/kg

608

Duplicate
TPH mg/kg

568

% *Diff.

6.80

*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:

Landfarm Composite Sample

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

Sample ID:

Landfarm

VCU # 26

Project Location: Laboratory Number:

TPH-1931

Project #:

Date Analyzed:

Date Reported:

11-19-97 11-19-97

Sample Matrix:

Soil

Sample Weight:

Volume Freon:

Dilution Factor:

TPH Reading:

TPH Result:

Reported TPH Result: **Actual Detection Limit:** Reported Detection Limit: 80.0 mg/kg

80 mg/kg

5.00 grams

1 (unitless)

20 mg/kg

20.00 mL

20.0 mg/kg 20 mg/kg

QA/QC:

Original TPH mg/kg

608

Duplicate TPH mg/kg

Diff.

%

568

6.80

Comments:

Comments:

Landfarm Composite Sample