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

Sep-Resource DET Sep-Re

Blow-Kish o

PIT REMEDIATION AND CLOSURE REPORT

<u> </u>	المالي
	Telephone: (505) 326-9200
Operator: AMOCO PRODUCTION COMPANY	
Address: 200 Amoco Court, Farmington,	NM 87401
Facility or Well Name: TICARIUA CONT	100 TRACT # 146 - 11E
Location: Unit or Qtr/Qtr Sec O Sec 4 T	250 R5W County Co Maright
Pit Type: Separator Dehydrator Other_	800
Land Type	
I It Incution	니(', width_ Ч동', depth_ 9'
(Attach diagram) Reference: wellhead X	_, other
Footage from reference:	170'
Direction from reference:	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)
Distance to Nearest Lake, Playa, or Watering Pon (Downgradient lakes, playas and livestock or wildlife watering ponds)	d 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)
	8

RANKING SCORE (TOTAL POINTS):

		BJ639 BLOW PIT
		Date Completed: 9/17/98
Date Remediation Star	ted:	Approx. cubic yards
Remediation Method:	Excavation	Insitu Bioremediation
theck all appropriate sections)	Landfarmed	Insitu Bioremediation
Remediation Location:	Other Offsite	X JICA, CONTR. 146-43 (0-4-25-5)
(i.e. landfarmed onsite, name and location of offsite facility) General Description o	f Remedial Action: Exc	cavation, BEDROCK Borrom, RKK AssessED.
Groundwater Encount		Yes Depth
Closure Sampling:	Sample location see A	
(if multiple samples, attach sample results	Sample denth	(NORTH SIDEWALL)
and diagram of sample locations and depths)	Sample date 917	Sample time
	Sample Results	
	Soil: Benzene	(ppm) Water: Benzene (ppb)
	Total BTEX	(ppm) Toluene (ppb)
	Field Headspace	e (ppm) O.O 135.4 Ethylbenzene (ppb)
		(ppm) ND Total Xylenes (ppb)
Groundwater Sample		(If yes, attach sample results)
I HEREBY CERTIFY KNOWLEGE AND F	Y THAT THE INFORMAT BELIEF	ION ABOVE IS TRUE AND COMPLETE TO THE BEST OF M
DATE	9/17/98 P	RINTED NAME Buddy D. Shaw
R.(Jan A. Shul	AND TITLE Environmental Coordinator
AFTER REVIEW OF	F THE PIT CLOSURE INF A APACHE TRIBE PIT CI	FORMATION, PIT CLOSURE IS APPROVED IN ACCORDANC LOSURE ORDINANCE.
APPROVED: YES_	X NO (REASO	ON) R.A. Attached
11	- C Man ll	DATE:

3003922520 LOCATION NO: BJ639 BLAGG ENGINEERING, INC. CLIENT: AMOCO P.O. BOX 87, BLOOMFIELD, NM 87413 C.D.C. ND: _____ (505) 632-1199 CLOSURE VERIFICATION PAGE No: FIELD REPORT: DATE STARTED: 9/17/98 LOCATION: NAME: TICA. CONTR. 146 WELL #: 11E PIT: BLOW DATE FINISHED: QUAD/UNIT: O SEC: 4 TWP: 25N RNG: 5W PM: NM CNTY: PM ST: NM ENVIRONMENTAL SPECIALIST: ____ OTR/FOOTAGE: 980 151 1660 FEL CONTRACTOR: P45 EXCAVATION APPROX. 41 FT. x 45 FT. x 9 FT. DEEP. CUBIC YARDAGE: 500 DISPOSAL FACILITY: ON-SHE / TICA. CONTR. 146-43 REMEDIATION METHOD: LANDFARM FORMATION: DK/MV LAND USE: ZANGE FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 170 FT. N39E FROM WELLHEAD. TEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000' NMOCD RANKING SCORE: ___ NMOCD TPH CLOSURE STD: 5000 PPM ✓ PIT ABANDONED _ STEEL TANK INSTALLED SOIL AND EXCAVATION DESCRIPTION: _ FIBERGLASS TANK INSTALLED SIDEWALLS - MOSTLY DE YELL DRANGE SAND, NON COHESIVE SUIENTLY MOIST, FIRM TO DENSE APPARENT STAINING POSSERVED ON WEST SIDEWALL (BOTTOM Z') &
NORTH SIDEWALL (BOTTOM Z') ENTIRE SOUTH SIDEWALL COMPOSED MOSTRY OF
BEDROCK NO APPARENT HC ODOR DETECTED WIN EXCAUATION OR IN
ANY OF THE DUM SAMPLES BOTTOM - BEDROCK (SILTETONE) LT. TO MED, GRAY DISCOLORATION, VERY HARD, HE ODDIR DETECTED IN OUT SAMPLE. (RISK ASSESSED BEDROCK FIELD 418.1 CALCULATIONS WEIGHT (g) ml. FREON DILUTION READING CALC. ppm BOTTOM SAMPLE I.D. LAB No: TIME W 1:1 1) e 4' TPH - 2039 SCALE 1100 FT 0 PERIMETER OVM RESULTS 41 FIELD HEADSPACE PID (ppm) SAMPLE 0.0 0,0 0,0 0.0 135.4 SEOROCK. (3117575NE) LAB SAMPLES SAMPLE TIME 9/17/98 - MORN. __ ONSITE: TRAVEL NOTES: CALLOUT:

Well Name:
Well Site location:
Pit Type:
Producing Formation:
Pit Category:
Horizonal Distance to Surface Water:
Vicinity Groundwater Depth:

Jicarilla Contract 146 #11E
Unit O, Sec. 4, T25N, R5W
Blow Pit
Basin Dakota/Mesa Verde
Non Vulnerable
> 1000 ft.
> 100 ft.

RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when trackhoe encountered siltstone 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 siltstone 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 siltstone 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 0.80 miles north of the nearest vulnerable area boundary (Gonzales Canyon wash).

(Refer to <u>Lapis Point Quadrangle</u>, <u>New Mexico - Rio Arriba County</u>, 7.5 <u>Minute Series</u> (<u>Topographic</u>), 1963, (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 impact from the earthen pit is very limited and that the siltstone 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.

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:

1 @ 4'

Date Analyzed:

09-17-98

Project Location:

Jicarilla Contract # 146 - 11E

Date Reported:

09-17-98

Laboratory Number:

TPH-2039

Sample Matrix:

Soil

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

ND = Not Detectable at stated detection limits.

QA/QC:

Duplicate
TPH mg/kg

220

% *Diff. — — —

7.02

*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 - BJ639

Man ill Analyst

Review

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: 1 @ 4' Date Analyzed: 09-17-98
Project Location: Jicarilla Contract # 146 - 11E Date Reported: 09-17-98

Laboratory Number: TPH-2039 Sample Matrix: Soil

Sample Weight: 5.00 grams Volume Freon: 20.00 mL

Dilution Factor: 1 (unitless) TPH Reading: 3 mg/kg

TPH Result:

Reported TPH Result:

Actual Detection Limit:

Reported Detection Limit:

12.0 mg/kg

12.0 mg/kg

20.0 mg/kg

QA/QC: Original Duplicate %
TPH mg/kg TPH mg/kg Diff.
----- 236 220 7.02

Comments: Blow Pit - BJ639

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, N	M 87401	
Facility or Well Name: TICARILLA CON	TRACT # 146-11E	_
Facility or Well Name:	County RTO ARRIBA	
Facility or Well Name: \text{Name: \text{Vigarity}} \text{Location: Unit or Qtr/Qtr Sec \text{O} \text{Sec \text{4} \text{T2S}}	68 K36 County	
Pit Type: Separator X Dehydrator Other		
Land Type		
Pit Leastion: Pit dimensions: length	gz', width17', depth20'	
(Attach diagram) Reference: wellhead X,	other	
Footage from reference: \\S	5	
Direction from reference: 8	9 Degrees Fast of	
1	West South _X_	
	Less than 50 feet (20 points)	
Depth To Groundwater: (Vertical distance from contaminants to seasonal	50 feet to 99 feet (10 points) Greater than 100 feet (0 points)	
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 ten feet in width)	Greater than 100 feet	
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:	Yes (20 points) No (0 points)	
(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: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	100 feet to 1000 feet (10 points) Greater than 1000 feet (0 points)	:
	RANKING SCORE (TOTAL POINTS):	

BJ639 SEP. PIT

	9/71/98
Date Remediation Sta	rted: Date Completed:9/z ₁ /98
Remediation Method:	Excavation Approx. cubic yards
Theck all appropriate sections)	Landfarmed Insitu Bioremediation
·	Other
Remediation Location: (i.e. landfarmed onsite, name and location of	
offsite facility) General Description o	f Remedial Action: Excavation, BEDROCK BOTTOM, RISK ASSESSED.
Groundwater Encount	cred: No X Yes Depth
Closure Sampling:	Sample location see Attached Documents
attach sample results and diagram of sample	Sample date
1	
	Sample Results (ppm) 6.050 Water: Benzene (ppb)
	Soil: Benzene (ppin)
	Total BIEX (ppm) Governo
	Field Headspace (ppm) 500 Ethylbenzene (ppb) TPH (ppm) 4,680 Total Xylenes (ppb)
15	: Yes No _x (If yes, attach sample results)
I HEREBY CERTIFY KNOWLEGE AND B	
DATE	9/21/98 PRINTED NAME Buddy D. Shaw
SIGNATURE BUD	ly J. Show AND TITLE Environmental Coordinator
A TOWN DEVICE OF	THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE APACHE TRIBE PIT CLOSURE ORDINANCE.
APPROVED: YES _	X NO (REASON) R-A. Attached
SIGNED: Kei	_C Mo

CLIENT: AMOCO	BLAGG ENGINEERING, IN	IC. LOCATION NO: 87634
CLIENT: 222-2	P.O. BOX 87, BLOOMFIELD, NA (505) 632-1199	C.D.C. ND: 6207
	(500) 662 1166	
FIELD REPOR	RT: CLOSURE VERIFICA	ATION PAGE NO: of
OCATION: NAME: TICA	CONTR. 146 WELL #: 11E PIT: SEP	DATE STARTED: 917198
OUATION. NAME. STOP.	TWP: ZSA RNG: SW PM: NM CNTY: F	ST STNY (
OTR/FUUTAGE:980 F3L	1660 FEL CONTRACTOR: P+5	ENVIRONMENTAL SPECIALIST: NJ
	Z FT. x 17 FT. x 20 FT. DEE	P. CUBIC YARDAGE: 300
EXCAVATION APPROX	1- SITE / JICA. CONTR. 146-43 REMEDIATIO	N METHOD: LANDFARM
DISPOSAL FACILITY: Or	GE LEASE: TIC 146	FORMATION: OK MU
LAND USE: KAD	SE LEASE. VIC. 19	
TIELD NOTES & REMA	RKS: PIT LOCATED APPROXIMATELY 1	55 FT. 584E FRUM WELLHEAD
DEPTH IN GROUNDWATER: >1	NEAREST WATER SOURCE: NE	CHECK ONE
NMOCD RANKING SCORE:	NMOCD TPH CLOSURE STD: 5000 PPM	✓ PIT ABANDONED
SOIL AND EXCAVATE	ON DESCRIPTION:	STEEL TANK INSTALLED FIBERGLASS TANK INSTALLED
510 EWALLS - DK. YELL	. ORANGE TO BROWN NON COHESIVE	SUBHTLY MOIST, PRIOR, ODVIORS
TTAININ	G OBJERUED ON MAJORITY OF JOW DETECTED who excauption, STRONG	th t seed. Siberior , he
	SIDEWAL OWN JAMPLES ONLY	
. RESPOCE	(SILTSTONE) LT. TO MED. GRAY DISC	SUDRATION, VERY HARD, STRONG
HC ODO	(SICTSTONE) LT. TO MED. GRAY DISC OR IN DUM SAMPLE.	-
ر		
BEDROCK RIS	K ASSESSED	CHI AZIDNIS
BOTTOM	FIELD 418.1 CAL TIME SAMPLE I.D. LAB NO: WEIGHT (g)	mL. FREON DILUTION READING CALC. ppm
CCALE		
SCALE	1530	
O FT		DE CELLE
	METER N	PIT PROFILE
,	7 DOWN RESULTS	A
	SAMPLE FIELD HEADSPACE	
32'	DIRECTION 10 PID (ppm)	
- A	2 @ 15' 0.0	\
26'	3 @ 14' 571 4 @ (4' 800	20.
امالحجاا	5 @ 20' 549 RK	
(D) (D)	(2) 10 WELL	ブラック エリ
TECP 3	J L HEAD	BEDROCK
TA,		(SILTSTONE)
	LAB SAMPLES	-
TAAK	SAMPLE ANALYSIS TIME	
	AND LITT TANTAGE U 1220	
1	DEIH TAMIETEX 1230	
	TAH PROSED	
TRAVEL NOTES: CALLO	TPH PRISED TOT. BTEX - FALLED	7/17 /98 - MORN.

Well Name:
Well Site location:
Pit Type:

Producing Formation:

Pit Category: Horizonal Distance to Surface Water:

Vicinity Groundwater Depth:

Jicarilla Contract 146 #11E
Unit O, Sec. 4, T25N, R5W
Separator Pit
Basin Dakota/Mesa Verde
Non Vulnerable
> 1000 ft.

> 100 ft.

RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when trackhoe encountered siltstone bedrock at 20 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 siltstone bedrock located 20 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below siltstone 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 0.80 miles north 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 siltstone 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.



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Parameter		oncentration (mg/Kg)	Det. Limit (mg/Kg)
Condition:	Cool and Intact	Analysis Requested:	8015 TPH
Preservative:	Cool	Date Analyzed:	09-20-98
Sample Matrix:	Soil	Date Extracted:	09-19-98
Chain of Custody No:	6207	Date Received:	09-18-98
Laboratory Number:	D944	Date Sampled:	09-17-98
Sample ID:	4 @ 14'	Date Reported:	09-21-98
Client:	Blagg / AMOCO	Project #:	04034-10

Parameter	(mg/Kg)	(mg/Kg)
Gasoline Range (C5 - C10)	2,460	0.2
Diesel Range (C10 - C28)	2,220	0.1
Total Petroleum Hydrocarbons	4,680	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 - 11E Separator Pit.

Alexa P. aprecen

May Wi Jende



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	4 @ 14'	Date Reported:	09-21-98
Laboratory Number:	D944	Date Sampled:	09-17-98
Chain of Custody:	6207	Date Received:	09-18-98
Sample Matrix:	Soil	Date Analyzed:	09-20-98
Preservative:	Cool	Date Extracted:	09-19-98
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	6,050	17.5
Toluene	29,360	16.7
Ethylbenzene	8,600	15.2
p,m-Xylene	46,960	21.6
o-Xylene	22,220	10.4
Total BTEX	113,190	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene Bromofluorobenzene	96 % 96 %

References:

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

December 1996.

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

USEPA, December 1996.

Comments: Jicarilla Contract #146 - 11E

Separator Pit.

Analyst . Quinc

CHAIN OF CUSTODY RECORD

Sample Lab Number Sample Sample Client No. 0 4034-10 Sample Lab Number Matrix Fig. 1230 Date Time Received by: (Signature) FOUR OFFICE Received by: (Signature)	Cool - Icerbine ice	C001 - 10			-0615	(505)				
Client No. O 4 0 3 4 1 0 Sample Time Lab Number Matrix Time Date Date Posted by: (Signature) Faceived by: (Signature) Sample Faceipt Received by: (Signature) Posted Post	ived Intact	Receiv		7401	ghway 64 Mexico 8	5796 U.S. Hi	ı			
Sample Lab Number Sample Continers (Continers) Time Lab Number Matrix Sample Lab Number Matrix Time Received by: (Signature) Paster Time Received by: (Signature)	z			<u></u>	오	OVIROTE				
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Sample Lab Number Sample Sample Sample Date Time Posts Signature) Date Date Date Date Date Posts Signature) Date Date Date Date Date Posts Signature)			_	ignature)	eived by: (S	Rec		7	ture)	Relinquished by: (Signature)
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Client No. Client No. O 4034-10 Sample Lab Number Sample Sample Sample Sample No. Sample	1			+	7	2017	4469		9/17/98	(4) @ (4'
Client No. O + O3+10 o tainers O + O3+10				(80	Con	Sample Matrix	Lab Number	Sample Time	Sample Date	Sample No./ Identification
	Remarks			15) EX 21\	tainers	10	Client No. ク 4 0 3 4		- ·	Sampler: $ MJV$
analysis / Project Location SEPARATOR FIT ANALYSIS / PARAMETERS		IS / PARAMETERS	ANALYSI	1		TRACT #146-115	TICAPILLA CON		moco	Client / Project Name 8 MGG / Amoco

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,	Farmington,	NM 87401
Facility or Well Name: SICARILLA	CONTRACT 14	6·11E
Location: Unit or Qtr/Qtr Sec o	Sec_ <u>4</u> T <u>2</u>	SN RSW County ROARCIBA
Land Type: RANGE		
Date Remediation Started: 9 17	98	Date Completed: 4/zz/99
Remediation Method: Landfarmed		Approx. cubic yards 200
Composted		
Other		
pth To Groundwater:	(pts.)	Final Closure Sampling:
Distance to an Ephemeral Stream	(pts.)	Sampling Date: 4 20 99 Time: 1000
Distance to Nearest Lake, Playa, or Watering Pond	(pts.)	Sample Results: Field Headspace (ppm) 61.4
Wellhead Protection Area:	(pts.)	TPH (ppm) 3,760 Method (BUS)
Distance To SurfaceWater:	(pts.)	Other
RANKING SCORE (TOTAL POIN	TS): <u>o</u>	
I HEREBY CERTIFY THAT THE INFO KNOWLEGE AND BELIEF	RMATION ABOVE	IS TRUE AND COMPLETE TO THE BEST OF MY
DATE 4/22/99	A PRINTED N	AME Buddy D. Shaw
	haw	AND TITLE Environmental Coordinator
AFTER REVIEW OF THE SOIL REME ACCORDANCE TO THE JICARILLA	DIATION INFORM APACHE TRIBE PIT	ATION, ON-SITE REMEDIATION IS APPROVED IN CLOSURE ORDINANCE.
APPROVED: YES NO	(REASON)	
SIGNED:	DATE:	

	1		
CLIENT: AMOCO	BLAGG ENG	INEERING, INC.	LOCATION NO: 85639
• · · · · · · · · · · · · · · · · · · ·		OMFIELD, NM 8741	
	(505)	632-1199	C.E.C. TE
FIELD REPORT:	LANDFARM/COM	POST PILE CLOSUR	
LOCATION: NAME JICARIL	A CONTRACT 146 WELL #: 11E	PITS: SEP., BLOW	DATE STARTED: 4.20.99 DATE FINISHED:
		PM: NM CNTY: RA ST: NM	1
OTR/FEDTAGE: SW/4	SE/4 CONTRACTOR:	Pas	ENVIRONMENTAL REP
10 L REMEDIATION:			į
	TEM: LANDFARM		YARDAGE: 200
LAND USE:	PANGE	_ LIFT DEPTH (ft)): <u>1,5</u>
FELD NOTES & REMAR	RKS:		
DEPTH TO GROUNDWATER: >/	00 NEAREST WATER SOURCE	>1000' NEAREST SURF	ACE WATER: >/000
NMCIC PANKING SCORE	NMOCD TPH CLOSURE ST	D:5000 PPM	
DK. YELLOWISH ORAN	UGE SAND, NON COHE	SIVE, SLIGHTLY MUIST.	FIEM.
NO APPARENT STAI	NING, HC ODOR DETEC	CTEO IN SAMPLWG PT. & COLLECTED ASPT COMPU	SME SAMPLE
SAMPLING DEPTAS R FOE LAB AN AL VS	SANGE FROM 0 - 10 .	Jeceph Streen D	APPROX, 600 C.Y.
CLOSED .	•		APPROX. SOUTH
		8.1 CALCULATIONS	CONTR. 146-43
SAMP. TIME SA	AMPLE I.D. LAB No: WEIGHT	(g) ml. FREON DILUTION REAL	DING CALC. ppm
	T. I O C I TILONIC		
SKETCH/SAMPI	E LOCATIONS	7	
1	(3) (6) T		
k		OVM RESULTS	LAB SAMPLES
Ŋ	o è	SAMPLE FIELD HEADSPACE SAM	PLE ANALYSIS TIME RESULTS
		4F-1 61.4 LF-1	7 F)+
	0 0		
N 54°E			
N 102. 1154°E			
4			
·			
		SCALE	
		O FT	
MDAVIDL NOMBO			
TRAVEL NOTES: CALLOU	r: <u>1/4</u>	ONSITE: 4.20.99	



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	LF - 1	Date Reported:	04-22-99
Laboratory Number:	F068	Date Sampled:	04-20-99
Chain of Custody No:	6899	Date Received:	04-21-99
Sample Matrix:	Soil	Date Extracted:	04-21-99
Preservative:	Cool	Date Analyzed:	04-22-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	184	0.2
Diesel Range (C10 - C28)	3,580	0.1
Total Petroleum Hydrocarbons	3,760	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 - 11E Landfarm. 5 Pt. Composite.

Analyst

Review

CHAIN OF CUSTODY RECORD

	1	Cool - Ice/Blue Ice	615	(505) 632-0615				, 10
	7	Received Intact	way 64	5796 U.S. Highway 64				
Z Z	~							
	ceipt	Sample Receipt	HINC TINC	FOVIROTECH IO				
			Received by: (Signature)	Receive			ure)	Relinquished by: (Signature)
			Received by: (Signature)	Receive			ure)	Relinquished by: (Signature)
8 00	⊬21.99	7. Y	Received by: (Signature)	Pate Time Receive			ure)	Relinquished by (Signature)
4		2						
	1	2002						
seve	22	SAMRE PRESERVE						
46	Xel	SPT. COMPOSITE	7	5012	7068	1000	4.20.99 1000	LE-1
			Con	Sample Matrix	Lab Number	Sample Time	Sample Date	Sample No./ Identification
			o. of tainers	01480F				RP
	Remarks	Rem	3		Client No.			Sampler:
		AMETERS	ANALYSIS / PARAMETERS	SICARILLA CONTRACT 146-116	SICARICHA CONTEACT 16		8	BLAGG/AMOCO
				ALICEARY	Daniel Land			Cinat / Project Name