JICARILLA APACHE TRIBE Blow of submit 1 copy to ENVIRONMENTAL PROTECTION OFFICE September Natural resource dept P.O. BOX 507

DULCE, NEW MEXICO 87528

PIT REMEDIATION AND CLOSURE REPORT

	OUL COM. DIV
	Telephone: (505) 326-9200
Operator: AMOCO PRODUCTION COMPANY	Telephone: (303)
Address: 200 Amoco Court, Farmington, N	NM 87401
TICARILLA GC 35	D # (
Con 17 TZ	240 R5W County RIO ARRIGA
Location: Unit or Qtr/Qtr Sec_L Sec_L	LOW
Pit Type: Separator Dehydrator Other_B	
Land Type: RANGE	
Pit Location: Pit dimensions: length_	54', width_ 43', depth_ 19'
	other
Footage from reference: 19	
Direction from reference: 2	S Degrees East North
Direction from verses	West South
Depth To Groundwater: (Vertical distance from contaminants to seasonal	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 points)
high water elevation of groundwater) Distance to an Ephemeral Stream (Downgradient dry wash greater than	Less than 100 feet (10 points) Greater than 100 feet (0 points)
ten feet in width) Distance to Nearest Lake, Playa, or Watering Pond (Downgradient lakes, playas and	Less than 100 feet (10 points) Greater than 100 feet (0 points)
livestock or wildlife watering ponds) Wellhead Protection Area: (Less than 200 feet from a private	Yes (20 points) No (0 points)
domestic water source, or: less than 1000 feet from all other water sources) Distance To SurfaceWater: (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)
	RANKING SCORE (TOTAL POINTS):

			BJ 508 E	310W P77
Note Demodistion Sta	arted:	Date	Completed:	1/26/97
Remediation Method:				1,200
ck all appropriate s. 2018)	Landfarmed 🔀			
S. ANIES	Other			
Remediation Location (i.e. landfarmed onsite, name and location of offsite facility)	: Onsite X Offsite			
General Description	of Remedial Action: Exc	cavation		
Groundwater Encoun	itered: No 🔀	Yes Deptl	1	
Final Pit: Closure Sampling: (if multiple samples,	Sample location see A			
attach sample results and diagram of sample	Sample depthZ\'	(PIT BOTTOM		
locations and depths)	Sample date 11/25	97	Sample time 12	45
	Sample Results			
	Soil: Benzene	(ppm)	Water: Benzene	(ppb)
	Total BTEX	(ppm)	Toluene	(ppb)
		(ppm) 0.0	Ethylben	
	ТРН	(ppm) <u>53.0</u>	Total Xyl	lenes (ppb)
Groundwater Sampl	e: Yes No	(If yes, at	tach sample results)	
I HEREBY CERTIF KNOWLEGE AND I	Y THAT THE INFORMAT! BELIEF	ION ABOVE IS TRU	E AND COMPLETI	E TO THE BEST OF MY
DATE	11 26 97 PI	RINTED NAME B	uddy D. Shaw	
SIGNATURE BUS		AND TITLE E		
A DEPOSITE OF A PARTIE OF A PA	F THE PIT CLOSURE INF A APACHE TRIBE PIT CL	ORMATION, PIT CI OSURE ORDINANC	LOSURE IS APPRO CE.	VED IN ACCORDANCE
APPROVED: YES	NO (REASO	N)		
SIGNED:	= C Mamil	DATE:	6-98	

300392,994 LECATION NO: 87508 BLAGG ENGINEERING, INC. COOMA THEFT P.O. BOX 87, BLOOMFIELD, NM 87413 C.C.C. NO. 5676 (505) 632-1199CLOSURE VERIFICATION PAGE NO. 1 of 1 FIELD REPORT: DATE STARTED: 1125197 LULATION: NAME: TICA, GC 35 O WELL #: 1 PIT. BLOW DATE FINISHED: _ QUAD/UNIT: L SEC: 12 TWP: 24N RNG: 5W PM NM CNTY RA ST: NM ENVIRONMENTAL SPECIALIST: ___ OTPLEBOTAGE NULY SWLY CONTRACTOR: P65 EXCAVATION APPROX. 54 FT. x 43 FT. x 19 FT. DEEP. CUBIC YARDAGE: 1200 DISPOSAL FACILITY: DN-SITE REMEDIATION METHOD: LANDFARMED LEASE: CA SRMI 4325 FORMATION: OK LAND USE RANGE FIELD HOTES & FEMAFIES: PIT LOCATED APPROXIMATELY 190 FT. 5250 FROM WELLHEAD. DEPTH TO GEOUNDWATER. >100' NEAPEST WATER SOURCE: >1000' NEAPEST SURFACE WATER. NMOST FANERIG SCORE: ____ NMOST TEH SLOSURE STD _5000 PEN ✓ PIT ABANDONED ____ STEEL TANK INSTALLED COIL AND EXCAVATION DECEPTIONS _ FIBERGLASS TANK INSTALLED SUIL CONSIST OF MOSTLY MOD. TO DY. YELL BROWN SAND SOME GRAVEL INTERMINED W/ STAD NEAR BOTTOM HALE OF EXCONATION SLIGHTLY MUIST TO MUIST FIRM, NO APPARENT STAINING OR OR COLORATION PRSERVED WIN EXCRURTION, NO APPRRENT HE ODDS IN RNY OF THE DUM SAMPLES. FIELE 418.1 CALCULATIONS SAMPLE I.D. LAB No: WEIGHT (g) | mL FREON DILHTION | READING CALC. pom TIME 1245 SCALE FT PIT PROFILE OVM PIT PERIMETER RESULTS FIELD HEADSFALE PID (ppm) SAMPLE e121 0.0 0,0 @141 0.0 3 **e** 14/ 0.0 4 C 14' 21 (1) 10 اللالما HEAD 0 LAB SAMPL Sez / TPH (418.1) 1245 ③ CALLOUT: 11/24/97 - MORN. OVSITE: 11/25/97 - MORN.

TRAVEL NOTES.



EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	5 @ 21'	Date Reported:	11-26-97
Laboratory Number:	C585	Date Sampled:	11-25-97
Chain of Custody No:	5676	Date Received:	11-25-97
Sample Matrix:	Soil	Date Extracted:	11-26-97
Preservative:	Cool	Date Analyzed:	11-26-97
Condition:	Cool and Intact	Analysis Needed:	TPH-418.1

	- -	Det.
	Concentration	Limit
Parameter	(mg/kg)	(mg/kg)

Total Petroleum	Hydrocarbons
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53.0

5.0

ND = Parameter not detected at the stated detection limit.

Dem L. ajena

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water

and Waste, USEPA Storet No. 4551, 1978.

Comments:

Jicarilla GC 35 D #1 Blow Pit.

May W Sendler
Review

87508

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

SUBMIT 1 COPY TO

NATURAL RESOURCE DEPT

AND OIL & GAS ADMINISTRATION

PIT REMEDIATION AND CLOSURE REPORT

	Telephone: (505)326-9200	
perator: AMOCO PRODUCTION COMPANY		
ddress: 200 Amoco Court, Farmington, NM	87401	
TICARILLY 60 35	O #1	
ocation: Unit or Qtr/Qtr Sec_ L Sec_ 12 T 24N	R_560_ County	
Pit Type: Separator \(\sum \) Dehydrator Other		
Land Type:RANGE		
Pit Location: Pit dimensions: length 28	3', width	
Attach diagram) Reference: wellhead X, otl	her	
Footage from reference: 192'		
Direction from reference:	Degrees East North of \text{West South } \textsquare \text{X}	
Depth To Groundwater: (Vertical distance from contaminants to seasonal high water elevation of	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 points)	
proundwater) Distance to an Ephemeral Stream (Downgradient dry wash greater than	Less than 100 feet (10 points) Creater than 100 feet (0 points)	
ten feet in width) Distance to Nearest Lake, Playa, or Watering Pond (Downgradient lakes, playas and livestock or wildlife watering ponds)	Less than 100 feet (10 points) Greater than 100 feet (0 points)	<u> </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) — No (0 points) —	
Distance To SurfaceWater: (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)	
	RANKING SCORE (TOTAL POINTS):	

ote Remediation Star	rted: Date Completed:
emediation Method: ck all appropriate	Excavation Approx. cubic yards 350 Landfarmed Insitu Bioremediation
Remediation Location: i.e. landfarmed onsite, name and location of	OtherOffsite
ec : c :11:. \	of Remedial Action: _Excavation
Groundwater Encoun	tered: No 🔀 Yes Depth
Final Pit: Closure Sampling: (if multiple samples,	Sample locationsee Attached Documents
attach sample results and diagram of sample locations and depths)	Sample depth $25'$ (PIT BOTTOM) Sample date $1/25/97$ Sample time 1200
	Sample Results Soil: Benzene (ppm) Water: Benzene (ppb)
Groundwater Samp	le: Yes No X (If yes, attach sample results)
I HEREBY CERTIF KNOWLEGE AND	Y THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF M
R	PRINTED NAME Buddy D. Shaw Oly D. Shaw Environmental Coordinator ON DIT CLOSURE IS APPROVED IN ACCORDANCE
TO THE JICARILI	OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANC LA APACHE TRIBE PIT CLOSURE ORDINANCE.
APPROVED: YES	X NO (REASON)

BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>87508</u> C.C.C. NO: <u>5676</u>
FIELD REPORT: CLOSURE VERIFICATION	PAGE No: of
QUAD/UNIT: L SEC: 12 TWP: 24N RNG: 5W PM: NM CNTY RA ST: NM	DATE STARTED: 11/25/97 DATE FINISHED: ENVIRONMENTAL
OTP/FOOTAGE NULLY SWILL CONTRACTOR: P & 5	SPECIALIST: NV
EXCAVATION APPROX 28 FT x 25 FT x 22 FT DEEP. CUBIC DISPOSAL FACILITY: 30-5178 REMEDIATION METHOLAND USE: RANGE LEASE: CA SRMI 4325 FOR	D: LANDFARMED
SOIL AND EXCAVATION DESCRIPTION:	E WATER: > 1000' CHECK ONE PIT ABANDONED STEEL TANK INSTALLED FIREPGLASS TANK INSTALLED
SOIL CONSIST OF MOSTLY OK YELL BROWN TOWN NO. SLIGHTLY MOST FIRM NO APPRICANT STRIMING OR O OBSERVED WIN EXCHURTION, NO APPRICAT HE ODOR OUM SAMPLES.	N COMESIVE, IS COLORATION IN ANY OF THE
TIME SAMPLE I.D. LAB No: :WEIGHT (g) IML. FREON DI	LITION READING CALC. ppm
SCALE 1200	
PIT PERIMETER N OVM RESULTS PIT	PROFILE
SAMPLE FIELD HEADSFACE D.	28' A'
ANTONOTION LAB SAMPLES SAMPLE ANALYSIS THE ID DE 25' TPH (418.1) 1209 PASSED	
TRAVEL NOTES: CALLOUT: 11/24/97- MORN. ONSITE: 11/25/97-ma	روم .

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EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	5 @ 25'	Date Reported:	11-26-97
Laboratory Number:	C584	Date Sampled:	11-25-97
Chain of Custody No:	5676	Date Received:	11-25-97
Sample Matrix:	Soil	Date Extracted:	11-26-97
Preservative:	Cool	Date Analyzed:	11-26-97
Condition:	Cool and Intact	Analysis Needed:	TPH-418.1

		Det.
	Concentration	Limit
Parameter	(mg/kg)	(mg/kg)

Total Petroleum Hydrocarbons 139 5.0

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water

and Waste, USEPA Storet No. 4551, 1978.

Comments: Jicarilla GC 35 D #1 Separator Pit.

Seu L. Gluan
Review Stacy W Sender

Relinquished by: (Signature) ENVIROTECH INC. 5796 U.S. Highway 64-3014 Farmington, New Mexico 87401 (505) 639-0615	Relinquished by: (Signature) Date Time Received by: (Signature) Pelinquished by: (Signature) Date Time Received by: (Signature) Perinquished by: (Signature)	SAMPLES REGINED COOL & INTINES - SAMPLES.	1 DE 6098	PASELVCOOL	Same tell	(5) @ 21 1/25/97 1245 CS85 SOIL 1 1 1 Brow PIT	(5) @ 25' 11/25/97 1200 CS84 SOIL 1 1 1 SEMMOTOR PIT	Sample No./ Sample Sample Lab Number Sample Semple Complex Com	Sampler: (Signature) Chain of Custody Tape No. Remarks O 40 34 ~10	Aroco	Client/Project Name Project Location
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87508

SUBMIT 1 COPY TO NATURAL RESOURCE DEPT AND OIL & GAS ADMINISTRATION

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

ON-SITE SOIL REMEDIATION REPORT

Operator: AMOCO PRODUCTION C	COMPANY	Telephone: (505) 326-9200		
Address: 200 Amoco Court,		NM 87401		
Facility or Well Name: JICARILLA	GAS COM 3	5 D#1		
Location: Unit or Qtr/Qtr Sec	Sec_/Z T_Z	24N R SW County RID ARRIBA		
Land Type: <u>EANGE</u>				
Data Remodiation Started: // · 25	97	Date Completed:		
Remediation Method: Landfarmed		Approx. cubic yards /550		
Composted				
Other				
Depth To Groundwater:	(pts.)	Final Closure Sampling:		
Distance to an Ephemeral Stream		Sampling Date: 12 30 98 Time: 0840		
Distance to Nearest Lake, Playa,	(pts.)	Sample Results: (LF-1 & LF-2)		
or Watering Pond Wellhead Protection Area:	(pts.)	Field Headspace (ppm) O.O (LF-1) TPH (ppm) 1920 Method 8015		
	(pts.) <u>0</u>	Other MULTIPLE SAMPLES - REFER TO		
RANKING SCORE (TOTAL POIN	TS):	ATTACHED SHEET		
I HEREBY CERTIFY THAT THE INFO KNOWLEGE AND BELIEF	DRMATION ABOVI	E IS TRUE AND COMPLETE TO THE BEST OF MY		
117/09	PRINTED	NAME Buddy D. Shaw		
SIGNATURE Bully Show AND TITLE Environmental Coordinator				
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.				
APPROVED: YES NO (REASON)				
SIGNED:				

BLAGG ENGINEERING, INC. CLIELT AMOCC LOCATION NO BISSON P.O. BOX 87, BLOOMFIELD, NM 87413 C.O.C. NO: 6433 (505) 632-1199LANDFARM/COMPOST PILE CLOSURE VERIFICATION FIELD REPORT: DATE STARTED: 12.30.98 PITS: SEP. BLOW NAME: JICARILLA GAS COM 35 DWELL #: 1 DATE FINISHED 1/12/99 QUAD UNIT: L SEC: 12 TWP: 24N RNG: 5W PM:NM CNTY: RA ST: NM ENVIRONMENTAL SPECIALIST: . CONTRACTOR: UTF / FOOT AGE: NW/4 SW/4 COLL PEMEL ATION: APPROX. CUBIC YARDAGE: 1550 REMEDIATION SYSTEM: LANDFARM LIFT DEPTH (ft): 1.2. LAND USE: _____ RAUGE FIELD NOTES & REMARKS: DEFITH TO GROUNDWATER: >100' NEAREST WATER SOURCE: > 1000 NEAREST SURFACE WATER: > 1000' NMCCII PAGNING SCORE: __O NMCCD TPH CLOSURE STD: 5000 PPM DK YELL ORANGE - BROWN SAND NON CONESIVE SLIGHTLY MOIST, FIRM, SOME STAINING OBSERVED IN SMALL AREA OF LANDFARM # 1 (SEE SKETCH BELOW) NO HC ODOR DETECTED SAMPLING DEPTH BETWEEN 4" - 18" 5 POINT COMPOSITE SAMPLES TAVEN FIZOM BOTH LANDFARMS FOR LAB ANALUSIS CLOSED FIELD 4181 CALCULATIENS WEIGHT (g) ml. FREON DILUTION | READING | CALC. ppm LAB No. SAMP, TIME SAMPLE LD. SKETCH/SAMPLE LOCA IONS LANDFARM LAB SAMPLES OVM RESULTS SAMPLE ANALYSIS RESULTS (10/1) FIELD HEADSPACE PID (ppm) SAMPLE 1.920 (80,5) 0840 0.0 4F.1 00 (8015) 0900 54'54'E SCALE LANDFARM FT

ONSITE:

RAVEL NOTES:

CALLOUT:



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Plane / AMOCO	Dania at #	04004.40
	Blagg / AMOCO	Project #:	04034-10
Sample ID:	LF - 1	Date Reported:	01-06-99
Laboratory Number:	E452	Date Sampled:	12-30-98
Chain of Custody No:	6433	Date Received:	01-05-99
Sample Matrix:	Soil	Date Extracted:	01-05-99
Preservative:	Cool	Date Analyzed:	01-06-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	4.5	0.2
Diesel Range (C10 - C28)	1,920	0.1
Total Petroleum Hydrocarbons	1,920	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 GC 35 D #1 Landfarm. 5 Pt. Composite.

Analyst P. Que

Stacy W Lendler



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	LF - 2	Date Reported:	01-06-99
Laboratory Number:	E453	Date Sampled:	12-30-98
Chain of Custody No:	6433	Date Received:	01-05-99
Sample Matrix:	Soil	Date Extracted:	01-05-99
Preservative:	Cool	Date Analyzed:	01-06-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	5.6	0.2
Diesel Range (C10 - C28)	101	0.1
Total Petroleum Hydrocarbons	107	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 GC 35 D #1 Landfarm. 5 Pt. Composite.

Analyst P. Oder

Stacy W Sendler

Cool - Ice/Blue Ice	0615	Farmington, New Mexico 67401 (505) 632-0615			
Received Intact	hway 64	5796 U.S. Highway 64			
Y NA				48-8849	
Sample Receipt	CHINC	FOVIROTECH INC		42-5280	per coc's
	Received by: (Signature)	Rece		3)	Relinquished by: (Signature)
	Received by: (Signature)			9)	Relinquished by: (Signature)
Date Time /⋅√->> ₽σ∂	Received by: (Signature)	Date Time Rece		9)	Relinquished by: (Signature)
AFTON - COOL					
SOM SAMPLES					
5 M. Composite	~	2011	E45-3	12/98 0900	LF-2
5 pt. Composite	\ \ \	2016	5452	2450/320840	LF-1
	Con	Sample Matrix	Lab Number	Sample Sample Date Time	Sample No./ Identification
Remarks	o. of tainers	-/0	Client No.		Sampler: REP
NAMETERS	ANALYSIS / PARAMETERS	GC 35 D#1	TICARILLA (000	Client / Project Name, & REG / Phys. Co
		Suggester			