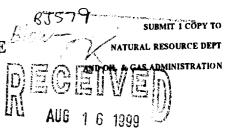
JICARILLA APACHE TRIBE ENVIRONMENTAL PROTECTION OFFICE P.O. BOX 507 DULCE, NEW MEXICO 87528



PIT REMEDIATION AND CLOSURE REPORT

Operator: AMOCO PRODUCTION COMPANY Telephone: (505)326-9200 Address: 200 Amoco Court, Farmington, NM 87401 Unit or Qtr/Qtr Sec O Sec 9 TZSN R SW County RO ARRIBED Location: Separator____ Other___ BLOW Pit Type: Land Type: KANGE Pit dimensions: length 28', width 28', depth 12' Pit Location: (Attach diagram) Reference: wellhead X , other _____ Footage from reference: 165 Direction from reference: 7 Degrees ____ East North X of South _____ West (20 points) Less than 50 feet **Depth To Groundwater:** 50 feet to 99 feet (10 points) (Vertical distance from Greater than 100 feet (0 points) contaminants to seasonal high water elevation of groundwater) (10 points) Less than 100 feet Distance to an Ephemeral Stream (0 points) Greater than 100 feet (Downgradient dry wash greater than ten feet in width) (10 points) Less than 100 feet Distance to Nearest Lake, Playa, or Watering Pond Greater than 100 feet (0 points) (Downgradient lakes, playas and livestock or wildlife watering ponds) Yes (20 points) Wellhead Protection Area: (0 points) No (Less than 200 feet from a private domestic water source, or: less than 1000 feet from all other water sources) Less than 100 feet (20 points) **Distance To SurfaceWater:** (10 points) (0 points) 100 feet to 1000 feet (Horizontal distance to perennial Greater than 1000 feet lakes, ponds, rivers, streams, creeks, irrigation canals and ditches) 0 **RANKING SCORE (TOTAL POINTS):**

BJ 579 BLOW PIT Date Remediation Started: ______ Date Completed: ______7/z/98 Approx. cubic yards _______ 350 av Excavation Pemediation Method: eck all appropriate Insitu Bioremediation _____ Landfarmed X sections) Other _____ Remediation Location: (i.e. landfarmed onsite, name and location of offsite facility) General Description of Remedial Action: Excavation, REDROCK BOTTOM. No X Yes ____ Depth ____ Groundwater Encountered: Sample location see Attached Documents Final Pit: Closure Sampling: (if multiple samples, Sample depth 8 (WEST SIDEWALL) attach sample results and diagram of sample locations and depths) Sample date 7/2/98 Sample time 1200 Sample Results (ppm) _____ Water: Benzene (ppb) _____ Soil: Benzene (ppb) _____ Toluene (ppm) _____ Total BTEX (ppb) _____ Field Headspace (ppm) _O.O Ethylbenzene (ppm) <u>ND</u> Total Xylenes (ppb) _____ TPH Groundwater Sample: Yes _____ No ___ (If yes, attach sample results) I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEGE AND BELIEF PRINTED NAME Buddy D. Shaw DATE

SIGNATURE Sudy D. Shaw

AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES NO ____ (REASON) ____

SIGNED: Lie CM 0 DATE: 7-21-98

3003906 069 LOCATION NO: 67579 BLAGG ENGINEERING, INC. CLIENT: AMOCO P.O. BOX 87, BLOOMFIELD, NM 87413 C.O.C. NO: _____ (505) 632-1199FIELD REPORT: CLOSURE VERIFICATION PAGE No: 1 of 1 DATE STARTED: 7/2/98 LOCATION: NAME: TICA. CONTR. 146 WELL #: 8 PIT: BLOW DATE FINISHED: _ QUAD/UNIT: O SEC: 9 TWP: 252 RNG: 5W PM:NM CNTY: RA ST: NM ENVIRONMENTAL OTP/FOOTAGE: 990 FSL 1650 FEL CONTRACTOR: P+5 EXCAVATION APPROX. 28 FT. x 28 FT. x 17 FT. DEEP. CUBIC YARDAGE: DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: LANDFORM LAND USE: RANGE LEASE: JIC 146 FORMATION: PC FIELD NOTES & REMARKS: PIT LECATED APPROXIMATELY 165 FT. NOW FROM WELLHEAD. DEPTH TO GROUNDWATER: 2100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000' NMBCD RANKING SCORE: 0 NMBCD TPH CLOSURE STD: 5000 PPM PIT ABANDONED SOIL AND EXCAVATION DESCRIPTION: ___ STEEL TANK INSTALLED __ FIBERGLASS TANK INSTALLED MOSTLY GRAYISH ORANGE TAND NON COHESIVE, TLIGHTLY MOIST, FIRM LO APPARENT STAINING OR HE DOOR DESERVED WIN EXCANATION) NO APPARENT HE ODOK IN ANY OF THE OWN SOMPLES BOTTOM - BETACOEK (SANDSTONE) VERY HARD VERY PRICE ORANGE NO APPARENT HE ODOR IN OVER SAMPLE. BEDLOCK FIELD 418.1 CALCULATIONS BOTTOM SAMPLE I.D. LAB No: WEIGHT (g) mL. FREON DILUTION READING CALC. ppm TIME 1:1 ND 4)e 8' TPH-2000 SCALE 1145 PIT PROFILE PIT PERIMETER #N OVMA RESULTS FIELD HEADSPACE PID (ppm) 28' SAMPLE 0.0 0.0 0.0 € BEDROCK LAB SAMPLES ANALYSIS TRAVEL NOTES CALLOUT: 7/2/98-MORN. ONSITE: 7/2/98-MORN.

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:

4 @ 8'

Date Analyzed:

07 - 02 - 98

%

*Diff.

1.65

Project Location:

Jicarilla Contract # 146 - 8

Date Reported:

07-02-98

Laboratory Number:

TPH-2000

Sample Matrix:

Soil

		Detection
Parameter	Result, mg/kg	Limit, mg/kg
Total Recoverable		
Petroleum Hydrocarbons	ND	20

ND = Not Detectable at stated detection limits.

QA/QC:

Duplicate QA/QC Sample TPH mg/kg TPH mg/kg 1712 1684

Method:

Modified Method 418.1, Petroleum Hydrocarbons, Total

Recoverable, Chemical Analysis of Water and Waste,

USEPA Storet No.4551, 1978

Comments: Blow Pit - BJ579

^{*}Administrative Acceptance limits set at 30%.

BLAGG ENGINEERING, INC.

P.O. Box 87, Bloomfield, New Mexico 87413 Phone: (505)632-1199 Fax: (505)632-3903

Field TPH-Worksheet

Client: AMOCO Project #:

Sample ID: 4 @ 8' Date Analyzed: 07-02-98
Project Location: Jicarilla Contract # 146 - 8 Date Reported: 07-02-98

Project Location: Jicarilla Contract # 146 – 8 Date Reported: 07 – C Laboratory Number: TPH–2000 Sample Matrix: Soil

Sample Weight: 5.00 grams
Volume Freon: 20.00 mL

Dilution Factor: 1 (unitless) TPH Reading: 4 mg/kg

TPH Result:

Reported TPH Result:

Actual Detection Limit:

Reported Detection Limit:

16.0 mg/kg

16 mg/kg

20.0 mg/kg

mg/kg

QA/QC: Original Duplicate %
TPH mg/kg TPH mg/kg Diff.
----1684 1712 1.65

Comments: Blow Pit - BJ579

JICARILLA APACHE TRIBE ENVIRONMENTAL PROTECTION OFFICE P.O. BOX 507 DULCE, NEW MEXICO 87528

SUBMIT 1 COPY TO

NATURAL RESOURCE DEP1

AND OIL & GAS ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

Operator: AMOCO PRODUCTION COMPANY	Telephone: (505) 326-9200
Address: 200 Amoco Court, Farmington,	NM 87401
Facility or Well Name: SICARILLA CONTRACT 146	- 8
Location: Unit or Qtr/Qtr Sec_ O Sec_ 9 T_2	SN R SW County BIO ARRIBA
Land Type: LANGE	
Date Remediation Started: 7 2 98 Remediation Method: Landfarmed Composted Other	Date Completed: 3/12/99 Approx. cubic yards 350
Depth To Groundwater: (pts.) Distance to an Ephemeral Stream (pts.) Distance to Nearest Lake, Playa,	Final Closure Sampling: Sampling Date: 3.10.99 Time: 1330 Sample Results:
or Watering Pond (pts.) Wellhead Protection Area: (pts.) Distance To SurfaceWater: (pts.) RANKING SCORE (TOTAL POINTS):	Field Headspace (ppm) 4:3 TPH (ppm) 0.5 Method 8015 Other
I HEREBY CERTIFY THAT THE INFORMATION ABOVE KNOWLEGE AND BELIEF	IS TRUE AND COMPLETE TO THE BEST OF MY
SIGNATURE Bully D. Shaw	AME Buddy D. Shaw AND TITLE Environmental Coordinator
AFTER REVIEW OF THE SOIL REMEDIATION INFORM ACCORDANCE TO THE JICARILLA APACHE TRIBE PITA APPROVED: NO (REASON) DATE:	CLOSURE ORDINANCE.

BLAGG ENGINEERING, INC. LOCATION NO: B3579 CLIENT: AMOCO P.O. BOX 87, BLOOMFIELD, NM 87413 C.D.C. NO: 6577 (505) 632-1199 FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION DATE STARTED: 3.10.99 PITS: BLOW LOCATION: NAME: SICARILLA CONTRACT 196 WELL #: 8 DATE FINISHED: ___ QUAD/UNIT: O SEC: 9 TWP: 25N RNG: 5N PM: NM CNTY: RA ST: NM ENVIRONMENTAL REP QTR/FOOTAGE: SW/4 SE/4 CONTRACTOR: P45 SOIL REMEDIATION: APPROX. CUBIC YARDAGE: 350 REMEDIATION SYSTEM: LANDFARM LIFT DEPTH (ft): 1-1.5 RANGE LAND USE: FIELD NOTES & REMARKS: DEPTH TO GROUNDWATER: >100 NEAREST WATER SOURCE: >1000 NEAREST SURFACE WATER: >1000 NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 5000 PPM MODERATE YELLOWISH BROWN SAND NOW COHESIVE, SCHONTLY MOIST, FIRM NO VISIBLE STAINING OBSERVED OR HC ODOR DETECTED SAMPLING DEPTHS PANGE FROM 6 -12" TOOK A SPT COMPOSITE SAMPLE FOR LAB ANALYSIS CWSED FIELD 418.1 CALCULATIONS WEIGHT (g) ML. FREON DILUTION READING CALC. ppm SAMP. TIME SAMPLE I.D. LAB No: SKETCH/SAMPLE LOCATIONS 75' LAB SAMPLES 3 OVM RESULTS LANDFARM N RESULTS ANALYSIS SAMPLE FIELD HEADSPACE PID (ppm) SAMPLE 0.5 (8015) 1330 1F-1 EDGE OF LF-1 WELL PAD 08 SCALE FT

TRAVEL NOTES: CALLOUT. A//A

ONSITE: 3 · 10 99



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Sample ID: Laboratory Number: Chain of Custody No: Sample Matrix: Preservative: Condition:	Blagg / AMOCO LF - 1 E803 6577 Soil Cool Cool and Intact	Project #: Date Reported: Date Sampled: Date Received: Date Extracted: Date Analyzed: Analysis Requested:	403410 03-12-99 03-10-99 03-11-99 03-11-99 8015 TPH
--	--	---	--

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.5	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	0.5	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:

Jicarilla Contract 146 - 8 Landfarm. 5 Pt. Composite.

Analyst . Queen

Stacy W Sendler

CHAIN OF CUSTODY RECORD

Client / Project Name RACE / AMOCO	3		Project Location LANDFARM SICAPILLA CONTRACT 194	Project Location LAMDFARM SICARILLA CONTRACT 196-8	ANALYSIS	ANALYSIS / PARAMETERS	
Sampler: REP			Client No. 니C	403410	lo. of stainers	Hemans	
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix			
CF-1	3,099 1330	1330	E803	5016	7	SPT. COMPOSITE	
						SAMPLE PRESSPUE	and a
						Cor	
						-	
Relinquished by (Signature)	ure)			Date Time Rec. 3:11:97 8 10	Received by: (Signature)	3.11.95 8;	01.8
Relinquished by: (Signature)	ure)				Received by: (Signature)		
Relinquished by: (Signature)	ure)	2		Rec	Received by: (Signature)		
				ENVIROTECH IC	CH INC.	Sample Receipt	₹
				5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615	ghway 64 Mexico 87401 -0615	Received Intact Cool - Ice/Blue Ice	