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

BJ689 SUBMIT 1 COPY TO
SCP OK NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

PIT REMEDIATION AND CLOSURE REPORT

AUG 2 7 1999

Operator: AMOCO PRODUCTION COMPANY	Telephone: (505) 326-9200
Address 200 Amoco Court, Farmington, N	M 87401
TICARILLA GE	C #IE
Twist on OtriOtr Sec F Sec 32 T2	SA RESW County 700 1777
Pit Type: Separator Dehydrator Other	BLOW
Land Type: LANGE	
Pit Location: Pit dimensions: length_	35', width 50', depth 9'
Footage from reference: 13°	8
Direction from reference:	Z Degrees X East North X Of South
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)
groundwater) Distance to an Ephemeral Stream (Downgradient dry wash greater than ten feet in width)	Less than 100 feet (10 points) Greater than 100 feet (0 points)
Distance to Nearest Lake, Playa, or Watering Pond	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 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):

BJ689	BLOW	PIT

	Date Completed: 12 2 48.
Date Remediation Sta	- which words 550
Remediation Method: (Check all appropriate	Excavation Approx. cubic yards Landfarmed
sections)	Landrarmod
	Other
Remediation Location (i.e. landfarmed onsite, name and location of offsite facility)	
General Description	of Remedial Action: Excavation. BEDROCK BOTTOM.
Groundwater Encoun	tered: No X Yes Depth
Final Pit: Closure Sampling: (if multiple samples,	Sample location see Attached Documents
attach sample results and diagram of sample locations and depths)	Sample depth $\frac{1}{3098}$ Sample time $\frac{1430}{98}$
	Sample Results
II	Soil: Benzene (ppm) 0.265 Water: Benzene (ppb)
	Total BTEX (ppm) 7.850 Toluene (ppb)
	Field Headspace (ppm) 581 Ethylbenzene (ppb)
	TPH (ppm) 451 Total Xylenes (ppb)
Groundwater Sample	e: Yes No _X (If yes, attach sample results)
DESCRIPTION AND D	Y THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY SELIEF
DATE	12/2/98, PRINTED NAME Buddy D. Shaw Oly D. Shaw AND TITLE Environmental Coordinator
SIGNATURE Suc	Oly Shaw AND TITLE _Environmental Coordinator
AFTER REVIEW OF TO THE JICARILLA	THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE A APACHE TRIBE PIT CLOSURE ORDINANCE.
APPROVED: YES	NO (REASON)
SIGNED:	CM en 12-28-98

BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	C.O.C. NO: <u>87689</u>
FIELD REPORT: CLOSURE VERIFICATION LOCATION: NAME: JICA. GC C WELL #: /E PIT: BLOW QUAD/UNIT: F SEC: 37 TWP: 76N RNG: 5W PM: NM CNTY: RA ST: NM	DATE STARTED: 11/30/98 DATE FINISHED:
OTR/FOOTAGE: 1560 FAL (1770 FUL CONTRACTOR: PJS	SPECIALIST:
EXCAVATION APPROX. 35 FT. x 50 FT. x 7 FT. DEEP. CUBIC DISPOSAL FACILITY: DN-SITE REMEDIATION METHO LAND USE: RAJEE LEASE: T/C C FOR FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 138 FT. // DEPTH TO GROUNDVATER: 2/00' NEAREST VATER SOURCE: 2/000' NEAREST SUPFACE NMDCP PANKING SCORE: O NMOCD TPH CLOSURE STD: 5000 PPM SOIL AND EXCAVATION DESCRIPTION: S'OBURLS - TOP 4' CONSISTED OF DK. YELL. ORDINGE STAND + 3 NITELVAL CONSISTED OF DK. YELL. ORDINGE STAN	YARDAGE: 550 D:
TRAVEL NOTES: CALLOUT: ONSITE:	



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 2 @ 6' E239 6414 Soil Cool Cool and Intact	Project #: Date Reported: Date Sampled: Date Received: Date Extracted: Date Analyzed: Analysis Requested:	04034-10 12-02-98 11-30-98 12-02-98 12-02-98 12-02-98 8015 TPH
--	--	---	--

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	262	0.2
Diesel Range (C10 - C28)	189	0.1
Total Petroleum Hydrocarbons	451	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 C #1E Blow Pit.

Analyst P. Oyene

Stacy W Sendler



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Benzene Toluene Ethylbenzene p,m-Xylene o-Xylene		265 533 251 4,710 2,090	8.8 8.4 7.6 10.8 5.2	
Condition: Parameter	Conc	entration /Kg)	Det. Limit (ug/Kg)	
Client: Sample ID: Laboratory Number: Chain of Custody: Sample Matrix: Preservative:	Blagg / AMOCO 2 @ 6' E239 6414 Soil Cool	Project #: Date Reported: Date Sampled: Date Received: Date Analyzed: Date Extracted: Analysis Requested:	12- 11- 12- 12 12	034-10 -02-98 -30-98 -02-98 -02-98 -02-98

ND - Parameter not detected at the stated detection limit.

Total BTEX

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

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

7,850.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846,

USEPA, December 1996.

Jicarilla C #1E Blow Pit. Comments:

Stacy W Sendler
Review

CHAIN OF CUSTODY RECORD

Client / Project Name	Project Location	BLOW PIT	ANALYSIS / PARAMETERS	RAMETERS
BLAGG / Amoco	JICARILLA	C #/E		
Sampler:	Client No.		ers)	Hemans
NTV	040	04034-10	o. of taine PH 1115)	
Sample	Lab Number	Sample		
) Date	3 0	1/0/2		PRESERVI - COOL
(2) 8 6 / 11/2 Bd (2)	7207			
		!		Date Time
Relinquished by: (Signature)		12/2/98 07/5	Heceived by: (Signature)	12.298 075
Relinquished by: (Signature)(·	Received by: (Signature)	
Relinquished by: (Signature)			Received by: (Signature)	
	(all)			Sample Receipt
et coc. 2 eric ette	# T F #			~ z
		5796 U.S.	5796 U.S. Highway 64	Received Intact
		Farmington, Ne (505) 6	Farmington, New Mexico 87401 (505) 632-0615	Cool - Ice/Blue Ice

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

BJ689 ... SUBMIT 1 COPY TO

NATURAL RESOURCE DEPT

AND OIL & GAS ADMINISTRATION

PIT REMEDIATION AND CLOSURE REPORT

Operator: AMOCO PRODUCTION COMPANY	Telephone: (505)326-9200
200 Amogo Court, Farmington, N	м 87401
Facility or Well Name:	C #1E
Facility of Well Name.	を R Sw County
V D Ladroton Other	
1	
Land Type:	
Til Location.	25', width30', depth4'
	other
Footage from reference: /5	S North
Direction from reference: 3'	P Degrees East North South West South
Depth To Groundwater: (Vertical distance from contaminants to seasonal high water elevation of groundwater)	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 points)
Distance to an Ephemeral Stream (Downgradient dry wash greater than ten feet in width)	Less than 100 feet (10 points) Greater than 100 feet (0 points)
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)
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):

BJ 6 8 9	SEP. PT	Ţ

	$r = \frac{1}{30}$
Date Remediation Started:	Date Completed:
Remediation Method:	Approx. cubic yards /00
(Check all appropriate sections) Landfarmed	Insitu Bioremediation
Other	
Remediation Location: Onsite \(\sum \) Offsite	
offsite facility)	De la Tura tima
General Description of Remedial Action: Excavation,	EXCOUNTION MOSTLY DEDROCK, HIGHETURE
NO THY ANKLYSIS WAS CONDUCTED.	
Groundwater Encountered: No X Yes	Depth
Final Pit: Sample location _ see Attached Do	cuments
Final Pit: Sample location	
cit multiple complete	
l and c 1. Commissionals 4 (/// Q)	off off
locations and depths) Sample date	Sample time
Sample Results	
Soil: Benzene (ppm)	Water: Benzene (ppb)
	Toluene (ppb)
Total BTEX (ppm)	
Field Headspace (ppm) <u>Z6.</u>	•
TPH (ppm) <u>N</u>	7 Total Xylenes (ppb)
Groundwater Sample: Yes No X (If y	ves, attach sample results)
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS KNOWLEGE AND BELIEF	S TRUE AND COMPLETE TO THE BEST OF MY
DATE 11/30/98 PRINTED NAMI	g Buddy D. Shaw
ROAN	Environmental Coordinator
AFTER REVIEW OF THE PIT CLOSURE INFORMATION, I TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDI	NANCE.
APPROVED: YES NO (REASON)	· ;
SIGNED: LECTION DATE: 1	2-28-98

P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	C.D.C. ND:
LOCATION: NAME: D.A. GC C WELL #: 18 PIT: SEP	PAGE No: of DATE STARTED: #/30/98 DATE FINISHED: ENVIRONMENTAL SPECIALIST:
EXCAVATION APPROX. 25 FT. x 30 FT. x 4 FT. DEEP. CUBIC DISPOSAL FACILITY: DN - SITE REMEDIATION METHOD LAND USE: REMEDIATION METHOD FOR LEASE: JIC L FOR DEPTH TO GROUNDWATER: PIT LOCATED APPROXIMATELY 155 FT. STATE OF THE PROPERTY OF THE	MATION: DK FROM WELLHEAD.
EXCAUATION CONSISTED OF MOSTLY BEDROCK (SANDSTONE) VERY MED. GRAY (PIT BOTTOM) IN COLOR SIDEWALLS FRIABLE, PHARD MED. GRAY DISCOLDRATION APPALENTLY ASSOCIATED APPARENT HC DOOR WIND EXCAUATION OR IN ANY OF GLIGHT DOOR IN PIT BOTTOM OUM SAMPLE) ALL SAMPLES BEDROCK, THERE FORE NO TOH ANALYSIS WAS CONDUCTED MOSTLY BEDROCK TIME SAMPLE I.D. LAB NO: WEIGHT (g) ML. FREON DI	PALE ORANGE TO PIT BOTOM VERY W/ STAIN WG NO THIE OVEL SAMPLES COLLECTED FROM TED.
O FT PIT PERIMETER /N OVM RESULTS SAMPLE FIELD HEADSPACE PID (ppm) 1 @ 2' 1.7 25' 25' 26 2' 0.0 4 @ 2' 0.0 4 @ 2' 0.0 THEN THEN TO THE	PROFILE A zs' BEORSEX (55)
TRAVEL NOTES: CALLOUT:ONSITE:	(55)

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

ON-SITE SOIL REMEDIATION REPORT

Operator: AMOCO PRODUCTION COMPANY	Telephone : (505) 326-9200
Address: 200 Amoco Court, Farmin	gton, NM 87401
Facility or Well Name: JICAZILLA GAS CO	M C IE
Location: Unit or Qtr/Qtr Sec_ F Sec_3	Z TOWN REW County PIO ARRIBA
Land Type: PANGE	
Date Remediation Started:	Date Completed: 6/10/99 Approx. cubic yards 450
Pepth To Groundwater: (pts.)	Final Closure Sampling:
Distance to an Ephemeral Stream (pts.)	
Distance to Nearest Lake, Playa, or Watering Pond (pts.)	Sample Results:
Wellhead Protection Area: (pts.)	Field Headspace (ppm) 475 TPH (ppm) 95Z Method (80.5)
Distance To SurfaceWater: (pts.)	Other
RANKING SCORE (TOTAL POINTS):	
I HEREBY CERTIFY THAT THE INFORMATION KNOWLEGE AND BELIEF	ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY
DATE <u>6/10/99</u> , PR	INTED NAME Buddy D. Shaw
SIGNATURE Bully S. Show	AND TITLE Environmental Coordinator
AFTER REVIEW OF THE SOIL REMEDIATION ACCORDANCE TO THE JICARILLA APACHE T	INFORMATION, ON-SITE REMEDIATION IS APPROVED IN RIBE PIT CLOSURE ORDINANCE.
APPROVED: YES NO (REASON)
SIGNED:	DATE:

CLIENT: AMOCO	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	ND: <u>85689</u>
FIELD REPORT:	LANDFARM/COMPOST PILE CLOSURE VERIFIC	ATION
	DATE FINISHED:	
:	2 TWP: 200 RNG: 5W PM: NM CNTY: RA ST: NM ENVIRONMENTAL SPECIALIST:	REP
SOIL REMEDIATION: REMEDIATION SYS LAND USE: F:ELD NOTES & REMAR	TEM: LANDFARM APPROX. CUBIC YARDAGE:	
DEPTH TO GROUNDWATER: >10	O' NEAREST WATER SOURCE: > 1000 NEAREST SURFACE WATER: > 1	000.
	NMOCD TPH CLOSURE STD: 5000 PPM	
IN LANDEARM AREA #	FIELD 418.1 CALCULATIONS AMPLE I.D. LAB No: WEIGHT (g) ml. FREON DILUTION READING CALC. ppm LE LOCATIONS	
\\ _1	SAMPLE FIELD HEADSPACE SAMPLE ANALYSIS TH	ME RESULTS
λ	REA //	30 952
Co.		
© LF AREA		
TRAVEL NOTES:	SCALE 0 FT	
CALLOU	JT: ONSITE: 9 99	



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Diesel Range (C10 - C28)	933 952	0.1 0.2
Gasoline Range (C5 - C10)	19.0	0.2
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Client: Blagg / AMOCO Sample ID: LF - 1 Laboratory Number: F482 Chain of Custody No: 7074 Sample Matrix: Soil Preservative: Cool Condition: Cool and Intact	Project #: Date Reported: Date Sampled: Date Received: Date Extracted: Date Analyzed: Analysis Requested:	403410 06-10-99 06-09-99 06-10-99 06-10-99 8015 TPH

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 Gas Com. C - 1E Landfarm. 5 Pt. Composite.

Aber L. Gieren

Stacy W sendler
Review

CHAIN OF CUSTODY RECORD

Client / Project Name	Project Location 4	Project Location LANDFARM		ANALYSIS / PARAMETERS	
BLAGG/AMOCO	JICABULA	SICABILLA CARS COM. C-1E			
Sampler:	Client No.))		Remarks
LEP C	403410	410	o. of tainer		
Sample No./ Sample Sample Identification Date Time	Lab Number	Sample Matrix			
1.999.0	F482	2012	1	SPI	SPT.COMBSITE
				SAI	SAMPLE PRESERVE
					Coor
					-
Relinquished by: (Signature)		Date Time Reco	Received by: (Signature)		Date Time
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)		Rec	Received by: (Signature)		
		FOVIROTECH IO	CHINC	Sa	Sample Receipt
					Z Z
		5/96 U.S. Highway 64 Farmington, New Mexico 87401	jnway 64 Mexico 87401	Received Intact	-
		(505) 632-0615	-0615	Cool - Ice/Blue Ice	ue Ice