### JICARILLA APACHE TRIBE ENVIRONMENTAL PROTECTION OFFICE P.O. BOX 507

**DULCE, NEW MEXICO 87528** 

AND OIL & GAS ADMINISTRATION

NATURAL RESOURCE DEPT

PIT REMEDIATION AND CLOSURE REPORT

	τ:	No. 25C CONTO
		がいし、 (505) 326-9200
CONDANY	Telephone:_	(505) 326-9200
Operator: AMOCO PRODUCTION COMPANY		
gourt Farmington, NI	м 87401	
Address: 200 Amoco Court, razmo	- # 141 - 23	
Facility or Well Name:	ST # /78 = =	
Facility or Well Name:	N R 5W County Rio A	ARRIBA
Location: Unit or Qtr/Qtr Sec_H Sec_( 125		
Pit Type:   Separator Dehydrator Other_ &	20W	
Pit Type: Separator Denydrator (71101		
Land Type: Ronge		
Land Type:		/
141	<b>44'</b> , width 34'	, depth
Pit Location: Pit dimensions: length	<i></i> ,	
(Attach diagram)  Reference: wellhead X,	other	
Reference: weillend	-1	
Footage from reference: 17	<u> </u>	. v 1
Direction from reference: 4	7 Degrees X East of	North
Diffection from foresterness	West	
	Less than 50 feet	(20 points)
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)	Less than 100 feet	(10 points) <i>O</i>
Distance to an Ephemeral Stream	Greater than 100 feet	( 0 points)
(Downgradient dry wash greater than		
ten feet in width)	Less than 100 feet	(10 points)
Distance to Nearest Lake, Playa, or Watering Pond	Greater than 100 feet	( 0 points)
Il (Doungradient lakes, Diayas and		
livestock or wildlife watering ponds)	Yes	(20 points)
Wellhead Protection Area:	No	(0 points)
If one than 200 feet from a private		
domestic water source, or: less than 1000 feet from all other water sources)		(20 (24.5)
	Less than 100 feet	(20 points) (10 points)
Distance To SurfaceWater: (Horizontal distance to perennial	100 feet to 1000 feet Greater than 1000 feet	(0 points)
lakes, ponds, rivers, streams, creeks,	Oteater man 1000 leet	\-\ \ -\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
irrigation canals and ditches)		
	RANKING SCORE (TOTA	L POINTS):
1 .	KANKING SCORE (1017	

Data Remediation S	tarted:	Date Completed: 10/7/95	8
Remediation Method:	\ \ \	Approx. cubic yards	
Check all appropriate	Landfarmed	Insitu Bioremediation	
sections)			
	Other		
Remediation Location (i.e. landfarmed onsite, name and location of offsite facility)			
General Description	of Remedial Action: Excavation.	BEDROCK BOTTOM, RISK ASS	<u>sessed</u> .
Groundwater Encoun	ntered: No <u>×</u> Yes	Depth	
Final Pit: Closure Sampling: (if multiple samples,	Sample location see Attached D		
attach sample results and diagram of sample	Sample depth 3 South	510Em4~	
locations and depths)	Sample date		
	Sample Results		
ı	Soil: Benzene (ppm) o.(	52 Water: Benzene (ppl	b)
	Total BTEX (ppm) 16.		b)
	Field Headspace (ppm) 179		b)
	TPH (ppm) <u>5,5</u>		b)
Groundwater Sample	: Yes No _X (If	yes, attach sample results)	
I HEREBY CERTIFY KNOWLEGE AND B	THAT THE INFORMATION ABOVE I	S TRUE AND COMPLETE TO THE	BEST OF MY
DATE	10/7/98 PRINTED NAM	E Buddy D. Shaw	
SIGNATURE BUD	ly S. Show AND TITLE	Environmental Coordina	tor
AFTER REVIEW OF TO THE JICARILLA	THE PIT CLOSURE INFORMATION, I APACHE TRIBE PIT CLOSURE ORDI	PIT CLOSURE IS APPROVED IN ACNOCE.	CCORDANCE
APPROVED: YES 2	$\times$ no (reason) $RA$ .	Attacheo	
signed:	CMall DATE:	11-18-98	

	\$00376433
	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199    C.D.C. ND: 6286
FIELD REPOR	T: CLOSURE VERIFICATION PAGE NO: 1 0° 1
LOCATION: NAME: TICA. C	TWP: Z5N RNG: SW PM: NM CNTY: RA ST: NM  BGO FE CONTRACTOR: Pts  DATE STARTED: 10/6/98  DATE FINISHED:  ENVIRONMENTAL SPECIALIST: NV
EXCAVATION APPROX. 4	TEASE: TE CUBIC YARDAGE: 175  CON-SITE REMEDIATION METHOD: LANDFROM  LEASE: TIC 146 FORMATION: DK
FIELD NOTES & REMARDED TO THE PROPERTY OF THE GROUNDWATER: > 15  NMOCD RANKING SCORE:  SOIL AND EXCAVATION	RKS: PIT LOCATED APPROXIMATELY 175 FT. \$476 FROM WELLHEAD.  NEAREST WATER SOURCE: >1000 NEAREST SURFACE WATER: >1000'  NEAREST SURFACE WATER: >1000'  NEAREST SURFACE WATER: >1000'  PIT ABANDONED  STEEL TANK INSTALLED  FIBERGLASS TANK INSTALLED
51277 3717 08 10	PALE OKANGE TANDSTONE (WEST SIDEWALL ONLY) DR. YELL. DANNES TO BROWN SAMD TO SILTY CLAY COLLESIVE, SLIGHTLY MOIST TO MOIST, FIRM TO IT NO APPAKENT He ODOR DETECTED WIND EXCAUATION, STAINING SEEVED ON BOSTOM FOST OF EAST & SOUTH SIDEWALLS, HE ODOR NETECTED IN OWN SAMPLE.
BEUWSEX RISK ESTOR SCALE	FIELD 418.1 CALCULATIONS  TIME SAMPLE I.D. LAB No: WEIGHT (g) ml. FREON DILUTION READING CALC. ppm
O FT PERIM	ETER 40 PIT PROFILE
TO WELL HEAD TO DE	RESULTS  SAMPLE   FIELD HEADSPACE   PID (ppm)
34' (4) (3) A	DOWN SLOPE (SS)  LAB SAMPLES  SAMPLE ANALYSIS TIME
TRAVEL NOTES: CALLOL	7711 - FAILED 87EX PASSED

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

Vicinity Groundwater Depth:

Jicarilla Contract 146 #22
Unit A, Sec. 10, T25N, R5W
Blow Pit
Basin Dakota
Non Vulnerable
> 1000 ft.
> 100 ft.

### RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when trackhoe encountered sandstone bedrock at 4 feet below grade.

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

- Past production fluids were contained locally by a relatively shallow sandstone bedrock located 4
  feet below grade. Groundwater levels located on or close to the well pad are estimated to be at
  a much greater depth below sandstone 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 1.11 miles northeast 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, <u>Hydrogeologist</u>, <u>Environmental Bureau</u>, <u>New Mexico Oil Conservation Division</u>).

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

Laboratory Number: E033 Chain of Custody No: 6286 Sample Matrix: Soil Preservative: Cool	ate Reported:       10-07-98         ate Sampled:       10-06-98         ate Received:       10-07-98         ate Extracted:       10-07-98         ate Analyzed:       10-07-98         analysis Requested:       8015 TPH
--	---

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	2,150	0.2
Diesel Range (C10 - C28)	3,390	0.1
Total Petroleum Hydrocarbons	5,540	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 - 22 Blow Pit.

Alexan L. Quecus

Stacy W Sendler



### EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: Sample ID: Laboratory Number: Chain of Custody: Sample Matrix: Preservative: Condition:	Blagg / AMOCO 3 @ 3' E033 6286 Soil Cool Cool & Intact	Project #: Date Reported: Date Sampled: Date Received: Date Analyzed: Date Extracted: Analysis Requested:	04034-10 10-07-98 10-06-98 10-07-98 10-07-98 BTEX
Parameter		entration /Kg)	Det. Limit (ug/Kg)
Benzene Toluene Ethylbenzene p,m-Xylene o-Xylene		152 605 2,320 9,520 4,310	8.8 8.4 7.6 10.8 5.2

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene Bromofluorobenzene	99 % 99 %

References:

**Total BTEX** 

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

16,910

December 1996.

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

USEPA, December 1996.

Comments:

Jicarilla Contract #146 - 22 Blow Pit.

Analyst P. Querre

Stacy W Sendler.
Review

# CHAIN OF CUSTODY RECORD

ntact	Received Intact	hway 64 Mexico 87401	5796 U.S. Highway 64 Farmington, New Mexico 874		-	
	Sai	CHINC.	ENVIROTECH INC.	187	+B21-+BC1	
		Received by: (Signature)	Rece			Relinquished by: (Signature)
		Received by: (Signature)				Relinquished by: (Signature)
Date Time		Received by: (Signature)	Date Time Received			Relinquished by: (Signature)
-						
87V COOL	TRES BOY	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	5012	E033	10/6/98 0945	(3) @ 3' 10/e
	9	Col	Sample Matrix	Lab Number	Sample Sample Date Time	Sample No./ Sandentification D
		No. of Intaine OH ON S		01-48040		NIN
Hemans		ers		Client No.		Sampler:
			TICARILA CONTESCT #146-22	TICARILLA CON		BLAGG/ AMOCO
	<b>METERS</b>	ANALYSIS / PARAMETERS	SLOW PIT	Project Location		Client / Project Name

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

BJ657
SUBMIT 1 COPY TO

NATURAL RESOURCE DEPT

AND OIL & GAS ADMINISTRATION

### PIT REMEDIATION AND CLOSURE REPORT

	Telephone: ( 505	)326-9200
Operator: AMOCO PRODUCTION COMPANY		
Advers 200 Amoco Court, Farmington, N	M 87401	
Facility or Well Name:	T #146-22	
Location: Unit or Qtr/Qtr Sec P Sec 10 T Z	County RIO HICKIBS	7
Pit Type: Separator Dehydrator Other		
Land Type: Ronge		
Pit Location: Pit dimensions: length	33' , width 4z' , dep	th_ 5 '
(Attach diagram)  Reference: wellhead X,	other	
Footage from reference: \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
Direction from reference:	Degrees $\times$ East Nor	th
	West Sou	th <u>×</u>
Depth To Groundwater: (Vertical distance from contaminants to seasonal high water elevation of	50 feet to 99 feet (10 i	points) points)
groundwater)  Distance to an Ephemeral Stream (Downgradient dry wash greater than ten feet in width)	Less than 100 feet (10 Greater than 100 feet (0	points)
Distance to Nearest Lake, Playa, or Watering Pond (Downgradient lakes, playas and livestock or wildlife watering ponds)	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 No (0	points) points)
Distance To SurfaceWater: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	100 feet to 1000 feet (10	points) points) points)
<b>1</b> · ·	RANKING SCORE (TOTAL PO)	INTS): O

	rted: Date Completed:/98.
Date Remediation Sta	Preservation Approx. cubic yards 225
Remediation Method:	ExcavationZ_
Theck all appropriate sections)	Landfarmed Insitu Bioremediation
	Other
Remediation Location (i.e. landfarmed onsite, name and location of	· × 0%:4-
offsite facility)  General Description	of Remedial Action: Excavation, BEDROCX 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	Sample depth
locations and depths)	Sample date $\frac{10/19/98}{}$ Sample time $\frac{1045}{}$
	Sample Results
11	Soil: Benzene (ppm) 1.600 Water: Benzene (ppb)
	Total BTEX (ppm) 85.685 Toluene (ppb)
	Field Headspace (ppm) 803 Ethylbenzene (ppb)
	TPH (ppm) 1,390 Total Xylenes (ppb)
<b>1</b> 1	:: Yes No _X (If yes, attach sample results)
KNOWLEGE AND I	
DATE	PRINTED NAME Buddy D. Shaw  Oly D. AND TITLE Environmental Coordinator
SIGNATURE Sub	Oly S. 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_	X NO (REASON) R.A. Attached
SIGNED:	C Mall DATE: 11-18-98

	LOCATION NO: BJ657
BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	C.O.C. NO: <u>6304</u>
FIELD REPORT: CLOSURE VERIFICATION	
OCATION: NAME: JICA CONTR. 146 WELL #: ZZ PIT: SEP.	DATE STARTED: 10/19/98 DATE FINISHED:
OUAD/UNIT: A SEC: 10 TWP: 25% RNG: SW PM: NM CNTY RA ST: NM	ENVIRONMENTAL NV
QTR/FOOTAGE: 830 FILL 860 FEL CONTRACTOR: PHS	
EXCAVATION APPROX. 33 FT. x 42 FT. x 5 FT. DEEP. CUBIC	YARDAGE:
DISPOSAL FACILITY: ON-SITE REMEDIATION METHOLAND USE: RANGE LEASE: TIC 146 FOI	RMATION: OK
LAND USE: KANGE LEASE:	58E COM WELLHEAD
FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 155 FT	E WATER: >/000
	PIT ABANDONED
SOTE AND EXCAVATION DESCRIPTION: 1	_ STEEL TANK INSTALLED
	FIBERGLASS TANK INSTALLED
SIDENALL - MOSTLY DK. YELL. DRANCE TO MOD. YELL. BROWN TALD, WON  MOIST FIRM, STAINING EUDENT ON WEST SIDENALL ONLY  GRADE) NO APPARENT HE ODOR DETECTED WIND EXCAP	(BET. 3-5' BELOW
GRADE) NO APPARENT HE ODOR DETECTED WIND EXCA. ODOR IS ALL OUM SAMPLES EXCEPT NORTH SIDEWALL	VATION, STRONG HC
BOTTOM - BEORDEK (SANDSTONE), OLIVE BROY IN COLOR, WERY DETECTED WIND OWN SAMPLE.	
BEDROCK BOTTOM  TIME SAMPLE I.D. LAB NO: WEIGHT (9) ml. FREON D  SCALE	DILUTION READING CALC. ppm
SCALE  O FT	
TIME SAMPLE I.D. LAB NO: WEIGHT (9) ML. FREON DESCALE  O FT  PIT PERIMETER IN  OVM  RESULTS  SAMPLE FIELD HEADSPACE PID (ppm)  1 @ 3' 89.7	
TIME SAMPLE I.D. LAB NO: WEIGHT (9) ML. FREON DE SCALE  O FT  PIT PERIMETER N  OVM  RESULTS  SAMPLE FIELD HEADSPACE PID (ppm)  1 @ 3'	PROFILE
TIME SAMPLE I.D. LAB NO: WEIGHT (9) ML. FREON DE SCALE  O FT  PIT PERIMETER IN  OVM  RESULTS  SAMPLE FIELD HEADSPACE PID (ppm)  1 @ 3' & 99.7  2 @ 3' 70Z  3 @ 3' 68L  42' 4 @ 7' 803  5 @ 5' 15(.2	PROFILE  33' BEDROCK

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

Jicarilla Contract 146 #22
Unit A, Sec. 10, T25N, R5W
Separator Pit
Basin Dakota
Non Vulnerable
> 1000 ft.
> 100 ft.

### RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when trackhoe encountered sandstone bedrock at 5 feet below grade.

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

- Past production fluids were contained locally by a relatively shallow sandstone bedrock located 5
  feet below grade. Groundwater levels located on or close to the well pad are estimated to be at
  a much greater depth below sandstone 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.
- Well site located within the <u>non-vulnerable area</u> and is approximately 1.11 miles northeast 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, <u>Environmental Bureau</u>, <u>New Mexico Oil Conservation Division</u>).

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

Client: Sample ID: Laboratory Number: Chain of Custody No: Sample Matrix: Preservative: Condition:	Blagg / AMOCO 4 @ 3' E087 6304 Soil Cool Cool and Intact	Project #: Date Reported: Date Sampled: Date Received: Date Extracted: Date Analyzed: Analysis Requested:	04034-10 10-21-98 10-19-98 10-21-98 10-21-98 10-21-98 8015 TPH
--	--	---	--

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	897	0.2
Diesel Range (C10 - C28)	493	0.1
Total Petroleum Hydrocarbons	1,390	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 - 22 Separator Pit.

Decen R. Opersen

Stacy W Sendler



### EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

			Dot
Condition:	Cool & Intact	Allalysis Requested.	
Preservative:		Analysis Requested:	BTEX
•	Cool	Date Extracted:	10-21-98
Sample Matrix:	Soil	Date Analyzed:	
Chain of Custody:	6304	<del></del>	10-21-98
Laboratory Number:		Date Received:	10-21-98
•	E087	Date Sampled:	
Sample ID:	4 @ 3'	Date Reported:	10-19-98
Client:	Blagg / Amoco		10-21-98
	Diama / Amono	Project #:	04034-10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene Toluene Ethylbenzene p,m-Xylene o-Xylene	1,600 15,950 10,580 36,570 20,980	8.8 8.4 7.6 10.8 5.2
Total BTEX	85,680	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene Bromofluorobenzene	99 % 99 %

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 - 22 Separator Pit.

Analyst P. Oyue...

Stacy W Sendler.
Review

# CHAIN OF CUSTODY RECORD

## 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, Farmington	, NM 87401
Facility or Well Name: JICARILLA CONTRA	CT   46.22
Location: Unit or Qtr/Qtr Sec A Sec 10	T 25A' R SW. County RIO AIZRIBA
Land Type: RANGE	
Date Remediation Started: 98  Remediation Method: Landfarmed Composted Other	Date Completed: 4/z1/99  Approx. cubic yards 400
Pepth To Groundwater: (pts.)o	Final Closure Sampling:
Distance to an Ephemeral Stream (pts.)	Sampling Date: 4 · 19 · 9 9 Time: 1030
Distance to Nearest Lake, Playa, or Watering Pond (pts.) o  Wellhead Protection Area: (pts.) o  Distance To SurfaceWater: (pts.) o	Sample Results:  Field Headspace (ppm) 182.6 (8015) 6-  TPH (ppm) 2080 Method (8021)  Other RENZENE = 0.139 ppm
RANKING SCORE (TOTAL POINTS):O	TOT. BTEX = 8, 250 ppm
I HEREBY CERTIFY THAT THE INFORMATION ABO KNOWLEGE AND BELIEF	VE IS TRUE AND COMPLETE TO THE BEST OF MY
	O NAME Buddy D. Shaw  AND TITLE Environmental Coordinator
AFTER REVIEW OF THE SOIL REMEDIATION INFOI ACCORDANCE TO THE JICARILLA APACHE TRIBE	RMATION, ON-SITE REMEDIATION IS APPROVED IN PIT CLOSURE ORDINANCE.
APPROVED: YES NO (REASON)	
SIGNED: DA	TE:

TLIENT AMOCO

## BLAGG ENGINEERING, INC. BOX 87 BLOOMFIELD NM 87413

P.O.	BOX 87, BLOOMFIE (505) 632-1		c.d.c. No: <u>6893</u>
FIELD REPORT: LAN	DFARM/COMPOST	PILE CLOSU	RE VERIFICATION
- NAME JICARILLA CONTE			· DATE EUNISTELL
QUAD/UNIT A SEC: 10 TWP:2		CNII.ZF SI N	ENVIRONMENTAL <b>ZEP</b> SPECIALIST:
REMEDIATION:		APPROX. CUBI	C YARDAGE: <u>400</u>
FELD NOTES & REMARKS:  1551- TO GROUNDWATER > 100 : NEA  WHO I FAN ING SCOPEO NME  DK UELLOWISH BROWN SAA	OCD TPH CLOSURE STD: <u><b>5000</b></u> U.D. NION CONFEINE, <b>5</b> 276	PPM PHTLUMOIST, F.	12 M .
EMPLL EREN OF STRINING AT SAMPLING PT. @ SAMP SPT. COMPOSITE SAMPLE F (CLOSED)	OBSCILVED, (SEE SKETCH LING DEPTHS RANGE F FOR LAB ANALYSIS	BELOW) HE 06 ROM 6-18" L	OR DETECTED
	FIELD 418.1 CALCU		
SAMP, TIME SAMPLE I.D	LAB No: WEIGHT (g) mL.	FREON DILUTION RE	ADING CALC. ppm

BILLICITY CHAIL DES ESCRIPTION	
	i
	I
PREA .	
OS, Norw	

SAMPLE	FIELD HEADSPACE FID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
(F.1	182.6	45-1	(8015)	1030	2080
		"	BENZENE	n	139 ppb
		n	रजा, श्राह्य	り	8250,000
			<u> </u>		
					<u> </u>
			1		

SCALE	
0	F'

TRAVEL NOTE	S: CALLOUT:	_ N A	ONSITE: 4.19.99
-------------	-------------	-------	-----------------



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

	DI (ANGOCO	Drainet #:	403410
Client:	Blagg / AMOCO	Project #:	
Sample ID:	LF - 1	Date Reported:	04-21-99
Laboratory Number:	F059	Date Sampled:	04-19-99
Chain of Custody No:	6893	Date Received:	04-20-99
Sample Matrix:	Soil	Date Extracted:	04-21-99
Preservative:	Cool	Date Analyzed:	04-21-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	441	0.2
Diesel Range (C10 - C28)	1,640	0.1
Total Petroleum Hydrocarbons	2,080	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 - 22 Landfarm. 5 Pt. Composite.

Analyst

Review Jande



### EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: Sample ID: Laboratory Number: Chain of Custody: Sample Matrix: Preservative: Condition:	Blagg / AMOCO LF - 1 F059 6893 Soil Cool Cool & Intact	Project #: Date Reported: Date Sampled: Date Received: Date Analyzed: Date Extracted: Analysis Requested:	403410 04-21-99 04-19-99 04-20-99 04-21-99 04-21-99 BTEX
---	--	---	--

	A	Det. Limit
Parameter	Concentration (ug/Kg)	(ug/Kg)
Benzene	139	8.8 8.4
Toluene Ethylbenzene	1,890 581 3,120	7.6 10.8
p,m-Xylene o-Xylene	2,520	5.2
Total BTEX	8,250	

ND - Parameter not detected at the stated detection limit.

	Parameter	Percent Recover
Surrogate Recoveries:	Parameter	
	T. ifi	100 %
	Trifluorotoluene Bromofluorobenzene	100 %

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 - 22 Landfarm. 5 Pt. Composite.

Analyst

Review Jacy W. Jende

# CHAIN OF CUSTODY RECORD

	7	Cool - Ice/Blue Ice	-0615	(505) 632-0615				
	5	Received Intact	hway 64	5796 U.S. Highway 64				
z	~							
	eceipt	Sample Receipt						
			Received by: (Signature)	Rece			ature)	Relinquished by: (Signature)
			Med by. (orginature)	Hece			ature)	Relinquished by: (Signature)
315	4.20.99	4.2	Heceived by: (Signature)	4.3697 7:15 K			ature)	Relinquished by (Signature)
Time	Date	Da	Characterist (Signature)					
		Coor						
CSBAR	25	SAMPLE						
7	1705	5 M. Composite	77	5011	F059	1030	4.1999 1030	LF-1
j j	6	}	Col	Sample Matrix	Lab Number	Sample Time	Sample Date	Sample No./
			No. of intainers  H  (S)  EV  (SZI)		Client No. 403410			Sampler:
	अनुष्ट	Remarks		SICARILLA CONTRACT 196-22	SICARILLA C		8	BLASTO/AMOCO
		METERS	ANALYSIS / PARAMETERS	ANDFARM	Project Location LANDFART			Client / Project Name