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

NATURAL RESOURCE DEPT

AND OIL & GAS ADMINISTRATION

## PIT REMEDIATION AND CLOSURE REPORT

MID CODE BUTY

	OUR GOING DUV.
	Plane 3 0300
DRODUCTION COMPANY	Telephone: (505) 326-9200
Operator: AMOCO PRODUCTION COMPANY	********
Address: 200 Amoco Court, Farmington,	NM 87401
Address	NCT #146-35
Facility or Well Name:	2 402120
Location: Unit or Qtr/Qtr Sec Sec 3	725N RSW County KIS MANOTH
Pit Type: Separator Dehydrator Other_	BLOW
Land Type:	
Land Type: 704/06F	
	55'_, width_ 4'z'_, depth_ 24'
(Attach diagram)  Reference: wellhead X	_, other
Footage from reference:	160'
Pootage from foliations.	Degrees East North of West South
Direction from reference: _	of Court
	West South
	Less than 50 feet (20 points)
Depth To Groundwater:	50.5 that 00 feet (10 points)
(Vertical distance from	Greater than 100 feet (0 points)
contaminants to seasonal high water elevation of	
groundwater)	
Distance to an Ephemeral Stream	Less than 100 feet (10 points) Greater than 100 feet (0 points)
(Downgradient dry wash greater than	Greater than 100 feet (0 points)
ten feet in width)	Jess than 100 feet (10 points)
Distance to Nearest Lake, Playa, or Watering Pon	d Less than 100 feet (10 points) Greater than 100 feet (0 points)
Downgradient lakes, playas and	Greater than 100 test.
livestock or wildlife watering ponds)	Yes (20 points)
Wellhead Protection Area:	No (0 points)
(Less than 200 feet from a private domestic water source, or: less than	
1000 feet from all other water sources)	(20
Distance To SurfaceWater:	Less than 100 feet (20 points) 100 feet to 1000 feet (10 points)
(Horizontal distance to perennial	Greater than 1000 feet (0 points)
lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	
	momit notified.
<b>Ⅱ</b> ·	RANKING SCORE (TOTAL POINTS):

			BT659	BLOW F	·17
Date Remediation Sta	arted:		ate Completed	l:	21/98
Pemediation Method: Check all appropriate sections)	Excavation	App Insi	itu Bioremedia	rdss	
Remediation Location (i.e. landfarmed onsite, name and location of offsite facility)	·	site			
General Description	of Remedial Action: E	xcavation. be	DIZOCK	, n one	
Groundwater Encoun	tered: No 🔀	Yes D	Depth		
Final Pit: Closure Sampling:	Sample location see				
(if multiple samples, attach sample results and diagram of sample locations and depths)	Sample depth	3' (NORTH SIDE	Sample t	ime	
	Sample Results  Soil: Benzene  Total BTEX  Field Headspa	(ppm)	<del>-</del>  !	Benzene Toluene Ethylbenzene Total Xylenes	(bbp)
Groundwater Sample		No (If yes,			
I HEREBY CERTIFY KNOWLEGE AND B	THAT THE INFORMA	TION ABOVE IS T	TRUE AND CO	OMPLETE TO	THE BEST OF MY
DATE SIGNATURE BUS	Ry D. Show	PRINTED NAME _	Environme	ental Coord	
ADDED DEVIEW OF	THE PIT CLOSURE IN A APACHE TRIBE PIT C	FORMATION, PIT CLOSURE ORDINA	CLOSURE IS NCE.	S APPROVED	IN ACCORDANC
ADDDOVED. VES	NO REAS	ON)			· · ·

11-18-98

DATE:

SIGNED:

	m 11 m m
CLIENT: AMOCO BLAGG ENGINEERING, INC.	LOCATION NO: BJ659
PO BOX 87 BLOOMFIELD, NM 87413	C.O.C. NO: 630Z
(505) 632-1199	
CLOCUPE VERIFICATION	PAGE No: of
FIELD REPORT. CLOSUIL VERMI TOTTE	DATE STARTED: 10/14/98
LOCATION: NAME: JICA, CONTR. 146 WELL #: 35 PIT: BLOW	DATE STARTED:
OUAD/UNIT: E SEC: 3 TWP: 250 RNG: 500 PM: PM: PM: CNTY: NT	ENVIRONMENTAL NV
OTR/FOOTAGE: 1570 FALL HID FWL CONTRACTOR: P+5	SPECIALIST:
EXCAVATION APPROX. S5 FT. x 42 FT. x 24 FT. DEEP. CUBIC	YARDAGE: 1,500
DEMEDIATION METHO	D: LANDENKY
DISPOSAL FACILITY: ON THE REMEDIATION IN THE LEASE: TIC 146 FOR	RMATION: CK/MV
LAND USE: Zines C HELLES	ריי FRΠM VFITHEAD.
FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 160 FT. NEPTH TO GROUNDWATER: >130' NEAREST WATER SOURCE: >100' NEAREST SURFACE	E WATER: >1000'
DEPTH TO GROUNDWATER: 7130' NEAREST WATER SHURCE:	CHECK DNE
NMBCD KANKING SCBRE.	_ PIT ABANDONED _ STEEL TANK INSTALLED
	_ FIBERGLASS TANK INSTALLED
ON. YELL ORANGE TO BROWN SAND, NON CONESIVE SLIGHTLY MOIS	T FIRM DK YELL
- $        -$	
DOWNWARD TOWARD TOWTH SIDEWALL (BETWEEN 19-21 BEWN GROE)	STAINING EUIDENT ON
DOWNWARD TOWARD SONTH SIDEWALL (BETWEEN 19-21 BEWN CODE)  ALL SIDEWALLS FROM 15 TO PIT BOTTOM ON ALL SIDEWALLS,  DETECTED WITH EXCOUNTION, SLIGHT HE GOOR IN ALL OUM.	samples.
DETECTED WIN EXCOUNTION,	
REDUCE (SHALE) OLIVE GRAY TO VERY DITSKY PURPLE	IN COLOR NO APPARENT
BOTTOM - BEDROCK (SHALE), OLVE GRAY TO VERY DITSKY PURPLE HE OWN OR NOTICEABLE STAINING DETECTED OUSERN BEDROCK IN OUM SAMPLE.	E) SLIGHT HC ODOR
BEOROCK IN OUM SAMPLE.	
BOTTOM  TIME SAMPLE I.D. LAB NO: WEIGHT (g) ML. FREON C	
TIME SAMPLE I.D. LAB No: WEIGHT (g) IML. FREON L	ICONON INCIDENTS
SCALE 1000	
O FT	
PIT PERIMETER N. PIT	PROFILE
OVM	
RESULTS  SAMPLE FIELD HEADSPACE	
	55 <sup>'</sup>
ID PID (ppm)	551
55' 1 @ 18' 94.9 2 @ 16' 36.2	55'
55'  1 @ 18' 94.9  2 @ 16' 36.2  3 @ 18' 64.7  4 @ 19' 53.1  24	55'
1 @ 18' 94.9 2 @ 16' 36.2 3 @ 18' 64.7	
55'  1 @ 18' 94.9  2 @ 16' 36.2  3 @ 18' 64.7  4 @ 19' 53.1  5 @ 24' 65.5	
55'  1 @ 18' 94.9 2 @ 16' 36.2 3 @ 18' 64.7 4 @ 19' 53.1 5 @ 24' 65.5	SS' SENJEK (Sh)
55'  1 @ 18' 94.9 2 @ 16' 36.2 3 @ 18' 64.7 4 @ 19' 53.1 5 @ 24' 65.5	
55'  1 @ 18' 94.9 2 @ 16' 36.2 3 @ 18' 64.7 4 @ 19' 53.1 5 @ 24' 65.5  LAB SAMPLES SAMPLE ANALYSIS TIME	
55'  1 @ 18' 94.9 2 @ 16' 36.2 3 @ 18' 64.7 4 @ 19' 53.1 5 @ 24' 65.5  LAB SAMPLES	
55'  1 @ 18' 94.9 2 @ 16' 36.2 3 @ 18' 64.7 4 @ 19' 53.1 5 @ 24' 65.5  LAB SAMPLES SAMPLE ANALYSIS TIME 10	
3  LAB SAMPLES  SAMPLE S  SAMPLE ANALYSIS TIME  De48' TPH 1000	
3  LAB SAMPLES  SAMPLE S  SAMPLE ANALYSIS TIME  De48' TPH 1000	SENJEK (SK)



### 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 1 @ 18' E085 6302 Soil Cool	Project #: Date Reported: Date Sampled: Date Received: Date Extracted: Date Analyzed: Analysis Requested:	04034-10 10-21-98 10-14-98 10-21-98 10-21-98 8015 TPH
--	---	---	--

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	25.6	0.1
Total Petroleum Hydrocarbons	25.6	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 - 35 Blow Pit.

Decen R. ajecen

Stacy W Sendler

# CHAIN OF CUSTODY RECORD

		COC 4302 - K3C2		Relinquished by: (Signature)	Relinquished by: (Signature)	Relinquished by: (Signature)						(1) @ 18' 10/14/98 1000	Sample No./ Sample Sample Identification Date Time	NSV	Sampler:	BirGG Amoco		
						8						£085	Lab Number	040	Client No.	TICARMA Con	Project Location	
Farmington, New Mexico 87401 (505) 632-0615	5796 U.S. Highway 64		EOVIDOTECH IOC.	Rec	(38	Date 11me Hec	4					2012	Sample Matrix	04034-10		JICARMA CONTRACT #146-35	Sion PIT	
Mexico 87401 2-0615	ghway 64		CH DC	Received by: (Signature)	eived by: (Signature)	Heceived by: (Signature)	Cinching)					~	N Con	o. of taine	)		ANALYSIS / PARAMETERS	
*	Received Intact	AN N	Sample Receipt			38	Date Time					PRESERV COOL			Remarks		METERS	

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

8J659 SUBMIT 1 COPY TO NATURAL RESOURCE DEPT

AND OIL & GAS ADMINISTRATION

# PIT REMEDIATION AND CLOSURE REPORT

Operator: AMOCO PRODUCTION COMPANY	<b>Telephone:</b> (505)326	-9200
Address: 200 Amoco Court, Farmington, M	IM 87401	
Facility or Well Name:	# 146-35	
Location: Unit or Qtr/Qtr Sec = Sec 3 T3	50 RSW County KIO ARRISA	
Pit Type: Separator Dehydrator Other_	RODUCTION TRAK	
Land Type: KANGE		
I It Incation	79', width 72', depth!	11
	other	
Footage from reference:	C Degrees East North	
Direction from reference:	ZG Degrees East North of ✓ 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)	s)
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)	s)
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 point No (0 point	s) s)
Distance To SurfaceWater: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 100 feet (20 point 100 feet to 1000 feet (10 point) (10 point) (10 point)	ts)
и .	RANKING SCORE (TOTAL POINTS)	: <u> </u>

				2250	) <del>,                                   </del>
			BJ659	7700, F	77-
Data Ramediation Sta	arted:				3/98
Remediation Method:	Excavation	App	orox. cubic ya	irds	15
Sheck all appropriate	Landfarmed 🔀	Insi	tu Bioremedia	tion	
sections)	Other				
Remediation Location (i.e. landfarmed onsite, name and location of offsite facility)	: Onsite <u>×</u> Offsite _				
General Description	of Remedial Action: <u>Exca</u>	vation, Ex	KAUATION	MOSTLY D	- JACK
THEREFORE N	o TOH ANDLYSIS W.	AS CONDUC	TED.		
Groundwater Encoun	tered: No 🔀 Y	Yes D	epth		
Final Pit:  Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)  Sample date				ime <u>//00</u>	(ppb)
	<del>-</del>	opm)	<del>-</del>	Benzene Toluene	(ppb)
	Field Headspace (			Ethylbenzene	(ppb)
	_	opm) <i>NA</i>	<del></del>	Total Xylenes	(ppb)
Groundwater Sample					THE DESCRIPTION OF MILE
I HEREBY CERTIFY KNOWLEGE AND B					THE BEST OF MY
DATE	10/8 98 PRIN	TED NAME _			
SIGNATURE BUS	<u> </u>	117 11111111		ental Coord	
AFTED DEVIEW OF	THE PIT CLOSURE INFOR	MATION, PIT URE ORDINA	CLOSURE IS	S APPROVED	IN ACCORDANCI

				• •
CLIENT: <u>AMOCO</u>	PO BOX 87. E	NGINEERING, LOOMFIELD, N ) 632-1199	INC. NM 87413	C.O.C. NO:
FIELD REPOR	T: CLOSUF	RE VERIFIC	CATION	PAGE No: of
LOCATION: NAME: JICA, C	ONTR. 146 WELL #	: 3 <b>5</b> РІТ: <i>Р</i> І	200.	DATE STARTED:
QUAD/UNIT: E SEC: 3	TWP: 250 RNG: 5	עט PM: pm CNTY	RA ST:NM	ENVIRONMENTAL NV
OTR/FOOTAGE: 1570 FALL  EXCAVATION APPROX			TEP CUBIC	
DICDOCAL EACHLITY:	ON-SITE	REMEDIAT	ION METHO	D: LANDFREM
LAND USE: RANGE	LEASE	JIC 146	FOI	RMATION: _ ERIMU
FIELD NOTES & REMAI	RKS: PIT LOCATED	APPROXIMATELY _	145 FT. S	FROM WELLHEAD.
DEPTH TO GROUNDWATER: >/c	NEAREST WATER SD	JRCE:	NEAREST SURFAL	CHECK DNE : PIT ABANDONED
NMOCD RANKING SCORE:	NMOCD TPH CLOSURE ]N DESCRIPTIO <u>N:</u>	S1D: FFM		_ STEEL TANK INSTALLED
			LED ALR	FIBERGLASS TANK INSTALLED
31DEWAUS - 171	DIORITY CONSISTED	T STANLING NOT	ICERBLE NO	APPARENT HE
94	or detected wi	samples all	SAMPLES S	souteted from
8	edrock, there for	TE NO TPH HIN	ACA217 mus	s commence ?
BOTOM - BEDR	DOOR IN GUM	MISKY RED PULL	the preasure	'ARD' NO APPARENT
		5.W X = C X		
MOSTLY		FIELD 418.1 C	ALCULATIONS	
BENNOEK		LAB No: WEIGHT (	) mL. FREON D	ILUTION READING CALC. ppm
SCALE	1100			
O FT			PIT	PROFILE
PIT PERIM	ETERIA	OVM	1_1_1	1 1101 1012
29'	SAMPL	RESULTS  FIELD HEADSPACE PID (ppm)	Α	A
1	7 2 8		<del></del>	29
T	70 3 0	0.0		14'
21 955		4' 0.0		1' ///k'
A 3	^		_	DASER
1			•	(34)
	SAMPLE	AB SAMPLES ANALYSIS TIME		
	SAMPLE	AIALI 313		
TRAVEL NOTES: CALLOU	T:	ONSITE:	10/8/98-1	nokn.

BJ659

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

SUBMIT I COPY TO

NATURAL RESOURCE DEPT

AND OIL & GAS ADMINISTRATION

# PIT REMEDIATION AND CLOSURE REPORT

Operator: AMOCO PRODUCTION COMPANY	Telephone: (505) 326-9200
Address: 200 Amoco Court, Farmington, 1	NM 87401
Facility or Well Name:	RACT # 146 - 35
Location: Unit or Qtr/Qtr Sec Sec3 T_3	N R S W County X18 11233
Pit Type: Scparator Other Other	
Land Type: RANGE	
I it Incution	42', width 28', depth 9'
	other
Footage from reference: 15	7 Pages X Fast North
Direction from reference:	Z Degrees $\times$ East North West South $\times$
	(20 maints)
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) $\Rightarrow$ 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)
II ·	RANKING SCORE (TOTAL POINTS):

	Date Completed:
Date Remediation Started:	Approx. cubic yards
Remediation Method: Excavation	
Sheck all appropriate sections)  Landfarmed	Insitu Bioremediation
Other	
Remediation Location: Onsite 🔀 Offsite	
(i.e. landfarmed onsite, name and location of	
offsite facility)	
General Description of Remedial Action: Excava-	tion. EXCAUATION MOSTLY BEDROCK
THEREFORE NO THE ANALYSIS WAS CON	DUCTED. RISK ASSESSED.
Groundwater Encountered: No X Yes	Depth
Final Pit: Sample location see Attac	hed Documents
Closure Sampling:	
(if multiple samples, attach sample results	H SIDEWARL)
and diagram of sample Sample depth $\frac{7}{16\sqrt{8}/98}$ locations and depths)	
Sample Results	Water: Benzene (ppb)
<del>]</del>	
Field Headspace (ppm	· ·
TPH (ppm	) Total Xylenes (ppb)
Groundwater Sample: Yes No	(If yes, attach sample results)
I HEREBY CERTIFY THAT THE INFORMATION A	BOVE IS TRUE AND COMPLETE TO THE BEST OF MY
KNOWLEGE AND BELIEF	
DATE 10/8/98 PRINTE	D NAME Buddy D. Shaw
ROOM	TITLE Environmental Coordinator
SIGINATORIS E - CC-	ATION, PIT CLOSURE IS APPROVED IN ACCORDANCE
TO THE JICARILLA APACHE TRIBE PIT CLOSUR	E ORDINANCE.
	1
APPROVED: YES X NO (REASON)	M MILACHA
	11.14.94
SIGNED: DA'	re:

CLIENT: AMOCO	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199
FIELD REPOR	T: CLOSURE VERIFICATION PAGE No: / of _
LOCATION: NAME: JCF . C	TWP: ZSN RNG: SW PM: NM CNTY: RP ST: NM  CONTRACTOR: P+5  DATE STARTED: 10/8/98  ENVIRONMENTAL SPECIALIST: NV
DISDOSAL FACILITY	FT. x _28 FT. x _9 FT. DEEP. CUBIC YARDAGE: _500  ON _ SITE REMEDIATION METHOD:
DEPTH TO GROUNDWATER: >/3	S: PIT LOCATED APPROXIMATELY 145 FT. 52 FROM WELLHE,  NEAREST WATER SOURCE: >/000 NEAREST SURFACE WATER: >/000 CHECK ONE:  NMOCD TPH CLOSURE STD: 5000 PPM PIT ABANDONED  STEEL TANK INSTALLED  FIBERGLASS TANK INSTALLED
GOTTOVA - BEDR	SKY RED PURPLE SHOLE HARD FRIABLE NO APPARENT STAININE BLE, NO APPARENT HE ODDE DETECTED WIND EXCOUNTION HE DETECTED IN NORTH SIDEWILL OUM SAMPLE ONLY, ALL ES CONLECTED FROM BEDROCK, THERE FORE NO TAH ANALYSI COLLECTED.  EX (SHALE) VERY DUSKY RED PURPLE, VERY HARD, NO APPARENT SOOR IN JUM JAMPLE.
( EXCAUTION )	Assessed )
BEDEOCK	TIME SAMPLE I.D. LAB No: WEIGHT (g) ML. FREON DILUTION READING CALC. PPI
SCALE	1200
JCALL	
0 FT	DIE DOUIL D
PIT PERIM	TER 10 PIT PROFILE
7 (WELL) HEAD  7 (3) 42'	OVM RESULTS  SAMPLE FIELD HEADSPACE PID (ppm)  1 @ 7'   13 4'. 6 2 @ 8'   0.0 3 @ 7'   0.0 4 @ 6'   0.0 5 @ 10'   0.0  LAB SAMPLES  SAMPLE ANALYSIS TIME  ID  LAB SAMPLES  SAM
TRAVEL NOTES:	ONSITE: 10/8/98 - morr.

Well Name:

Well Site location:

Pit Type:

Producing Formation:

Pit Category:

Horizonal Distance to Surface Water:

Vicinity Groundwater Depth:

Jicarilla Contract 146 #35

Unit E, Sec. 3, T25N, R5W

Separator Pit

Chacra/Mesa Verde

Non Vulnerable

> 1000 ft.

> 100 ft.

### RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when trackhoe encountered shale bedrock at 9 feet below grade.

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

- 1. Past production fluids were contained locally by a relatively shallow shale bedrock located 9 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below shale bedrock.
- 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 <u>non-vulnerable area</u> and is approximately 1.40 miles northeast of the nearest vulnerable area boundary (Gonzales Canyon wash).

(Refer to <u>Lapis Point Quadrangle</u>, New Mexico - Rio Arriba County, 7.5 Minute Series (<u>Topographic</u>), 1963, (vulnerable area boundary developed by Mr. William C. Olson, <u>Hydrogeologist</u>, <u>Environmental Bureau</u>, New Mexico Oil Conservation Division).

Based upon the information given, we conclude that the subsurface lateral impact from the earthen pit is very limited and that the shale 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.

# 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	<b>Telephone:</b> (505) 326-9200								
Address: 200 Amoco Court, Farming	gton, NM 87401								
Facility or Well Name: SICARULA CONTRAC	T 146 · 35								
Location: Unit or Qtr/Qtr Sec_E Sec_3	T25N RSW County RIO ARRIBA								
Land Type: RANGE									
Date Remediation Started: 10.8.98  Date Completed: 5 12 99  Remediation Method: Landfarmed Approx. cubic yards 2150  Composted Other									
epth To Groundwater: (pts.)	Final Closure Sampling:								
Distance to an Ephemeral Stream (pts.)	Sampling Date: <u>5.11.99</u> Time: 1335								
Distance to Nearest Lake, Playa, or Watering Pond (pts.)	Field Headspace (ppm) 59.9  TPH (ppm) 1,740 Method 8015  Other MULTIPLE SAMPLES - SEE ATTACHED								
I HEREBY CERTIFY THAT THE INFORMATION									
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEGE AND BELIEF  DATE  SIGNATURE  SIGNATURE  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:	DATE:								

BLAGG ENGINEERI P.O. BOX 87, BLOOMFIEL (505) 632-11	D, NM 87413	LOCATION NO	
FIELD REPORT: LANDFARM/COMPOST F	PILE CLOSURE	VERIFICA	TION
QUAD/UNIT: E SEC: 3 TWP: 25N RNG: 5W PM: NM  GTR/FOOTAGE: SW/4 NW/4 CONTRACTOR: PAS		DATE STARTED: 5 DATE FINISHED: ENVIRONMENTAL SPECIALIST: 2	
SOL REMEDIATION:		0.00.00.	
	APPROX. CUBIC Y	ARDAGE: 215	50
LAND USE: RANGE	LIFT DEPTH (ft):	2'	
DEPTH TO GROUNDWATER: >100 NEAREST WATER SOURCE: >1000  NMCII PANKING SCORE: O NMOCD TPH CLOSURE STD: 5000 P  DARK VELLOWISH BROWN SAND, NEW CONESIVE, SIIGHTLE  LARGE AREA OF STAINING OBSERVED IN LANDTARM  HE ODDE DETECTED IN SAMPLING PTS. O, O.O. S.  G"-18" COLLECTED 2 SPT. COMPOSITE SAMFLES FOR  CLOSED  FIELD 418.1 CALCULA  SAMP. TIME SAMPLE I.D. LAB NO: WEIGHT (g) ML. F  SKETCH/SAMPLE LOCATIONS	PM Y HOIST, FIRM I AREA# Z (SEE GAMRING DEPTHS 2 Q LAB A NALYSIS ATIONS	SNETCH BELDI. PANLYE FROM	
LANDFARM AREA # 1  OVM  114/2 SAMPLE	FIELD HEADSPACE SAMPLE	LAB SAMPL	ES RESULTS
( )   LF-/	14.9 LF.1	TPH (8015) 1300	97.1
© 1 LF-2	59.9 LF.2	(8015) 1335	,740
SCAL STAINED O	FT		
TRAVEL NOTES: CALLOUT: NA ONSITE	5 11 99		



### EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	LF - 1	Date Reported:	05-12-99
Laboratory Number:	F205	Date Sampled:	05-11-99
Chain of Custody No:	6919	Date Received:	05-12-99
Sample Matrix:	Soil	Date Extracted:	05-12-99
Preservative:	Cool	Date Analyzed:	05-12-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	2.3	0.2
Diesel Range (C10 - C28)	94.8	0.1
Total Petroleum Hydrocarbons	97.1	Limit (mg/Kg) 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 - 35 Landfarm. 5 Pt. Composite.

Analyst

Stacy W Sendler



# EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	LF - 2	Date Reported:	05-12-99
Laboratory Number:	F206	Date Sampled:	05-11-99
Chain of Custody No:	6919	Date Received:	05-12-99
Sample Matrix:	Soil	Date Extracted:	05-12-99
Preservative:	Cool	Date Analyzed:	05-12-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	63.3	0.2
Diesel Range (C10 - C28)	1,680	0.1
Total Petroleum Hydrocarbons	1,740	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 - 35 Landfarm. 5 Pt. Composite.

Adeu L. Geeren

Stacy W Sendler
Review

# **CHAIN OF CUSTODY RECORD**

	_		T	<del>-</del>		-		<u> </u>	T			T	1			1		۲۸		$\overline{}$
				Relinquished by: (Signature)	Relinquished by: (Signature)	Relinquished by/(Signature)	4							18-2	1-37	Sample No./	RA	Sampler:	BLAST/AMOCO	Client / Project Name
				ure)	ure)	ure)								5:11:39	511.97 1300	Sample Date			0	
														1335	1300	Sample Time				
														POLZ	F205	Lab Number	01 t E o t	Client No.	SICABILLA CONTRACT 146-35	Project Location LANDFALM
(505) 632-0615	5796 L		FOVIROTECH IO			Date Time								201	28-1	Sample Matrix	410		UTRACT 140	BUDFARM
(505) 632-0615	5796 U.S. Highway 64		H H	Receive	Receive									'					28-	
315	way 64		ゴラ	Received by: (Signature)	~ <u>~</u>	Received by: (Signature)								7	7	Con	_	`		
-	2		ನ	ature)	ature)	ature)										Sc	o/ <b>5</b> _	<u></u>		
					-	2 ta														ANALY
						8													_	ANALYSIS / PARAMETERS
Cool - Ice/Blue Ice	Received Intact		Sample			8.					cool	SIMMES PRESENCE			SP				-	METERS
<u>*</u>	7	~	Sample Receipt			Date 5.72.99						SPRE			A BARAGE			Remarks		
		z				710						SOLK			3					