State of New Mexico 10 To Rio Brazos Rd Energy, Minerals and Natural Resources Department Appendix 87410

Submit 1 copy to Appropriate District and 1 copy to Santa Fe Office

FED & & NESS

OIL CONSERVATION DIVISION 2040 S. PACHECO

Santa Fe, New Mexico 87505

Operator: Apache Corporation \ MW Pe	troleum		_Telephone):	505-325-0	318	
Address: 2855 Southside River Road,	Suite A, Farn	nington, N	M 87401			······	
Facility or Well Name:	Jic Apach	ne Tribal A	118 #3 Pit	#1			
Location: Unit or Qtr/Qtr Sec	A	Sec 25	T 26 N	R 3W	County	Rio Arriba	
Pit Type: Separator:	Dehydrato	or	_Other	Tank Drai	n		
Land Type: Jicarilla Tribal							
Beginning Pit Dimensions	Length	n16	S' Width	n16'	Depth	n2'	
Pit Location: Ending Pit Dimensions: (Attach diagram)	Lengtl	n 20	<u>)'</u> Width	n <u>20'</u>	Depth	20'	
Reference:	Wellhead	XX	_Other				
Footage from reference:		150)'	_			
Direction from reference:		336	_ Degrees		_East	North _	xx
				X	o _West	f South _	
Depth To Groundwater:			Less than	50 feet		(20 points)	
(vertical distance from			50 feet to	99 feet		(10 points)	
contaminants to seasonal			Greater th	nan 100 feet		(0 points)	0
high water elevation of groundwater)							
					Voo	(20 nointo)	
Wellhead Protection Area:			•		Yes No	(20 points) (0 points)	0
(Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources)					NO	(o points)	
Distance To Surface Water:				200 feet		(20 points)	
(Horizontal distance to perennial				to 1000 feet	nt	(10 points)	
lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)			Greater ti	han 1000 fe	₽l	(0 points)	
ingulon canals and ditones)			RANKING	G SCORE (1	TOTAL POI	NTS)	00

Date Remediation Sta	rted:	7/17/97		_Date Comp	leted:	7/22/97		
Remediation Method: (Check all appropriate		Excavation	xxx	_Approx. cut	oic yards	158		
sections)	Landfarmed	Í	XX	_Insitu Biore	mediation			
		Other						
Remediation Location (i.e. landfarmed onsite, name and location of offsite facility)		Onsite	xx	_Offsite				
General Description o	of Remedial Action:		Excavate	pit to 20' , to	ook PID readin	gs. Spread soil on		
. location fo	r remediation. Took	soil sampl	les.					

			 :					
				* * * * * * * * * * * * * * * * * * * *				
Groundwater Encoun	tered:	No	XX	Yes	····	Depth		
Final Pit:	Sample location		5 point com	posite sample	taken from pit sid	ewalls and pit bottom		
Closure Sampling: (in multiple samples,		center.						
attach sample results and diagram of sample	Sample depth	20'	8 to 10" into pit sidewalls 10" into pit bottom					
locations and depths)	Sample Date Sample results		7/22/97	7	Sample Time	9:30 AM		
	Benzene		(ppm)	ND				
	Total BTEX		(ppm)	ND				
	Field Headspace		(ppm)	49.4				
	TPH			ND				
Groundwater Sample	:	Yes		_ No	XX(If y	ves attach sample results)		
I HEREBY CERTIFY T KNOWLEDGE AND B		TION ABO	VE IS TRU	E AND COM	PLETE TO THE	BEST OF MY		
DATE	December 1, 1998	3	PRINTED	NAME	Jeff Cross			
SIGNATURE	efflion		_AND TITE	-E	Project Manag	ger		

District III 1000 Rio Brazos Rd Aztec, NM 87410

State of New Mexico Energy, Minerals and Natural Resources Department

Submit 1 copy to
Appropriate District
and 1 copy to
Santa Fe Office

OIL CONSERVATION DIVISION

2040 S. PACHECO Santa Fe, New Mexico 87505

Operator:	Apache Co	rporation \ MW Peti	roleum		_Telephone	e :	505-325-0	318	
Address:	2855 South	side River Road, S	uite A, Farm	ington, NI	WI 87401				
Facility or	Well Name:		Jic Apach	e Tribal A	118 #3 Pit	#2			
Location:	Unit or Qtr/0	Qtr Sec	A	Sec 25	T 26 N	R 3W	County	Rio Arriba	
Pit Type:	Separator:	XX	_Dehydrator	r	_Other	Separator			
Land Type	2:	Jicarilla Tribal							
	Beginni	ing Pit Dimensions:	Length	20	' Width	15'	Depti	3'	
Pit Location: (Attach dia		ng Pit Dimensions:	Length	20	· Width	25	_ Depth	10'	
(Allacii dia	Refere	ence:	Wellhead	XX	_Other				
	Footag	ge from reference:		90	•	_			
	Directi	on from reference:		26	_Degrees	X	_East	North	XX
							_West	South	
Depth To	Groundwate	<u>er:</u>		· · · · · · · · · · · · · · · · · · ·	Less than	50 feet		(20 points)	
(vertical dista					50 feet to	99 feet		(10 points)	
contaminant	s to seasonal				Greater th	nan 100 feet		(0 points)	0
high water e groundwater									
Wellhead	Protection A	Area:					Yes	(20 points)_	
domestic		m a private , or; less than r water sources)					No	(0 points) _	0
	To Surface				Less than	200 feet o 1000 feet		(20 points)	
B .	al distance to	reams, creeks,				o 1000 leet nan 1000 fee	et	(10 points) (0 points)	0
1	canals and di					SCORE (T		· · · · · ·	0
							····		-

Date Remediation Star	ted:	8/8/97		_Date Compl	eted:	8/11/97
Remediation Method:		Excavation	xxx	_Approx. cub	oic yards	100
(Check all appropriate sections)	Landfarmed		XX	_Insitu Biore	mediation	
		Other				
Remediation Location (i.e. landfarmed onsite, name and location of offsite facility)	:	Onsite	XX	_Offsite		
General Description o	f Remedial Action:		Excavate	pit to 10', to	ook PID readings	s. Spread soil on
location for	remediation. Took	soil sampl	es.			
			<u></u>			
				_		
Groundwater Encoun	tered:	No	x	<u>X</u> Yes		Depth
Final Pit:	Sample location		5 point co	mposite sample	taken from pit side	walls and pit bottom
Closure Sampling: (in multiple samples,		center.				
attach sample results and diagram of sample	Sample depth	10'	t bottom			
locations and depths)	Sample Date		8/11/9		Sample Time	11:00 AM
	Sample results				- ,	
	Benzene		(ppm)	ND	<u>-</u>	
	Total BTEX		(ppm)	ND	<u>)</u>	
	Field Headspace		(ppm)	1.44	<u>i</u>	
	TPH			NE	<u>)</u>	
Groundwater Sample		Ye		No		es attach sample results)
I HEREBY CERTIFY T KNOWLEDGE AND E		ATION ABO	VE IS TR	UE AND CO	MPLETE TO THE	BEST OF MY
DATE	December 1, 199	8	_PRINTE	D NAME	Jeff Cross	
SIGNATURE	Just Cwn		_AND TI	TLE	Project Manag	er

τ

District III 1000 Rio Brazos Rd Aztec, NM 87410

State of New Mexico Energy, Minerals and Natural Resources Department

Submit 1 copy to
Appropriate District
and 1 copy to
Santa Fe Office

OIL CONSERVATION DIVISION

2040 S. PACHECO Santa Fe, New Mexico 87505

Operator: Apache Corporation \ MW Petr	oleum		Telephone	:	505-325-03	318	
Address: 2855 Southside River Road, Su	uite A, Farm	ington, NM	87401			·	
Facility or Well Name:	Jic Apach	e Tribal A1	18 #3 Pit	#3			
Location: Unit or Qtr/Qtr Sec	A	Sec 25	T 26 N	R 3W	County	Rio Arriba	·
Pit Type: Separator:	_Dehydrato	r	Other	Blow Pit			
Land Type: Jicarilla Tribal	<u></u>						
Beginning Pit Dimensions:	Length	n 8'	Width	ı 8 '	Depth	2'	
Pit Location: Ending Pit Dimensions: (Attach diagram)	Length	10'	Width	10'	_ Depth	4'	
Reference:	Wellhead	XX	Other		· · · · · · · · · · · · · · · · · · ·		
Footage from reference:		200'		-			
Direction from reference:		358	Degrees		_East of	North	хх
				X	oı _West _	r South	
Depth To Groundwater:			Less than	50 feet	· · ·	(20 points)	
(vertical distance from			50 feet to	99 feet		(10 points)	
contaminants to seasonal			Greater th	an 100 feet		(0 points) _	0
high water elevation of groundwater)							
Wellhead Protection Area:					Yes	(20 points)_	
(Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources)					No	(0 points) _	0
Distance To Surface Water:			Less than			(20 points)	
(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks,				o 1000 feet nan 1000 fee		(10 points)_ (0 points)	0
irrigation canals and ditches)				SCORE (T		· · · · · ·	0

Date Remediation Star	rted:	8/8/97		_Date Comp	eted:	8/11/97
Remediation Method: (Check all appropriate sections)	Landfarmed	Excavation	xxx	_Approx. cub _Insitu Biore	-	8
		Other				
Remediation Location (i.e. landfarmed onsite, name and location of offsite facility)	:	Onsite	xx	_Offsite _		
General Description o	f Remedial Action:		Excavate	pit to 4', to	ok PID readings	. Spread soil on
location for	remediation. Took	soil sampl	es.			
Groundwater Encoun	tered:	No	x	<u>K</u> Yes		Depth
Final Pit: Closure Sampling:	Sample location		5 point con	nposite sample	taken from pit side	walls and pit bottom
(in multiple samples, attach sample results		center.				
and diagram of sample locations and depths)	Sample depth	4'	8 to 10" i	nto pit sidev	valls 10" into pit	bottom
·	Sample Date Sample results		8/11/9	7	Sample Time	1:00 PM
	Benzene		(ppm)	ND		
	Total BTEX		(ppm)	ND		
	Field Headspace		(ppm)	0.3		
	ТРН			ND		
Groundwater Sample	:	Yes		No	XX (If ye	es attach sample results)
I HEREBY CERTIFY T KNOWLEDGE AND B		TION ABO	VE IS TRU	E AND COM	PLETE TO THE	BEST OF MY
DATE	December 1, 1998	3	PRINTE	NAME	Jeff Cross	
SIGNATURE	leff hor		_AND TIT	LE	Project Manage	er

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

Operator:	MW	/ PETROLEUM			_Telephone	505-3	25-0318		
Address:	2855	5 SOUTHSIDE RI	VER ROAD	/ SUITE A	/ FARMING	STON N.M	. 87401-794	7	
Facility or We	ell Na	ime:	A 118#3	*	PIT#1				
Location:	Unit	or Qtr/Qtr Sec	A	SEC 25	T 26N	R 3W	_County	RIO ARRIBA	\
Pit Type:	Sepa	arator:	Dehydrator		Other	TANK DR	AIN		
Land Type:		JIC. TRIBA	AL				***************************************		
Pit Location:		Pit Dimensions:	Length	20'	Width	20'	Depth	20'	
(Attach diagra	am)	Reference:	Wellhead	XXX	- Other		-		
		Footage from ret	•	150'	-				
		Direction from re	•	336	Degrees	-	East	North	xx
		Direction nom re	icience.		_Degrees		_ of		
						X	_West	South _	
Depth To Gr	ound	water:		•	Less than	50 feet		(20 points)	
(vertical distance	from				50 feet to	99 feet		(10 points)	
contaminants to s	season	al			Greater th	an 100 feet	t '	(0 points)	0
high water elevati groundwater)	on of								
Distance to a	an Er	phemeral Stream	:		Less than	100 feet		(10 points)	
		wash greater tha				an 100 fee	t	(0 points)	0
ten feet in wid	dth								
Distance to I	Neare	est Lake, Playa, d	or Watering	Pond:	Less than	100 feet		(10 points)	
		es, playas and	_		Greater th	an 100 fee	t	(0 points)	0
livestock or w	vildlife	e watering ponds)							
Wellhead Pro	otect	tion Area:				Yes	S	(20 points)	
		et from a private				No		(0 points)	0
		urce, or less than						` · · · -	-
1000 feet from	m all	other water source	es)						
Distance To	Surf	ace Water:			Less than	100 feet		(20 points)	
i		ce to perennial				1000 feet		(10 points)	
		s, streams, creek	S,		Greater th	an 1000 fe	et	(0 points)	0
irrigation can	ais ai	na ditches)			RANKING	SCORE (TOTAL POI	NTS) _	0
									

Date Remediation Sta	rted: 7/17/9	7	Date Comp	oleted:	7-2	.2-97	₹ 		
Remediation Method:	Excavation	XXX	- Approx. cu	bic yards		158			
(Check all appropriate sections)	Landfarme	d XX	- . Insitu Biore	•					
occircino)									
	Other					-			
Remediation Location (i.e. landfarmed onsite,		te XX	_Offsite						
name and location of offsite facility)				<u> </u>					
General Description o	f Remedial Action: F	xcavate pit	to 20'.took	PID readin	ıgs. spread	soil on			
	for remidiation. Tool				<u> </u>				
		<u> </u>							
Groundwater Encoun	tered: N	lo xxx	_ Yes		_ Depth				
Final Pit: Closure Sampling: (in multiple samples,	Sample location	5 point co	mposite take	en from pit	sidewalls ar	nd pit botton	n center.		
attach sample results and diagram of sample locations and depths)	Sample depth 20'	8" to 10" i	nto pit side v	valls ,10" ir	nto pit bottor	m.			
Sample r		7/22/97	7	Sample T	i <u>me</u>	9:30AM			
Soil:	Benzene	(ppm)	ND	Water:	Benzene	(ppb)	NA		
	Total BTEX	(ppm)	ND	-	Toluene	(ppb)	NA		
	Field Headspace	(ppm)	49.4	Ett	hylbenzene	(ppb)	NA		
	TPH	(ppm)	ND	То	tal Xylenes	(ppb)	NA		
Groundwater Sample	: Y	es	_ No	xxx	_(If yes atta	ich sample i	esults)		
I HEREBY CERTIFY T KNOWLEDGE AND B		TION ABOVE	IS TRUE A	ND COMP	LETE TO 1	THE BEST (OF MY		
DATE9-	14-98	PRINTED	NAME		JEFF CR	oss			
SIGNATURE									
AFTER REVIEW OF T THE JICARILLA APAG				SURE IS A	PPROVED	IN ACCORE	DANCE TO		
APPROVED: YE	s_ <u>X</u>	10	_(REASON)					
SIGNED:	a C Ma		DATE:	11-	13-9	8			

^

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

Operator:	MW	PETROL	EUM			_Telephone		505-32	25-0318		
Address:	2855	SOUTH	SIDE RI	VER ROAD	/ SUITE A	/ FARMING	GTC	M.N NC	. 87401-7	947	
Facility or We	eli Naı	me:		A 118#3		PIT#2					
Location:	Unit	or Qtr/Qt	r Sec	A	SEC 25	T 26N	R	3W	County	RIO ARRIBA	
Pit Type:	Sepa	arator:	xx	Dehydrato	<u> </u>	_Other					
Land Type:		JI	C. TRIBA	AL							
Pit Location: (Attach diagr		Pit Dime		Length Wellhead	20'	_ Width Other	1	25'	Dej	oth <u>10'</u>	
		Referen Footage	from ref		90'		_				
		Direction	n from re	eference:	26	_Degrees	_	<u> </u>	_East	North _	хх
									_West	of South _	
Depth To G	rounc	lwater:				Less than	50	feet		(20 points)	
(vertical distance		iwater.				50 feet to				(10 points)	
contaminants to		al				Greater th			et	(0 points)	0
high water eleva groundwater)		-									
Distance to	an Fi	nhomora	l Stream	١٠		Less than	10	0 feet		(10 points)	
(Downgradie ten feet in w	ent dry	·				Greater th			et	(o points) _	
Distance to	Near	est Lake	, Playa,	or Waterin	g Pond:	Less than				(10 points)_	
(Downgradie livestock or)		Greater ti	han	100 fee	et	(0 points) _	0
), ₄₄ , 115,	44	4: A						Υe	20	(20 points)	
Wellhead P (Less than 2									lo	(0 points) _	0
domestic wa 1000 feet fro	ater so	ource, or	less than							· · /_	
Distance To	o Sud	face Wet	er.			Less than	າ 10	0 feet		(20 points)	
(Horizontal						100 feet 1			t	(10 points)	
lakes, pond		•		KS,		Greater t				(0 points)	0
irrigation ca						RANKING	g s	CORE	(TOTAL F	POINTS)	0

Date Remedia	ition Starte	ed: 8/8/9	7	_Date Comp	leted:	8-1	11-97	
Remediation	Method:	Excavation	xxx_	_Approx. cul	bic yards		100	
(Check all app sections)	ropriate	Landfarmed	XX	_Insitu Biore	mediation			
		Other						
Remediation		Onsit	e XX	_Offsite				
(i.e. landfarme name and loca offsite facility)	ation of							
General Desc	ription of	Remedial Action: E	xcavate pit	to 10',took l	PID readin	gs. spread	soil on	
	location fo	or remidiation. Took	soil sampl	es.				
Groundwater	Encounte	red: N	o xxx	_ Yes		_ Depth		-
Final Pit: Closure Sam (in multiple sa	-	Sample location	5 point co	mposite take	en from pit	sidewalls ar	nd pit bottor	n center.
attach sample and diagram o	results of sample	Sample depth 10'	8" to 10"	into pit side v	walls ,10" i	nto pit bottor	m.	
locations and depths) Sample D Sample re			8/11/9	7	_Sample T	ï <u>me</u>	11:00AM	
	Soil:	Benzene	(ppm)	ND	_Water:	Benzene	(ppb)	NA
		Total BTEX	(ppm)	ND	-	Toluene	(ppb)	NA
		Field Headspace	(ppm)	1.44	_ Et	hylbenzene	(ppb)	NA
		TPH	(ppm)	ND	_ To	otal Xylenes	(ppb)	NA
Groundwate	r Sample:	Y	es	No	XXX	_(If yes atta	ach sample	results)
I HEREBY CI KNOWLEDG		IAT THE INFORMAT LIEF.	TION ABOV	E IS TRUE A	AND COM	PLETE TO	THE BEST	OF MY
DATE	9-1	14-98	PRINTE!	D NAME		JEFF CR	oss	
SIGNATURE		4-98 My Cron	AND TIT	LE		PROJECT	T MANAGE	R
AFTER REVI	IEW OF TH LA APAC	IE PIT CLOSURE IN HE TRIBE PIT CLOS	FORMATIO	N, PIT CLO NANCE.	SURE IS A	APPROVED	IN ACCOR	DANCE TO
APPROVED:	YES	s_X N	10	(REASON	1)			
	,)	$d \rightarrow 0$)(
SIGNED:	-Ku		<u>c</u> \	DATE:	11-	13-98	3	

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

Operator: MWI	PETROLEUM			_Telephone	50	5-325-0318		
Address: <u>2855</u>	SOUTHSIDE RIV	/ER ROAD	/ SUITE A	/ FARMING	TON N	I.M. 87401-794	7	
Facility or Well Nan	ne:	A 118#3		PIT#3				
Location: Unit o	or Qtr/Qtr Sec	A	SEC 25	T 26N	R 3W	County	RIO ARRIBA	<u> </u>
Pit Type: Sepai	rator:'	Dehydrator		_Other		BLOW PIT	<u> </u>	
Land Type:	JIC. TRIBA	\L_						
(Attach diagram)	Pit Dimensions:	Length Wellhead	10'	Width Other	10	' Depth	4'	
	Footage from ref	•	200'					
l	Direction from re	ference:	358	_Degrees		East	North _	хх
					x		South	
Depth To Ground	water			Less than	50 feet		(20 points)	
(vertical distance from				50 feet to			(10 points)	
contaminants to seasonal	4			Greater th			(0 points)	
high water elevation of groundwater)							· · /_	
Distance to an Ep	hemeral Stream	:		Less than	100 fee	et .	(10 points)	
(Downgradient dry ten feet in width				Greater th			(0 points)	
Distance to Neare		_	-	Less than			(10 points)	
(Downgradient lake livestock or wildlife				Greater th	an 100	reet	(0 points) _	0
 Wellhead Protecti	on Ares:					Yes	(20 points)	
(Less than 200 feet						No	(0 points)	0
domestic water sou 1000 feet from all o	urce, or less than					-		· · · · · · · · · · · · · · · · · · ·
Distance To Surfa	ica Water			Less than	100 fee	et	(20 points)	
(Horizontal distance				100 feet to	-		(10 points)_	
lakes, ponds, rivers	•	S,		Greater th			(0 points)	0
irrigation canals an	•			RANKING	SCOR	RE (TOTAL POI	NTS)	0

Date Remedia	ation Start	ed:	8/8/97		_Date Comp	oleted:	8-	11-97		
Remediation	Method:	Exca	vation	XXX	_ _Approx. cu	bic yards		8		
(Check all app sections)		Landf	armed	XX	Insitu Biore	emediation				
		Oth	er		-				g;	
Remediation	Location:		•	XX	Offsite					
(i.e. landfarme name and loca offsite facility)	ed onsite, ation of		•							
General Desc	cription of	Remedial Acti	on: Exc	avate pit	to 4',took P	ID reading	gs. spread s	oil on		
	location fo	or remidiation.	Took s	oil sampl	es.					
Groundwate	r Encounte	ered:	No	xxx	_ Yes		Depth		-	
Final Pit: Closure Sam (in multiple sa	-	Sample location	on	5 point co	mposite tak	en from pi	sidewalls ar	nd pit bottor	n center.	
attach sample and diagram	e results of sample	Sample depth	4'	8" to 10" i	3" to 10" into pit side walls ,10" into pit bottom.					
locations and depths) Sample D Sample re				8/11/9	7	_Sample	Ti <u>me</u>	1:00PM		
	Soil:	Benzene		(ppm)	ND	_Water:	Benzene	(ppb)	NA	
		Total BTEX		(ppm)	ND	_	Toluene	(ppb)	NA	
		Field Headspa	ace	(ppm)	0.3	_ E	thylbenzene	(ppb)	NA	
		TPH		(ppm)	ND	T	otal Xylenes	(ppb)	NA	
Groundwate	er Sample:		Yes	S	No	<u>xxx</u> _	(If yes atta	ach sample	results)	
I HEREBY C		HAT THE INFO	RMATI	ON ABOV	E IS TRUE	AND COM	PLETE TO	THE BEST	OF MY	
DATE	9.	14-98		_PRINTEI	O NAME		JEFF CR	oss		
SIGNATURE	=_Je	ff was		_AND TIT	LE			T MANAGE	R	
AFTER REV	IEW OF TI	HE PIT CLOSU THE TRIBE PIT	RE INF	ORMATIC	N, PIT CLC	SURE IS	APPROVED	IN ACCOR	DANCE TO	
APPROVED	: YE	s_X	NC	 _	(REASOI	N)		-		
SIGNED:	Kē	=C'h	<u> </u>		DATE:	11-	13-98	<i>y</i>		



United States Department of the Interior

FILE COPY

BUREAU OF INDIAN AFFAIRS

Albuquerque Arca Office P.O. Box 26567

Albuquerque, New Mexico 87125-6567

AUG - 6 297

380 - Branch of Natural Resources Services Jicarilla 97-198

JUL 3 1 1997

Mr. Jeff Cross Apache Corporation 304 N. Behrend Farmington, New Mexico 87401

Dear Mr. Cross:

We have reviewed the cultural resources survey report dated July 17, 1997, and entitled, "Cultural Resource Survey: Archaeological Survey of Two Pit Remediations on Jicarilla Apache Tribal Lands." This was prepared by Mr. Gifford Velarde, Velarde Energy Service, and is numbered Report CR-96-520. The report deals with pit remediations for Jicarilla Apache A118#3 and A118#5. We understand that you also have a copy of this document.

The report, dealing with Jicarilla Apache Tribal lands, states that no surface evidence of potentially significant cultural resources was encountered during the requisite field inspection. The project location is sufficiently small and in a location where we do not expect that it will impact any areas of traditional religious or cultural importance to the Jicarilla Apache Tribe. Therefore, we have determined that no effect on any National Register listed or eligible cultural resources will result from the proposed action. We have notified the New Mexico State Historic Preservation Officer of our determination and provided a copy of this report for their files.

The proposed undertakings are in compliance with the provisions of Section 106 of the National Historic Preservation Act and may proceed under the following stipulations:

- 1. All land-altering activities will be confined to the areas surveyed for cultural resources.
- 2. If subterranean cultural resources are encountered, all landaltering activities will be halted and the Area Archeologist notified immediately.

These stipulations must be followed or project suspensions will be issued. The responsibility of project sponsors is to notify subcontractors of the project boundaries and stipulations. Any change in project boundaries will require additional survey and repetition of the compliance procedures.

This letter only serves as notification that National Historic Preservation Act Section 106 compliance has been completed for the subject project. It does not constitute approval of right-of-way or concurrence in the proposed activities by the Bureau of Indian Affairs (BIA). This compliance is one of several legal requirements which must be accomplished before BIA approval of rights-of-way, easements, or other land use contracts for land modifying projects.

If you have any questions, please contact Dr. Bruce G. Harrill, Area Archeologist, Branch of Natural Resources Services, at (505) 766-3374.

Sincerely,

Assistant Area Director

VELARDE ENERGY SERVICE Dulce, New Mexico Cultural Resources Survey Report

Cultural Resource Survey: Archaeological Survey of Two pit remediation on Jicarilla Apache Tribal Lands.

Preparer: Gifford Velarde, Archaeologist, Velarde Energy Service, P. O. Box 919, Dulce, New Mexico 87528

Survey Archaeologist: Same as preparer.

Other Parties: Jeff Cross and Don Shipley, Apache Corporation

Report Number: CR-97-520

Date of Report: 17 July 97 Date of

Date of Survey: 17 July 97

Sponsor. Name and Address: Jeff Cross, Apache Corporation, 304 Behrend

, Farmington, New Mexico, 87401.

PROJECT #1 INFORMATION

Project Name/Designation: Jicarilla Apache A118 #3

Description of Undertaking: Remediate production pit

Nature of Federal Involvement: Under Bureau of Indian Affairs Jurisdiction

Size of Project Area: A rectangular area 150 feet in length and 150 feet in width $(150' \times 150')$ for a total of .51 acre (Figure 1).

PROJECT LOCATION

State: New Mexico County: Rio Arriba

Reservation: Jicarilla Apache

USGS Quadrangle: Ojito, N.M., 1963, 7.5, (1:24000)

Legal Description: The proposed project is located in the NE 1/4 of the NE 1/4

of Section 25, Township 26 North, Range 3 West,

UTM Coordinates: Zone 13; 312,710 mE; 4,037,100 mN (center of project)

Distance/Direction from local landmarks/geographic features: The project is 1.5 miles east of J-45 on the southern Jicarilla.

ENVIRONMENTAL SETTING

Topographic Situation: The area is rolling with the project found alongside a small hill.

Drainage: The drainage is northeasterly.

Geology and Soils: The soil has been disturbed by previous construction.

Vegetation Communities and Local Flora: Mountain muhly, snakeweed, rabbitbrush, oak brush, dock, mustard and bottlebrush are found locally.

Elevation (feet): 7550 feet (topo).

SÜRVEY

Dimensions & Acreage: Same as project area.

Survey Method: The area was surveyed by walking a series of 4-5 meter linear transects.

Previous Surveys: The project sits adjacent to a gas well.

Previous Disturbance: The production pit did not recieve archaeological survey when it was built.

CULTURAL RESOURCES

Sites: None

Isolated Occurrences: None

Isolated Artifacts: None

RECOMMENDATIONS

Archaeological clearance is recommended for Jicarilla Apache A118 #3.

Attachments: Project Location Map: Figure 1

REFERENCES

Museum of New Mexico

1986 Archaeological Records Management System. Laboratory of

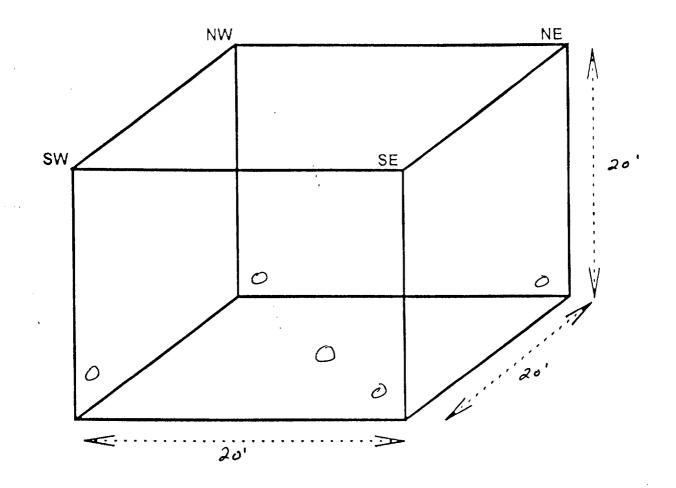
Anthropology, Santa Fe. New Mexico.

M W PETROLEUM/FARMINGTON DISTRICT PIT EXCAVATION AND CLOSURE REPORT

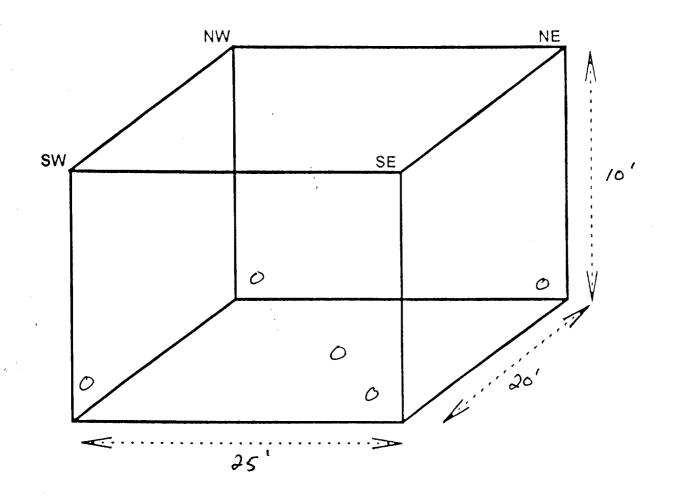
SE Corner

						Jicarilla Apacl	he Tribal EPO/	OCD/BLM	
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			•			Date of Revie			
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Pit 2	20'	15'	3'	Pit 2		25'		4'	8
Pit 3	8'	8'	2'	Pit 3		10'	10'	 	
····		Pit 1 @ 6'	Pit 2 @ 8'	Pit 3 @ 4'	************************		Pit 1 @ 20'	Pit 2 @ 10'	Pit 3 @ 4'
	Center	2500+	130	0.3		Center	55	4.5	0.3
₽	NW Corner	2500+	98	0.5	P	NW Corner	45	0.3	0.5
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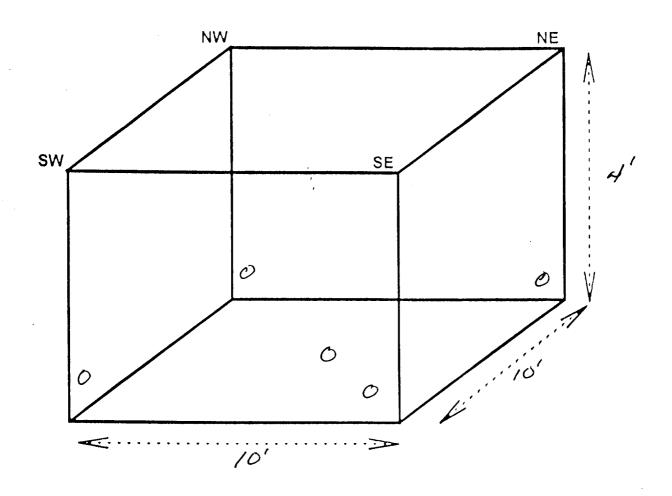
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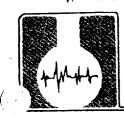
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SAMPLE D	ATE	7-22-97	
NOTES	4 POI	T COMPOSITE SAMPLE TAKEN	18" TO 10" INTO PIT
	SIDE	WALL	
	1 PO	NT GRAB SAMPLE TAKEN 10" T	O 12" INTO BOTTOM CENTER



					= :	SAMPLE AREA
WELL NAM	1E	_A118#3	P.+ #2			
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ASSAIGAI ANALYTICAL LABORATORIES, INC.

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Report Generated: July 31, 1997 13:42

CERTIFICATE OF ANALYSIS RESULTS BY SAMPLE

SENT APACHE CORPORATION

TO: 304 N. BEHREND

FARMINGTON, NM 87401

: 9707236 WORKORDER #

: JICARILLA PIT CLOSURES WORK ID

: APA01 CLIENT CODE DATE RECEIVED : 07/25/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9707236-01A

Sample ID: A118 #3 PIT #1 SIDES

Collected: 07/22/97 09:30:00

Matrix: SOIL

Sample ID: All 8 #3 Pl1 #	- DAMOU ID				DAMOUL ID	
TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A Benzene Toluene Ethylbenzene P-&m-Xylene O-Xylene	ND ND ND ND ND	mg/kg mg/kg mg/kg mg/kg mg/kg	0.0050 0.0050 0.0050 0.010 0.0050	100 100 100 100 100	07/28/97 07/28/97 07/28/97 07/28/97 07/28/97	SBTXME180 SBTXME180 SBTXME180 SBTXME180 SBTXME180

Lau ID: 9707236-01B

Sample ID: A118 #3 PIT #1 SIDES

Collected: 07/22/97 09:30:00

Matrix: SOIL

Sample ID: A118 #3 PIT #						==	
TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID	
Diesel Range OG Soil/M8015 Diesel Range OG in Soil	ND	mg/Kg	25	25	07/30/97	SDRO44	

Lab ID: 9707236-02A

Sample ID: A118 #3 PIT #1 BOTTOM

Collected: 07/22/97 09:45:00

Matrix: SOIL

Sample ID: All 8 #3 Pll #.						
TEST / METHOD	RESULT	UNITS	LIMIT	D_ F	DATE	BATCH_ID
BTEX/SW846 8020A Benzene Toluene Ethylbenzene P-&m-Xylene O-Xylene	ND ND ND ND ND	mg/kg mg/kg mg/kg mg/kg mg/kg	0.0050 0.0050 0.0050 0.010 0.0050	250 250 250 250 250 250	07/29/97 07/29/97 07/29/97 07/29/97 07/29/97	SBTXME180 SBTXME180 SBTXME180 SBTXME180 SBTXME180



Page: 2

I ID: 9707236-02B Sample ID: A118 #3 PIT #1 BOTTOM

Collected: 07/22/97 09:45:00 **Matrix:** SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015 Diesel Range OG in Soil	ND	mg/Kg	25	25	07/30/97	SDRO44

Muage for William P. Biava

President

WORKORDER COMMENTS

DATE : 07/31/97

WORKORDER:

DEFINITIONS/DATA QUALIFIERS

The following are definitions, abbreviations, and data qualifiers which may have been utilized in your report:

ND = Analyte "not detected" in analysis at the sample specific
 detection limit.

D F = Sample "dilution factor"

NT = Analyte "not tested" per client request.

B = Analyte was also detected in laboratory method QC blank. E = Analyte concentration (result) is an estimated value or

exceeds analysis calibration range.

LIMIT = The minimum amount of the analyte that AAL can detect utilizing the specified analysis.

Please Note: Multiply the "Limit" value (AAL's Detection Limit) by Dilution Factor (D_F) to obtain the sample specific Detection Limit.

REPORT COMMENTS

client Apache Corporation

Chain of Custndy Record

Project Manager / Contact Joff Cross

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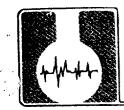
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(505) 345-8964

MELQUIADES ALANIS 6411 LOCAL UNO CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

Stored over 30 days (additional fee) Disposed of (additional fee) Analysis Required Returned to customer Stored (30 days max) After analysis, samples are to be: Received by:/ Сотряпу Reason SICKAR × 又 Met ICE Chemical Preservation Telephone No. (505) 774-6643 Relinquished by Temp. 8 Company Printed, Reason Fax No. (505) 774-6624 Type / Size of Container Samplers: (Signature) __ 402 0/055 Company ALLE Sample Type 9.30 Sal Project Name / Number JICARILLA PIT CLOSURES 19:45 Received by: Signature Comments: Ē Reason. 7-22-92 Date cliy/State/ZipEarmington, NM 87401 7-25-97 20:6 A118#3P,4#15ides A118#3 P. + 1 Sides Date Sample Number / Location Address 304 N. Behrend Contract / Purchase Order / Quote OACKR COLP (205S Method of Shipment Special instructions: H C Refinquished by: Shipment No. AAL FRACTION HUMBER · ` ; 1 Signature, Company. Reason Printed.

TO STATE OF A



ASSAIGAI ANALYTICAL LABORATORIES, INC.

SEP - 4 1997

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Report Generated:

August 22, 1997 14:45

CERTIFICATE OF ANALYSIS RESULTS BY SAMPLE

SENT APACHE CORPORATION

TO: 304 N. BEHREND

FARMINGTON, NM 87401

WORKORDER # : 9708168

WORK ID : JICARILLA PIT CLOSURES

CLIENT CODE : APA01

DATE RECEIVED : 08/15/97

ATTN: JEFF CROSS

Page:1

Lab ID: 9708168-01A

Sample ID: A118 #3 PIT #2 SIDES

Collected: 08/11/97 11:00:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A Benzene Toluene Ethylbenzene P-&m-Xylene O-Xylene	ND	mg/kg	0.0050	100	08/20/97	SBTXME185
	ND	mg/kg	0.0050	100	08/20/97	SBTXME185
	ND	mg/kg	0.0050	100	08/20/97	SBTXME185
	ND	mg/kg	0.010	100	08/20/97	SBTXME185
	ND	mg/kg	0.0050	100	08/20/97	SBTXME185

Lab ID: 9708168-01B

Sample ID: A118 #3 PIT #2 SIDES

Collected: 08/11/97 11:00:00

Matrix: SOIL

							
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Diesel Range OG Soil/M8015 Diesel Range OG in Soil	ND	mg/Kg	25	25	08/20/97	SDRO047	

Lab ID: 9708168-02A

Sample ID: A118 #3 PIT #2 BOTTOM

Collected: 08/11/97 11:30:00

Matrix: SOIL

Sample ID: All 8 #3 PlT #2	#2 BOTTOM WHATTAN BOTZ						
TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID	
BTEX/SW846 8020A Benzene Toluene Ethylbenzene P-&m-Xylene O-Xylene	ND ND ND ND ND	mg/kg mg/kg mg/kg mg/kg mg/kg	0.0050 0.0050 0.0050 0.010 0.0050	100 100 100 100 100	08/20/97 08/20/97 08/20/97 08/20/97 08/20/97	SBTXME185 SBTXME185 SBTXME185 SBTXME185 SBTXME185	



D: 9708168-02B Sample ID: A118 #3 PIT #2 BOTTOM

Collected: 08/11/97 11:30:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015 Diesel Range OG in Soil	ND	mg/Kg	25	25	08/20/97	SDRO047

Lab ID: 9708168-03A

Sample ID: A118 #3 PIT #3 CENTER

Collected: 08/11/97 13:00:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A Benzene Toluene Ethylbenzene P-&m-Xylene O-Xylene	ND	mg/kg	0.0050	100	08/20/97	SBTXME185
	ND	mg/kg	0.0050	100	08/20/97	SBTXME185
	ND	mg/kg	0.0050	100	08/20/97	SBTXME185
	ND	mg/kg	0.010	100	08/20/97	SBTXME185
	ND	mg/kg	0.0050	100	08/20/97	SBTXME185

Lab ID: 9708168-03B

Sample ID: A118 #3 PIT #3 CENTER

Collected: 08/11/97 13:00:00

Matrix: SOIL

3T / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID	
Diesel Range OG Soil/M8015 Diesel Range OG in Soil	ND	mg/Kg	25	25	08/20/97	SDRO045	

William P. Biava

President

WORKORDER COMMENTS

DATE : 08/22/97

WORKORDER:

DEFINITIONS/DATA QUALIFIERS

The following are definitions, abbreviations, and data qualifiers which may have been utilized in your report:

ND = Analyte "not detected" in analysis at the sample specific
 detection limit.

D F = Sample "dilution factor"

 \overline{NT} = Analyte "not tested" per client request.

B = Analyte was also detected in laboratory method QC blank.

E = Analyte concentration (result) is an estimated value or exceeds analysis calibration range.

LIMIT = The minimum amount of the analyte that AAL can detect utilizing the specified analysis.

Please Note: Multiply the "Limit" value (AAL's Detection Limit) by Dilution Factor (D_F) to obtain the sample specific Detection Limit.

REPORT COMMENTS

Client Apache Corporation

Chain of Custor ' Hecord

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Project Manager / Contact __J Q £ E _ C r O 9 9

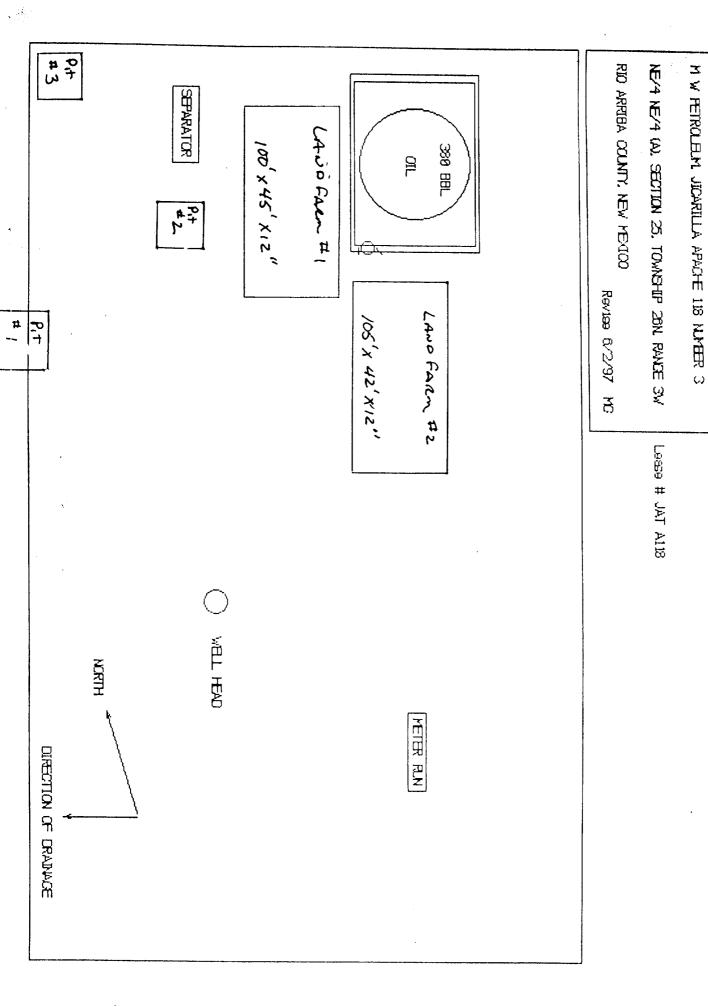
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1910 N. BIG SPRING MIDLAND, TEXAS 79705 (915) 570-1116

AL BUOUEROUE, NEW MEXICO 87109 - (505) 315 896-1

MELOUIADES ALANIS 6411 LOCAL UNO CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

Address 304 N. Behrend	Telephone No. (505) 774-6643 //	Analysis Required	
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City/State/Zpt.a.tmlng.con, NM 8/4111	Lax No. Click College		
Project Name / Number JICARILLA PIT CLOSURES.	Samplers: (Signature) folky Markon	Rem	
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Shipment Na.		Stored (30 days max)	
Special Instructions		Stored over 30 days (additional fee)	
		Returned to customer	



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: <u>N</u>	M W PETR	OLUEM			Telephon	e	505-325-0	318	
Address: _		2855 SOUTHS	IDE RI	VER ROAD	/SUITE A	VFARMING	TON, N.M.	87401-7947	7
Facility or Well	l Name:	JAT	A118	# 3 CELL #	1				
Location: l	Jnit or Qtr/	'Qtr Sec	Α	Sec 25	T 26N	R 3W	_County	RIO ARR	IBA
Land Type		JIC. TRIBAL			 				
Date Remedia	tion Starte	d: 7/	17/97		Date Con	npleted:		6/10/98	
Remediation M	fethod:	Landfarmed		XXX	Approx. o	cubic yards		133	
		Composted			-	-		_	
		Other		Ren	ediated	5011 70	BE put	BACK IN	P.+
Depth to Grou	ndwater:		(pts)	0		Final Clo	sure Samp	oling	
Distance to an	Ephemera	al Stream:	(pts)	0	Sampling	g Date:	6/10/98	_Time:	10:30AM
Distance to Ne or Watering Po		e, Playa,	(pts)	0	Sample I		0		
Wellhead Prot	ection Are	a:	(pts)	0		space (ppm)			M8015
Distance To S	urface Wa	ter:	(pts)	0	_]		n) <u>ND</u>	Method 20A (NI	
RANKING SC	ORE (TO	TAL POINTS)		0		EI DIEX (344040,00	204 (14)	<u> </u>
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DATE:		9/14/98		PRINTED	NAME		JEFF C	ROSS	
SIGNATURE	Jeff	lon		TITLE		PROJEC	T MANAG	ER	
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APPROVED:	YES		NC)	_(REASO	N)		- N.	_
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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: M	W PETRO	OLUEM			Telephone)	505-325-0	318	
Address:		2855 SOUTH	SIDE RIV	ER ROAD	/SUITE A/	FARMING	TON, N.M.	87401-7947	
Facility or Well I	Name: _	JA	T A118 #	# 3 CELL #	2				
Location: Ur	nit or Qtr/0	Qtr Sec	Α	Sec 25	T 26N	R 3W	County	RIO ARRII	ВА
Land Type		JIC. TRIBAL							
Date Remediati	on Started	1 -	8/8/97		Date Com	npleted:		6/10/98	
Remediation Me	_	Landfarmed	0,0,0		•	ubic yards		133	
Remediation we					, Approx. o				
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		Other			emediati	W 3011 1	se pui	myrac III.	
Depth to Groun	dwater:		(pts)	0		Final Clo	sure Sam	pling	
Distance to an I	Ephemera	al Stream:	(pts)	0	Sampling	Date:	6/10/98	Time:	10:40AM
Distance to Nea		e, Playa,	(pts)		Sample F	Results:			
or Watering Po				0	Field Heads	space (ppm)	0		
Wellhead Prote	ection Area	a:	(pts)	0	ТРН	(ppn	n) <u>ND</u>	Method	M8015
Distance To Su	ırface Wa	ter:	(pts)	0	Othe	er BTEX \	SW846 , 80	020A (NE)
RANKING SCO	-			0	-				
I HEREBY CER KNOWLEDGE			ORMATIC	ON ABOVE	IS TRUE	AND COMF	PLETE TO	THE BEST (OF MY
DATE:		9/14/98		_PRINTED	NAME		JEFF_C	ROSS	
SIGNATURE_	Ju	ylun		_TITLE		PROJEC	T MANAG	SER	
AFTER REVIE ACCORDANC	W OF THE	IE SOIL REM E JICARILLA	EDIATIC APACHE	N INFORM	IATION. C Γ CLOSUF	ON-SITE RE RE ORDINA	MEDIATION NCE.	ON IS APPR	OVED IN
APPROVED:	YES	<u>X</u>	NC		_(REASC)N)			_
SIGNED: S	K.	Ma	0	_DATE:	<u>use</u> 11-	13-9	Bore 8	kf:11	

M W PETROLEUM/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE		JAT A118 # 3			
* AMOUNT OF SOIL UND	ERGOIN	NG REMEDIATION	266	Yds.	
			SampDATE	TPH	BTEX
CELL No. 1			6/10/98	ND	ND
DIMENSIONS(LxWxH)	— 100' ≯	〈 45' X 12"			
				ļ. <u>.</u>	
CELL LOCATION (dir. from we	ll head	NORTH			
* DATE BEGAN: 7/11/9	97				
DATE TERMINATED (TPH <5.	,000 ppm/	/BTEX< 50 ppm/Benzene < 10 ppm)	6/10/98	3	-
			SampDATE	TPH	BTEX
CELL No. 2			6/10/98	ND	ND
DIMENSIONS(LxWxH)	105')	X 42' X 12"			
CELL LOCATION (dir. from we	all head	NORTHEAST			
CELL LOCATION (dir. iroin we	sii iieau	NORTHE IO			
* DATE BEGAN: 8/8/	97				<u> </u>
DATE TERMINATED (TPH <5	5,000 ppm	/BTEX< 50 ppm/Benzene < 10 ppm)	6/10/9	8	
			SampDATE	TPH	BTEX
CELL No. 3					
DIMENSIONS (LAVAVAL)					
DIMENSIONS(LxWxH)					
CELL LOCATION (dir. from w	ell head				
* DATE BEGAN:					
DATE TERMINATED (TPH <	5,000 ppm	n/BTEX< 50 ppm/Benzene < 10 ppm)		_
REMEDIATION RECORD: (D	ate Treat	ment, Tilling)			
7/21/97 TREAT SOIL WITH 4	6-0-0 FEF	RTILIZER, WATER, PLOW AND TILL	SOIL.		
8/13/97 TREAT CELL # 2 WI	TH 46-0-0	FERTILIZER, WATER, PLOW AND	TILL CELLS 1 AN	D 2	
9/23/97 PLOW AND TILL CE	LLS.				
4/22/98 PLOWED CELLS.					
4/24/98 TILL CELLS. 5/19/98 WATER AND PLOW	CELLS			-	
5/20/98 TILL CELLS.	OLLLO.				
0/20/00 1122 02220.					

From excavation reports.

= SAMPLE AREA 0 ALL SAMPLES TAKEN 10" TO 12" INTO CELL. 0 JAT 4 118 #3 100'x45x1 OUN. ∞ 0 SAMPLE DATE: WELL NAME: DIMENSIONS: 0 NOTES:

= SAMPLE AREA SAMPLE DATE: WELL NAME: DIMENSIONS:

0	,	. 9
	0	
	8	
0		,

ALL SAMPLES TAKEN 10" TO 12" INTO CELL.	8 POINT COMPOSITE SAWING		
NOTES:		,	



ASSAIGAI ANALYTICAL LABORATORIES, INC.



7300 Jefferson, NE • Albuquerque, New Mexico 87109 • (505) 345-8964 • FAX (505) 345-7259

3332 Wedgewood, E-5 • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820 127 Eastgate Drive, 212-C • Los Alamos, New Mexico 87544 • (505) 662-2558

APACHE CORPORATION
attn: JEFF CROSS
2855 SOUTHSIDE RIVER RD STE A
FARMINGTON, NM 87401-7947

	* explanation of codes
В	analyte detected in Method Blank
E	result is estimated
Н	analyzed out of hold time
N	tentatively identified compound
S	subcontracted
1-9	see footnote

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: APACHE CORPORATION
Project: 9806175 JICARILLA

William P. Biava: President of Assaigai Analytica Laboratories, Inc.

	Sample SOII				Sample Collected	06/10/98 10:30:00
		Dilution	Detection	1		Run
Resu	<u>Units</u>	Factor	<u>Limit</u>	*	Sequence	<u>Date</u>
s						
ND	mg / Kg	50	0.005		XG.1998.535-23	06/15/98
ND	mg / Kg	50	0.005		XG.1998.535-23	
ND	mg / Kg	50	0.005		XG.1998.535-23	
ND	mg / Kg	50	0.01		XG.1998.535-23	
ND	mg / Kg	50	0.005		XG.1998.535-23	
1						
ND	mg / Kg	25	25	1	XG.1998.556-4	06/20/98
Toluene 6-8015 Modified TPI Diesel Range Organics	6-8015 Modified TPH					
		Sample	Sample O.O.II			Sample Sample

Client Sample ID	JAT A1	18 #3	CELL #2		mple SOIL	_			Sample Collected	06/10/98 10:40:00
<u>Fraction</u>	QC Group	CAS#		<u>Result</u>	<u>Units</u>	Dilution <u>Factor</u>	Detection <u>Limit</u>	*	<u>Sequence</u>	Run <u>Date</u>
			SW846-8010/8020 Volatiles							
9806175-02A	X98326	71-43-2	Benzene	ND	mg / Kg	50	0.005		XG.1998.535-22	06/15/98
	X98326	100-41-4	Ethylbenzene	ND	mg / Kg	50	0.005		XG.1998.535-22	
	X98326	95-47-6	o-Xylene	ND	mg / Kg	50	0.005		XG.1998.535-22	
	X98326		P/M-Xylenes	ND	mg / Kg	50	0.01		XG.1998.535-22	
	X98326	108-88-3	Toluene	ND	mg / Kg	50	0.005		XG.1998.535-22	
			SW846-8015 Modified TPH							
9806175-02B	X98328	1	Diesel Range Organics	ND	mg / Kg	25	25		XG.1998.556-6	06/20/98

Page 1 of 2

Coyote Reports

ver 1.1 / 980406

Report Date

6/24/98 9:56:29 AM





Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: APACHE CORPORATION
Project: 9806175 JICARILLA

footnote

This sample was utilized for the matrix spike and duplicate. Please note that the recoveries were outside of QC criteria, suggesting matrix interference problems. This should be taken into account when reviewing the data.

Page 2 of 2 Coyote Reports ver 1.1 / 980406 Report Date 6/24/98 9:56:30 AM

^{***} Sample specific analytical Detection Limit is determined by multiplying the sample Dilution Factor by the listed method Detection Limit. ***



Client Apache Corporation

Project Manager / Contact Jeff Cross

Page _

nain of Custody Record

7300 JEFFERSON, N.E.
ALBUQUERQUE, NEW MEXICO 87109
(505) 345-8964

3332 WEDGEWOOD / EL PASO, TEXAS 79925 (915) 593-6000

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	×	2	4 oz alas		_		2 X
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	/ / / / /	Temp. Chemical		Time		Sample Number / L	FRACTION NUMBER
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	Malnor X	Having Butter	Samplers: (Signature) ₋			/ Number	Project Name / Number
			Fax No. (505) 774	01-7947	1	zip Farmingto n	City / State /
Analysis Required		774-6643	Telephone No. (505)	- 1			Address 2855
	Analysis Required The state of	Date Date Time Time After analys	Temp. Chemical X X X X X X X X X X X X X X X X X X X	Temp. Chemical Temp. Chemical A A A A A A A A A A A A A	RD. Ste. Arelephone No. (505) 774-6643 Oll-7947 Fax No. (505) 774-6624 Samplers: (Signature) Hauter Thurthy Samplers: (Signature) Hauter Thurthy Signature Thurthy Preservation 10-15 Received by: Received by: Preservation 10-15 Received by: Preservation 10-15 Preservation 10-	NM 87401-7947 Fax No. (505) 774-6624 NM 87401-7947 Fax No. (505) 774-6624 Samplers: (Signature) Hauly Butter Samplers: (Signature) Thus Presentation: Type Trans Continue: Type Trans Spirit Haz glass Lite 2 (10/97 10:75 Spirit Haz glass Lite 3 (10/97 10:75 Spirit Haz glass Lite 4 (10/97 10:	55 Southside River RD. Ste. Melephone No. (505) 774-6624 Parmington. NM 87401-7947 Fax No. (505) 774-6624 Samplers: (Signature) Hawy Butter Samplers: (Si