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State of New Mexico

1000 Rio Brand Park Energy Minerals and Natural Resources Department

Aztec, NM 87410

DEPUTY OIL & GAS INSPECTION OIL CONSERVATION DIVISION

Submit 1 copy to

Appropriate District

and 1 copy to

Santa Fe Office

JAN 27 1998

OIL CONSERVATION DIVISION
2040 S. PACHECO
Santa Fe, New Mexico 87505

DECEIVED

PIT RÉMEDIATION AND CLOSURE REPORT

1	///						ചാ രത്തി	DIV
Operator:	Apache Corporation \ MW Pet	troleum		Telephon	e:	505-32	5-0318 BT.	3
Address:	2855 Southside River Road, S	uite A, Farr	nington, f	NM 87401				
Facility or	Well Name:	Jic Apach	ne Tribal 3	163 #1 Pit #	1			
Location:	Unit or Qtr/Qtr Sec	NEINE	Sec 15	T 24 N	R 4W	County	Rio Arriba	
Pit Type:	Separator:	Dehydrato	r	Other	Blow Pit			
Land Type	Jicarilla Tribal							·
	Beginning Pit Dimensions:	Length	4	5' Width	1 4	5' Dej	pth 6'	
Pit Location: (Attach diag	Ending Pit Dimensions:	Length				<u>5'</u> De	<u>_</u>	
	Reference:	Wellhead		_Other	Separato	r		
	Footage from reference:		75	j '	_			
	Direction from reference:		130	_Degrees	xx	_East	North	
						_West	of South	x
	Froundwater:			Less than 5	50 foot		(00 : 1)	
vertical distan				50 feet to 9			(20 points)	
ontaminants t				Greater tha		ł	(10 points) _ (0 points)	0
igh water elev roundwater)	ation of	A					(o points) _	
	rotection Area:					Yes	(20 points)	
Less than 2 Omestic wa	200 feet from a private					No	(0 points)	0
000 feet fro	ater source, or, less than om all other water sources)						(° P°•) _	
istance To	Surface Water:			Lass the D				
	listance to perennial			Less than 2			(20 points)	
kes, ponds	, rivers, streams, creeks,			200 feet to 1			(10 points)	
rigation can	als and ditches)			Greater than	i iooo tee	ı	(0 points)	
				RANKING S	CORE (T	OTAL POI	NTS)	0

Date Remediation Sta	rted:	5/19/97		Date Comp	oleted:	5/23/97
Remediation Method: (Check all appropriate		Excavation	XXX	Approx. cu	bic yards _	1800
sections)	Landfarmed		XX	Insitu Biore	emediation	
		Other				
Remediation Location	:	Onsite	XX	Offsite		
(i.e. landfarmed onsite, name and location of offsite facility)						
General Description o	f Remedial Action:		Excavate	pit to 12' be	elow pit botto	om, 5' off pit sides.
Lay soil ou	t on location in two	dirt farm ce	ells.			
				<u> </u>	<u>.</u>	
				, v		
Groundwater Encoun	tered:	No	XX	Yes		Depth
Final Pit:	Sample location		4 point com	oosite sample	taken 8 to 10 " i	into pit sidewalls,
Closure Sampling: (in multiple samples, attach sample results		grab samp	le taken 1	o" into pit b	ottom center	г.
and diagram of sample locations and depths)	Sample depth	18'	8 to 10" in	to pit sidev	valls 10" into	pit bottom
locations and deptils)	Sample Date Sample results		5/23/97		Sample Time	10:50 AM
	Benzene		(ppm)	ND		
	Total BTEX	A	(ppm)	ND		
	Field Headspace		(ppm)	9.02		
	ТРН			610\Sides		
Groundwater Sample:		Yes		420\BTM No	XX(If	f yes attach sample results)
I HEREBY CERTIFY T KNOWLEDGE AND BI		TION ABOV	'E IS TRUE	AND COM	PLETE TO TI	HE BEST OF MY
DATE	August 10,1998		PRINTED	NAME	Jeff Cross	· · · · · · · · · · · · · · · · · · ·
SIGNATURE	flon		AND TITL	E	Project Mana	ager

. . . -

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

PIT REMEDIATION AND CLOSURE REPORT

Operator:	Apache Co	rporation \ MW Petr	oleum			Telephone	e:		505-325-0	318	
Address:	2855 South	side River Road, Sı	uite A, Farm	ingto	n, NM	87401		•			
Facility or \	Nell Name:		Jic Apach	e Trib	al 363	3 #1 Pit #2	2				
Location:	Unit or Qtr/0	Qtr Sec	NE\NE	Sec	15	T 24 N	R	4W	County	Rio Arriba	
Pit Type:	Separator:	XXX	_Dehydrato	r		Other			-1-3		
Land Type	:	Jicarilla Tribal									
	Beginni	ng Pit Dimensions:	Length		15'	Widtl	h	12'	Depth	2'	
Pit Location: (Attach dia		ng Pit Dimensions:	Length		25'	Widtl	h	20'	Depth	9'	
(, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Refere	nce:	Wellhead			Other	Sepa	arator			
	Footag	e from reference:			15'	 	_				
	Direction	on from reference:		10	00	Degrees		ΚX	East of	North	
									.West	South	x
Depth To	Groundwate	er:				Less than	50 fee	et		(20 points)	
(vertical dista						50 feet to				(10 points)_	
contaminants high water ele						Greater th	ian iu	u teet		(0 points)	0
groundwater)			a								
	Protection A								Yes	(20 points)	
domestic w		n a private or; less than water sources)							No	(0 points)	0
	Γο Surface \					Less than				(20 points)	
•		reams, creeks,				Greater th			t	(10 points) (0 points)	0
	anals and dit								OTAL POIN	•	0

Date Remediation Sta	rted:	5/21/98		_Date Comp	leted:	5/23/97
Remediation Method: (Check all appropriate		Excavation	xxx	_Approx. cut	oic yards	170
sections)	Landfarmed	I	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 7' belo	ow pit bottom	, 10' off pit sides.
Lay soil ou	t on location in two	dirt farm ce	ells.			
Groundwater Encoun	tered:	No	X	Yes.		Depth
Final Pit:	Sample location		4 point con	posite sample	taken 8 to 10 " ir	nto pit sidewalls,
Closure Sampling: (in multiple samples, attach sample results		grab samp	ole taken 1	0" into pit b	ottom center.	
and diagram of sample locations and depths)	Sample depth	9'	8 to 10" i	nto pit sidew	alls 10" into	pit bottom
iodatorio una deputo,	Sample Date Sample results		5/23/9	7	Sample Time	11:30 AM
	Benzene		(ppm)	ND		
	Total BTEX	sk.	(ppm)	ND		
	Field Headspace		(ppm)	3.52		
	ТРН			ND\Sides 630\BTM		
Groundwater Sample	:	Yes		_ No	(If	yes attach sample results)
I HEREBY CERTIFY T KNOWLEDGE AND B		TION ABOV	/E IS TRU	E AND COM	PLETE TO TH	E BEST OF MY
DATE	August 10,1998		PRINTED	NAME	Jeff Cross	
SIGNATURE	floor		AND TITI	.E	Project Mana	ger

*

Submit 1 copy to Natural Resource Dept. and Oil & Gas Administration

PIT REMEDIATION AND CLOSURE REPORT

Operator:	M W PETROLEUM	Telephone 505-325-0318	
Address:	304 N. BEHREND, FARMINGTON, N.M.	84701	
Facility or We	ell Name: JIC. TRIBAL 363 # 1	PIT # 1	-
Location:	Unit or Qtr/Qtr Sec NE\NE SEC 15	T 24N R 4W County	RIO ARRIBA
Pit Type:	Separator:Dehydrator	Other BLOW P	<u>T</u>
Land Type:	JIC. TRIBAL		
Pit Location: (Attach diagra	Pit Dimensions: Length 50' am) Reference: Wellhead	Width 55' Dept Other SEPERATOR	h <u>18'</u>
	Footage from reference: 75' Direction from reference: 130		North
			of South X
Depth To Gr	oundwater:	Less than 50 feet	(20 points)
(vertical distance		50 feet to 99 feet	(10 points)
contaminants to s high water elevation groundwater)		Greater than 100 feet	(0 points)0
Distance to a	an Ephemeral Stream:	Less than 100 feet	(10 points)
	nt dry wash greater than	Greater than 100 feet	(0 points) 0
Distance to I	Nearest Lake, Playa, or Watering [®] Pond:	Less than 100 feet	(10 points)
(Downgradier	nt lakes, playas and vildlife watering ponds)	Greater than 100 feet	(0 points) 0
 Wellhead Pro	rotection Area:	Yes	(20 points)
(Less than 20 domestic wat	00 feet from a private ter source, or less than m all other water sources)	No	(0 points) 0
Distance To	Surface Water:	Less than 100 feet	(20 points)
	listance to perennial	100 feet to 1000 feet	(10 points)
lakes, ponds,	, rivers, streams, creeks,	Greater than 1000 feet	(0 points)0
irrigation can	nals and ditches)	RANKING SCORE (TOTAL PC	DINTS) 0

Date Remedia	tion Starte	ed: 5/19/97		Date Comp	leted:		5/23/97	
Remediation	Method:	Excavation	XXX	_ _Approx. cut	oic yards		1800	
(Check all app sections)	ropriate	Landfarmed	XXX	_ _Insitu Biore	mediation _.			
ŕ		Other					_	
Remediation (i.e. landfarme name and loca offsite facility)	ed onsite, ation of	Onsite	e XXX	_Offsite				
General Desc	ription of	Remedial Action: Ex	x <u>cavate pit</u>	to 12' below	v pit botto	m,5' off pit	sides.	
_	Lay soil o	ut on location in two	o dirt farm	cells.			··	
Groundwater	[.] Encounte	ered: No		_ Yes		Depth		
Final Pit: Closure Sam	nlina:	Sample location	4 POINT	COMPOSITE	SAMPLE	TAKEN 10°	' INTO PIT	SIDEWALL
(in multiple sa	mples,	GRAB SA	MPLE TAK	EN 10" INTO	PIT BOT	TOM CENT	ER.	
	of sample	Sample depth 18	8" to 10" i	nto pit side v	valls ,10" in	to pit bottor	n.	
	depths) Sample Da Sample re		5/23/97	7	Sample Ti	me	10:50AM	
	Soil:	Benzene	(ppm)	ND	Water:	Benzene	(ppb)	NA
		Total BTEX	(ppm)	ND		Toluene	(ppb)	NA
		Field Headspace	(ppm)	9.02	_ Eth	ylbenzene	(ppb)	<u>NA</u>
		TPH	(ppm)	610\SIDE		al Xylenes	(ppb)	NA
Groundwate	r Sample:	Ye	s	420\BTM No		_(If yes atta	nch sample	results)
I HEREBY CI KNOWLEDG		AT THE INFORMATI	ON ABOVI	E IS TRUE A	ND COMP	LETE TO 1	THE BEST (OF MY
DATE		7/15/97	_PRINTED	NAME		JEFF CR	oss	
SIGNATURE	77-0	7)	_AND TIT				MANAGE	
	LA APAC	É PIT CLOSURE INF HE TRIBE PIT CLOS	URE ORDII	NANCE.		PPROVED	ÎN ACCORI	DANCE TO
APPROVED:	YES	s × No	0	_(REASON)			
SIGNED:	Leve	C Man	<u></u>	DATE:	<u> </u>	0-97	7	

Submit 1 copy to Natural Resource Dept. and Oil & Gas Administration

PIT REMEDIATION AND CLOSURE REPORT

Operator: MW PETROLEUM		_Telephone	505-325-0318		
Address: <u>304 N. BEHREND, FA</u>	RMINGTON, N.M.	84701			
Facility or Well Name:JI	C. TRIBAL 363 # 1	PIT#2			
Location: Unit or Qtr/Qtr Sec	NEWE SEC 15	T 24N	R 4W County	RIO ARRIBA	1
Pit Type: Separator: XXX D	ehydrator	_Other			
Land Type: JIC. TRIBAL					
Pit Location: Pit Dimensions: (Attach diagram)	Length 25'	Width	20' De	pth 9'	
Reference: W Footage from reference	ence: 15'	_Other	-		
Direction from refe	rence: 100	Degrees	XXEast	North _	
			West	South _	X
Depth To Groundwater:		Less than	50 feet	(20 points)	
(vertical distance from		50 feet to		(10 points)_	
contaminants to seasonal			an 100 feet	(0 points)	
high water elevation of groundwater)				· · /_	
Distance to an Ephemeral Stream:		Less than	100 feet	(10 points)	
(Downgradient dry wash greater than ten feet in width			an 100 feet	(0 points)	0
Distance to Nearest Lake, Playa, or	-	Less than		(10 points)	
(Downgradient lakes, playas and livestock or wildlife watering ponds)		Greater th	nan 100 feet	(0 points) _	0
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			o 1000 feet	(10 points)	
lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)		Greater th	nan 1000 feet	(0 points) _	0
		RANKING	S SCORE (TOTAL P	POINTS)	0

Date Remedia	tion Start	ed: <u>5/2</u>	21/97	_Date Comp	leted:		5/23/97	-
Remediation I		Excava	ation XXX	_Approx. cut	oic yards		170	
(Check all apposections)	ropnate	Landfar	med XXX	_Insitu Biore	mediation	l		
		Othe	r					
Remediation (i.e. landfarme name and loca	ed onsite, ation of	C	Onsite XXX	_Offsite _				
offsite facility)		Remedial Action	n: Excavate nit	to 7' helow	pit botto	m.10' off nit	: sides.	
	•	ut on location i			 0110	, . vii pii		
<u> </u>	Lay SUII O	at on location I	two untidill			.,		
Groundwater	Encounte	ered:	No xxx	_ Yes		Depth		
Final Pit:		Sample location	4 POINT	COMPOSITE	E SAMPLI	E TAKEN 10	" INTO PIT	SIDEWALI
Closure Sam		•						
(in multiple sa	roculto		B SAMPLE TAK	KEN 10" INTO	PIT BO	TOM CENT	EK.	
attach sample and diagram o	results of sample	Sample depth	9' 8" to 10"	into pit side w	valls ,10" i	into pit bottor	<u>m.</u>	
locations and	depths)			<u>.</u>		· ·		
	Sample Da		5/23/9	7	Sample 1	ıme	11:30AM	
	Sample re	อนเเว						
	Soil:	Benzene	(ppm)	ND	Water:	Benzene	(ppb)	NA
		Total BTEX	(ppm)	ND		Toluene	(ppb)	NA
		Field Headspace	e (ppm)	3.52	. E	thylbenzene	(ppb)	NA
		TPH	(ppm)	ND\SIDES	т.	otal Xylenes	(ppb)	<u>NA</u>
Groundwate	r Sample:		Yes		XXX	(If yes atta	ach sample	results)
		HAT THE INFOR	MATION ABOV	E IS TRUE A	ND COM	PLETE TO	THE BEST	OF MY
KNOWLEDG	c and BE							
DATE		7/15/97		D NAME		JEFF CR	OSS	
SIGNATURE	-	off lus	AND TIT	LE		PROJECT	T MANAGE	R
AFTER REVI THE JICARIL	EW OF TH	HE PIT CLOSUR HE TRIBE PIT C	E INFORMATIC LOSURE ORDI	N, PIT CLOS	SURE IS	APPROVED	IN ACCOR	DANCE TO
APPROVED:	YES	s_ <u>×</u>	NO	(REASON)		<u></u>	
			Ω					
SIGNED:	Ken	C. Ma		DATE:	7-	30-91)	

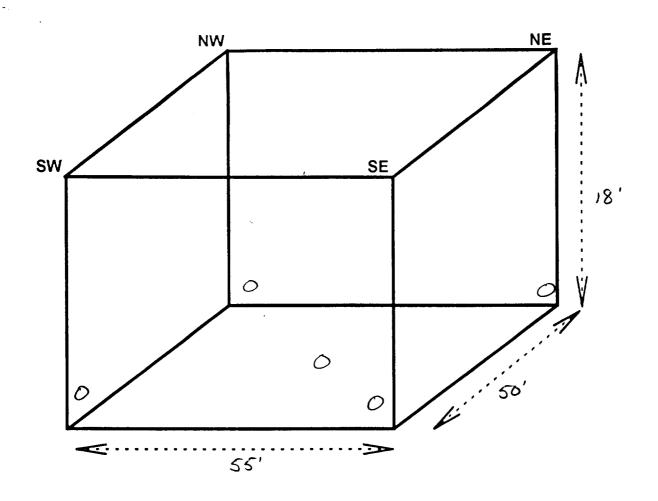
1, 7

M W PETROLEUM/FARMINGTON DISTRICT PIT EXCAVATION AND CLOSURE REPORT

SE Corner

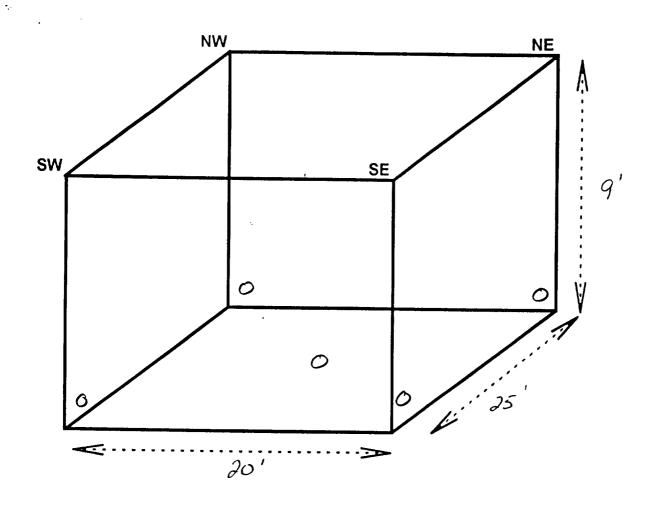
LOCA	TION	JAT 363 # 1		-	3	Jicarilla Apact Review and A OCD-BLM	he Tribal EPO/ pproval	OCD/BLM	
PIT CO	TNUC	2				EPO Represe			
	ţ		-			Date of Review	<u>w</u>		
	ſ			 	Everyoti	30		Ţ	
DIMEN	SIONS	START: PIT #	1 5/10/07 DIT		Excavation FINISH:	on PIT #1 AND #2	2 5/23/97	L	
DIMEN	W	START: PIT#	1 5/19/9/ PH D	. #2 5/2 1/3/	,OH. I	W W	2 3/23/97 L	D	CU YDS
Pit 1	45'	45'	6'	Pit 1		55'	50'	18'	1800
Pit 2	12'	15'	2'	Pit 2		20'	25'	9'	170
Pit 3	· · · · ·			Pit 3					
	-	Pit 1 @ 10'	Pit 2 @ 6'	Pit 3 @			Pit 1 @ 18'	Pit 2 @ 9'	Pit 3 @
	Center	338	480	1		Center	30	95	
p	NW Corner	800	450		P	NW Corner	10	86	
	NE Corner	250	390			NE Corner	9.3	76	
D	SW Corner	350	420		D	SW Corner	6.8	51	
	SE Corner	225	350	L		SE Corner	7.8	20	
NOTES):								
		T EXCAVATION	ON ON PIT#	1 , EXCAVATE I	DOWN TO	O 10' HEAVY S	STAINING AND	ODOR.	
		SS HIGH @ 10							
	5/20/97 CON	TINUE EXCAV	ATING PIT#	1 TO 14' STILL	HEAVY S	STAINING			
				OTTOM CLEAN					
				/ALLS. TAKE PI				SEND TO AS	SAIGAI LABS.
			·						-
				2 EXCAVATE D					ADING HIGH.
	5/22/97 CON	TINUE EXCAV	ATION ON P	IT #2 , EXCAVA	ATE DOW	/N TO 9',PID R	READINGS GC	OOD.	
				IT #2 NO STAIN					TO ASSAIGAI
	LABS.								

				SOIL SAMPL		<u> </u>			
DATE:	5/23/97	Pit 1 @ 18'	Pit 2 @ 9'	Pit 3 @	_	IS RESULTS		PER LAB:	ASSAIGAI
	Center	27	17.4		PIT	TPH	BETEX	WITNESS	DATE
P	NW Corner	8.5	0.2		NO	SIDE\BTM	SIDE\BTM		
- 1	NE Corner	1.3	0		1	610\420	ND\ND	JEFF C.	5/28/97
D	SW Corner	0	0	25	2	ND\630	ND/ND	JEFF C.	5/28/97
	SE Corner	8.3	0		3		<u> </u>		
						(S) SAMPLE			
DATE:		Pit 1 @	Pit 2 @	Pit 3 @		SIS RESULTS	T	PER LAB	r _
	Center		ļ		PIT	TPH	BETEX	WITNESS	DATE
P	NW Corner		<u> </u>		NO				1
	NE Corner	ļ	ļ		1		 	 	
D	SW Corner				2			 	
	SE Corner				3	<u> </u>	<u> </u>	<u> </u>	<u></u>
						(S) SAMPLE			·····
DATE:		Pit 1 @	Pit 2 @	Pit 3 @		SIS RESULTS	_	PER LAB	7'
	Center				PIT	TPH	BETEX	WITNESS	DATE
Р	NW Corner				NO				
1	NE Corner				1	<u> </u>		-	ļ
D	SW Corner				2			<u> </u>	

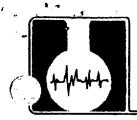


				(= SAMPLE AREA
WELL NAM	IE .	JAT 343#1	pi+ #1	4. · · · ·	
SAMPLE D	ATE .	5-23-97			
NOTES	4 POINT	T COMPOSITE SAMI	PLE TAKEN 8" T	O 10" INTO	PIT
-	SIDEW	'ALL	· · · · · · · · · · · · · · · · · · ·		
-	1 POIN	T GRAB SAMPLE TA	AKEN 10" TO 12	" INTO BOT	TOM CENTER
			,		
-					
-	<u>.</u>				
<u>-</u>					
			· · · · · · · · · · · · · · · · · · ·		

(,



		= SAMPLE AREA
WELL NAM	ME	
SAMPLE D	DATE5-23. 97	
NOTES	4 POINT COMPOSITE SAMPLE TAKEN 8" TO 10" IN	TO PIT
<u>-</u>	SIDEWALL	
_	1 POINT GRAB SAMPLE TAKEN 10" TO 12" INTO B	OTTOM CENTER
_		
-		
_		
-		
-		
_		
_		



ASSAIGAI ANALYTICAL LABORATORIES, INC.

7300 Jefferson, N.E. • 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

Report Generated: June 2, 1997 13:56

CERTIFICATE OF ANALYSIS RESULTS BY SAMPLE

SENT APACHE CORPORATION

TO: 304 N. BEHREND

FARMINGTON, NM 87401

WORKORDER #

: 9705220

WORK ID

: JICARILLA PIT CLOSURES

CLIENT CODE

: APA01

DATE RECEIVED: 05/27/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9705220-01A

Sample ID: A 363 #1 PIT 1 SIDEWALLS

Collected: 05/23/97 10:50:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE	BATCH_ID
BTEX/SW846 8020A Benzene Toluene Ethylbenzene P-&m-Xylene O-Yvlene	ND	mg/Kg	0.0010	500	05/28/97	SBTXME165
	ND	mg/Kg	0.0010	500	05/28/97	SBTXME165
	ND	mg/Kg	0.0010	500	05/28/97	SBTXME165
	ND	mg/Kg	0.0020	500	05/28/97	SBTXME165
	ND	mg/Kg	0.0010	500	05/28/97	SBTXME165

Lab ID: 9705220-01B

Sample ID: A 363 #1 PIT 1 SIDEWALLS

Collected: 05/23/97 10:50:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015 Diesel Range OG in Soil	610	mg/Kg	50	1.0	05/28/97	SDRO028

Lab ID: 9705220-02A

Sample ID: A 363 #1 PIT 1 BOTTOM

Collected: 05/23/97 11:00:00

Matrix: SOIL

Sample ID: A 303 #1 11						
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	0.0010 0.0010 0.0010 0.0020 0.0010	500 500 500 500 500	05/28/97 05/28/97 05/28/97 05/28/97 05/28/97	SBTXME165 SBTXME165 SBTXME165 SBTXME165 SBTXME165



Page: 2

Collected: 05/23/97 11:00:00 **Matrix:** SOIL

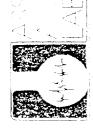
L. D: 9705220-02B Sample ID: A 363 #1 PIT 1 BOTTOM

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015 Diesel Range OG in Soil	420	mg/Kg	50	1.0	05/27/97	SDRO028

grant . V. med

William P. Biava

President



Chain of Custody Record

7300 JEFFERSON, N.E. ALBUQUERQUE, NEW MEXICO 97109 (505) 345-8964

1910 N. BIG SPr...+G MIDLAND, TEXAS 79705 (915) 570-1116

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

MELQUIADES ALANIS 6411 LOCAL UNO 6111 DARTEZ, CHIHUAHUA MEXICO 32320

,		· · · · · · · · · · · · · · · · · · ·	1 1					n other complete	*******	Name - s		••••	~4		事情。	
100 32320	· · · · · · · · · · · · · · · · · · ·	Remarks											a funda	さらいっと		
СДПРАВ ЗПАВЕZ, СНІНЦАНЦА МЕХІСО 32320	Analysis Required.												1 144	Company TT	s, samples are to be: Disposed of (additional fee) Stored (30 days max)	ed over 20 days (additions)
CHURABU		S 128 John	900										Date (1)	1100 OC: D	After analysis, samples are to be. Disposed of (addition)	
		S1601A1	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)	/_/	5								a Call			
padvic jjej	1 my 9-1 2.	1624 Dr. Hulli		Preservation Temp. Chemical	ICE		1000						Relinquished by	Company MAC		
nager Contact		Fax No. (505), 774-6624 Samplers: (Signature), L. L.		Type / Size of Container	402 glass	:			THE REPORT OF THE PARTY OF THE				(Car.	7.77		i minima managaman kali managaman ka
Project Manage	ow anoddae:			Time Type		00:11	H-oo-H						I VIN	any MLF	nents.	
		87401 MT. CLESUR		Date	ANS-23-92 10.									Total Company Company	Comments	
Ollent_Apache_Corperation	Address 304 % Pohrend	Chy State ZipFalmington, NM 87481 Project Name, MumberJIGARISLA, RIT, CLCSURES	Contract, Purchase Order Cunte	Fleid Sample Number / Location	363 "1 p. 1 5 de war 5- 23-97 10:50 501	A3634/Pitt Batton								John Mulh, & Box		
Client Apach	Address 304	City State ZipE Project Name . M	Contract Purch	AAL FRACTON NUMBER	0/13	OJA A		3		our r	***************************************	()	dingulated by:	inned John	tethod of Shipment.	inipment No

WORKORDER COMMENTS

DATE : 06/02/97 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



ASSAIGAI ANALYTICAL LABORATORIES, INC.

7300 Jefferson, N.E. • 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

Report Generated: June 2, 1997 13:50

CERTIFICATE OF ANALYSIS RESULTS BY SAMPLE

SENT APACHE CORPORATION

TO: 304 N. BEHREND

FARMINGTON, NM 87401

WORKORDER #

: 9705221

WORK ID

: JICARILLA PIT CLOSURES

CLIENT CODE

: APA01

DATE RECEIVED: 05/27/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9705221-01A

Sample ID: A 363 #1 PIT 2/SIDES

Collected: 05/23/97 11:30:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A			\$ Medicals		
Benzene	ND	mg/Kg	0.0010 5 00	05/28/97	SBTXME165
Toluene	ND	mg/Kg	0.0010 500	05/28/97	SBTXME165
Ethylbenzene	ND	mg/Kg	0.0010 500	05/28/97	SBTXME165
P-&m-Xylene	ND	mg/Kg	0.0020 500	05/28/97	SBTXME165
O-Xylene	ND	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	0.0010 500	05/28/97	SBTXME165

Lab ID: 9705221-01B

Sample ID: A 363 #1 PIT 2/SIDES

Collected: 05/23/97 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	50	1.0	05/27/97	SDRO028

Lab ID: 9705221-02A

Sample ID: A 363 #1 PIT 2 BOTTOM

Collected: 05/27/97 11:45:00

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 ND ND ND ND	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	0.0010 0.0010 0.0010 0.0020 0.0010	500 500 500 500 500 500	05/28/97 05/28/97 05/28/97 05/28/97 05/28/97	SBTXME165 SBTXME165 SBTXME165 SBTXME165 SBTXME165



Page: 2

L. D: 9705221-02B Sample ID: A 363 #1 PIT 2 BOTTOM

Collected: 05/27/97 11:45:00 **Matrix:** SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015 Diesel Range OG in Soil	630	mg/Kg	50	1.0	05/27/97	SDRO028

Survey France

William P. Biava President

Client Apache Corporation

Chain of Custody Hecord

Lab job no.:

Page

Project Manager / Contact Jeff Cross

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

1910 N. BIG G MIDLAND, TEX. 9705 (915) 570-1116

ALBUQUERQUE, NEW MEXICO 87109 (505) 345-8964

MEL QUIADES ALANIS 6411 LOCAL UNO CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

Address 304 N. Behrend	Telephone No. (505) 774-6643 / /	Analysis Required
Cir/Siste/ZnFarmington, NM 87401	Fax No. (505) 774-6624	
Project Name / Number JICARILLA PIT CLOSURES		Port
Contract / Purchase Order / Quote	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
TO THE AAL THE TANK THE POINT AND THE POINT AND THE PARTIES AND THE POINT AND THE POIN	Time Sample Type Star of Container Temp. Chemical	
A 3634 P. ++2 Sides	5.23-97 11:30 soil 402, 4lass ICE 1	
0.00	16:30 1. Sec. 10 10 10 10 10 10 10 10 10 10 10 10 10	
11	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
S		
entre e	1/2/2	
y i		
d in the second		
· · ·		
Relinquished by:	Received by: Signature Signature Signature	Signature Clery Man
John Mulvik	Printed to Mr. 21 Malece Printed a Vin J. Charles	Time Printed Cliff
. Apachs sorp.	Company MLII Company Mrt	O. D. Company 1771
		After enalysis, samples are to be:
Method of Shipment:	Comments:	Disposed of (additional fee)
Shipment No.		Stored (30 days max)
Special Instructions:		Stored over 30 days (additional fee)

LABORATORY

Returned to customer

WORKORDER COMMENTS

DATE : 06/02/97

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"

 $\overline{N}T$ = Analyte "not tested" per client request.

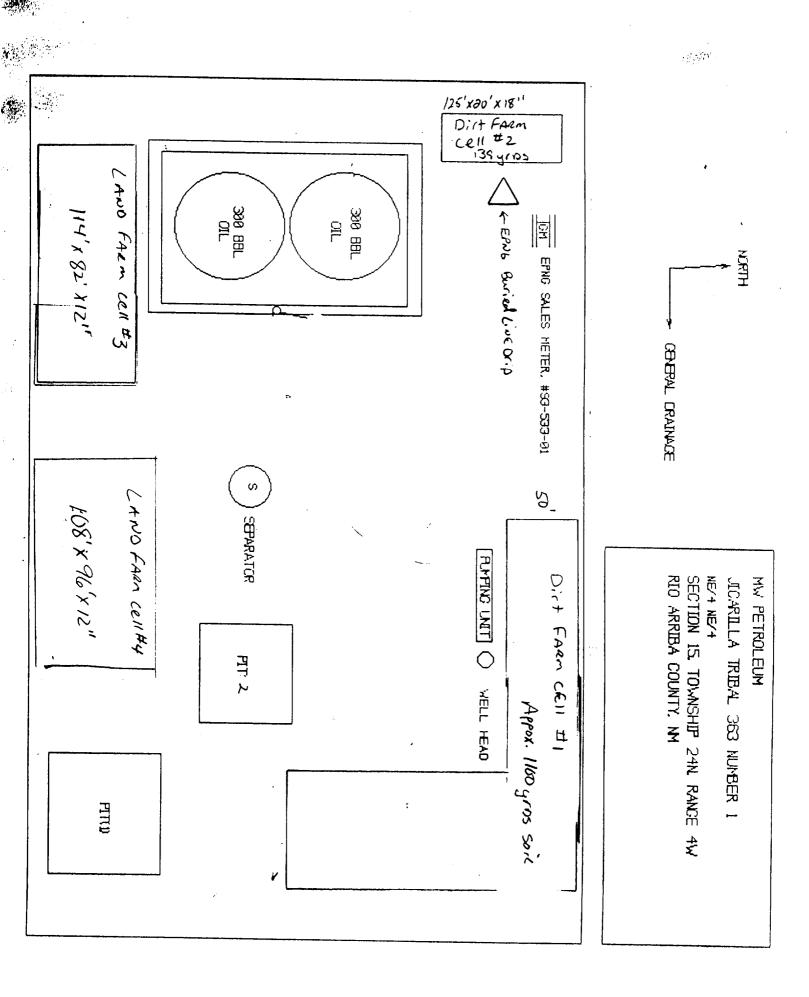
B = Analyte was also detected in laboratory method QC blank.

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



Submit 1 copy to Natural Resource Dept. and Oil & Gas Administration

Operator: MWF	PETROLUEM			Telephon	lephone 505-325-0318					
Address:	2855 SOUTH	ISIDE RI	VER ROAD	/SUITE A	/FARMING	TON, N.M.	87401-7947	7		
Facility or Well Nam	ne:J	AT 363 #	1 CELL	‡ 1						
Location: Unit o	r Qtr/Qtr Sec _	NEWE	Sec 15	T 24 N	R 4 W	County	RIO ARR	IBA		
Land Type	JIC. TRIBAL	<u>.</u>								
Date Remediation S	started:	5/19/97		_Date Con	npleted:		6/13/98			
Remediation Method	d: Landfarmed		xxx	_Approx. c	ubic yards		1100			
	Composted			_						
	Other			SOIL TO	BE SPREA	D ON LO	CATION.			
Depth to Groundwat	ter:	(pts)	0		Final Clo	sure Samı	pling	-		
Distance to an Ephe	emeral Stream:	(pts)	0	Sampling	Date:	6/13/98	Time:	10:40AM		
Distance to Nearest or Watering Pond:	Lake, Playa,	(pts)	00	Sample F						
Wellhead Protection	n Area:	(pts)	0	Field Heads	pace (ppm)		_			
Distance To Surface	e Water:	(pts)	0			•	Method			
RANKING SCORE	(TOTAL POINTS)	0	Othe	er BTEX \S	SW846 , 80	20A (NI	0)		
I HEREBY CERTIF KNOWLEDGE AND		ORMATIC	ON ABOVE	IS TRUE	AND COMP	LETE TO	THE BEST (OF MY		
DATE:	7/16/98		_PRINTED	NAME	<u> </u>	JEFF C	ROSS			
SIGNATURE	Jeff lion		TITLE		PROJEC	T MANAG	ER			
AFTER REVIEW O							N IS APPR	OVED IN		
APPROVED:	YES X	NC		_(REASO	N)			_		
SIGNED: KE	E C Ma	M	_DATE:	1-	29-98	?				

Submit 1 copy to Natural Resource Dept. and Oil & Gas Administration

Operator:	M W PETF	ROLUEM			Telephone	e	505-325-0	318	
Address:		2855 SOUTI	HSIDE RI	VER ROAD	SUITE A	/FARMING	TON, N.M.	87401-7947	,
Facility or W	ell Name:	J	AT 363 #	1 CELL#	2				
Location:	Unit or Qtr	/Qtr Sec _	NEWE	Sec 15	T 24 N	R4W	County	RIO ARRI	ВА
Land Type		JIC. TRIBA	L						
Date Remed	liation Starte	ed:	5/19/97	·	Date Com	npleted:		6/13/98	
Remediation		Landfarmed			-	ubic yards		 ,	
		Composted			• • •	-			
		Other			SOIL TO	BE SPREA	D ON LOC	ATION.	
Depth to Gro	oundwater:		(pts)	0		Final Clo	sure Samp	ling	
Distance to a	an Ephemer	al Stream:	(pts)	0	Sampling	Date:	6/13/98	_Time:	10:50AM
Distance to I or Watering		e, Playa,	(pts)	0	Sample R				
Wellhead Pr	otection Are	a:	(pts)	0	Field Heads		0	-	110015
Distance To	Surface Wa	iter:	(pts)	0	TPH		840	_	M8015
RANKING S	CORE (TO	TAL POINTS)	0	Otne	er <u>BTEX\S</u>	¥¥040 , ŏU∠	OA (NL	, ,
I HEREBY C		AT THE INFO	ORMATIC	ON ABOVE	I IS TRUE A	AND COMP	LETE TO T	HE BEST (OF MY
DATE:		7/16/98		-					
SIGNATURE	<u> </u>	flun		TITLE		PROJECT	r_manage	R	
		E SOIL REM						I IS APPRO	OVED IN
APPROVED	: YES	<u>×</u>	NC		_(REASON	N)		·	_
SIGNED: -	Ker C	Ma	Q	_DATE:	7-	29-92	8		-

Submit 1 copy to Natural Resource Dept. and Oil & Gas Administration

Operator:	M W PETR	COLUEM			Telephon	ıe	505-325-0	318	
Address:		2855 SOUTHS	IDE RI	VER ROAD	/SUITE A	VFARMING	TON, N.M.	87401-7947	7
Facility or W	ell Name:	JA1	r 363 #	1 CELL#	13				
Location:	Unit or Qtr	/Qtr Sec N	EWE	Sec 15	T 24 N	R4W	_County	RIO ARR	IBA
Land Type		JIC. TRIBAL		<u> </u>					
Date Remed	iation Starte	d: 5/	/19/97		_Date Con	npleted:		6/13/98	
Remediation	Method:	Landfarmed		XXX	_Approx. o	cubic yards		346	
		Composted			<u>-</u>				
		Other			SOIL TO	BE SPREA	D ON LOC	ATION.	
Depth to Gro	oundwater:		(pts)	0		Final Clo	sure Samp	oling	
Distance to a	an Ephemer	al Stream:	(pts)	0	Sampling	g Date:	6/13/98	_Time:	11:00AM
Distance to I or Watering		e, Playa,	(pts)	0	Sample f		•		
Wellhead Pr	otection Are	a:	(pts)	0	Field Heads	space (ppm) (ppm	0 n) 920	— Method	M8015
Distance To	Surface Wa	iter:	(pts)	0		er BTEX \S		_)
RANKING S	CORE (TO	TAL POINTS)		0	_	OI DILX (C	511010 , 00		
	CERTIFY TH	IAT THE INFO	RMATIC	ON ABOVE	IS TRUE	AND COMP	LETE TO 1	THE BEST (OF MY
DATE:	/1	7/16/98		PRINTED	NAME		JEFF_CF	ROSS	
SIGNATURI	E	ff lion		_TITLE		PROJEC	T MANAG	ER	
		IE SOIL REME E JICARILLA A						N IS APPR	OVED IN
APPROVED): YES	s_ <u>X</u>	NC)	_(REASC)N)			_
SIGNED:	La	C Ma) _DATE:	7-	-29-98	γ		_

Submit 1 copy to Natural Resource Dept. and Oil & Gas Administration

Operator:	M W PET	ROLUEM			_Telephon	ne	505-325-0	318	
Address:		2855 SOUT	HSIDE RI	VER ROAL) /SUITE A	VFARMING	TON, N.M.	87401-794	7
Facility or We	ell Name:		JAT 363 #	1 CELL:	# 4				
Location:	Unit or Qt	/Qtr Sec _	NEWE	Sec 15	T 24 N	R4W	County	RIO ARR	IBA
Land Type		JIC. TRIBA	L	<u></u>					
Date Remed	iation Starte	ed:	5/19/97		_Date Cor	mpleted:		6/13/98	
Remediation	Method:	Landfarmed	i	xxx	_Approx. o	cubic yards	٠٠.٠٠	384	
		Composted			_				
		Other			SOIL TO	BE SPRE	AD ON LOC	ATION.	
Depth to Gro	oundwater:		(pts)	0		Final Clo	osure Samp	oling	
Distance to a	an Epheme	ral Stream:	(pts)	0	Sampling	g Date:	6/13/98	_Time:	11:10
Distance to Nearest Lake, Playa, (pts) or Watering Pond:				0	Sample I		٥		
			0	_	space (ppm)		– Method	M8015	
Distance To	Surface W	ater:	(pts)	0	TPH (ppm) 3200 Method M8015 Other BTEX \ SW846 , 8020A (ND)				
RANKING S	CORE (TO	TAL POINTS	5)	0	_	el <u>DILX (</u>	00000,00	2071 (11	<u> </u>
I HEREBY C			ORMATIC	N ABOVE	IS TRUE	AND COMP	PLETE TO T	HE BEST	OF MY
DATE:		7/16/98		PRINTEC	NAME	··	JEFF CF	ROSS	
SIGNATURE	E <u>le</u>	of her	7	_TITLE		PROJEC	T MANAG	ER	
AFTER REV		HE SOIL REI E JICARILLA						N IS APPR	OVED IN
APPROVED): YE	s_ <u>X</u>	, NC		_(REASC)N)		<u> </u>	_
SIGNED:	Ke-	CM.		_DATE:	<u></u>	-29-9	8		

M W PETROLEUM/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE	JAT 363 # 1		ı	
* AMOUNT OF SOIL UNDERGOIN	G REMEDIATION	1970	Yds.	
		SampDATE	TPH	BTEX
CELL No1		6/13/98	1700	ND
	V 4400 VDD0			
DIMENSIONS(LxWxH) APPO	X. 1100 YRDS			
CELL LOCATION (dir. from well head	NORTH AND EAST			
* DATE BEGAN: 5/19/97	_			
DATE TERMINATED (TPH <5,000 ppm/l	BTEX< 50 ppm/Benzene < 10 ppm)	6/13/98		
		SampDATE	TPH	BTEX
CELL No. 2		6/13/98	840	ND
DIMENSIONS(LxWxH) 125' >	(20' X 18"			
OF LLOCATION (die from well bood	NODTUNECT			
CELL LOCATION (dir. from well head	NORTHWEST			
* DATE BEGAN: 5/19/97				
DATE TERMINATED (TPH <5,000 ppm/	BTEX< 50 ppm/Benzene < 10 ppm)	6/13/98		•
		SampDATE	TPH	BTEX
CELL No.		6/13/98	920	ND
CELL No. 3		0,10,00	020	110
DIMENSIONS(LxWxH) 114')	(82' X 12"			
CELL LOCATION (dir. from well head	SOUTHWEST			
* DATE BEGAN: <u>5/19/97</u>				<u> </u>
DATE TERMINATED (TPH <5,000 ppm/	BTEX< 50 ppm/Benzene < 10 ppm)	6/13/98		•
REMEDIATION RECORD: (Date, Treatm	nent, Tilling)			······································
5/27/97 TREAT ALL CELLS WITH 46-0-	0 FERTILIZER, WATER. PLOW AND	TILL SOIL.		
5/30/97 PLOW AND TILL ALL CELLS.				
6/9/97 PLOW AND TILL ALL CELLS.				
6/21/97 TILL ALL CELLS	-110			
7/8/97 WATER, PLOW AND TILL ALL CI	ELLS.			:
7/25/97 TILL ALL CELLS. 8/13/97 PLOW AND TILL ALL CELLS.				
4/28/98 4/29/98 PLOWED AND TILLED	ALL CELLS \ 6/2/98 6/3/98 PLOWER	AND TILLED AL	L CELLS.	

From excavation reports.

M W PETROLEUM/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE	JAT 363 # 1		_	
* AMOUNT OF SOIL UNDERG	GOING REMEDIATION	1970	Yds.	
CELL No4		SampDATE 6/13/98	3200	BTEX ND
DIMENSIONS(LxWxH) 10	08' X 96' X 12"			
CELL LOCATION (dir. from well hea	ad SOUTHEAST			
* DATE BEGAN: 5/19/97				
DATE TERMINATED (TPH <5,000 p	ppm/BTEX< 50 ppm/Benzene < 10 ppm)	6/13/9	8	-
CELL No. 5		SampDATE	TPH	BTEX
DIMENSIONS(LxWxH)				
CELL LOCATION (dir. from well hea	ad			
* DATE BEGAN:				
DATE TERMINATED (TPH <5,000	ppm/BTEX< 50 ppm/Benzene < 10 ppm)			_
		SampDATE	TPH	BTEX
CELL No. 6				
DIMENSIONS(LxWxH)				
CELL LOCATION (dir. from well he	ad			
* DATE BEGAN:				
DATE TERMINATED (TPH <5,000	ppm/BTEX< 50 ppm/Benzene < 10 ppm)	<u> </u>		
REMEDIATION RECORD: (Date, T	reatment, Tilling)			
				
			 	

From excavation reports.

WELL NAME: SAMPLE DATE: DIMENSIONS:	JAT 363#1 CELL#1 6/13/98 APPOX. 1100 YRDS. OF SOIL.	1 OF SOIL.		<u> </u>	0	= SAMP	= SAMPLE AREA	
0	0	Ο	0	0			0	
0	0	0	0	0		0	0	
TOTAL	TOTAL OF APPOX. 1100 YRDS OF SOIL.	OF SOIL.		0		0	0	
				0		0	0	7
NOTES:	ALL SAMPLES TAKEN 10" TO 12 21 POINT COMPOSITE SAMPLE	ALL SAMPLES TAKEN 10" TO 12" INTO CELL. 21 POINT COMPOSITE SAMPLE						i
								1 1 1
								1 1 1
								1 1

WELL NAME:	JAT 363 # 1	1 CELL#2	I	0	AHGA FI IGMAA
DIMENSIONS:	125' X 20' X 18"	.48"		•	
0		0	0		0
· · · · · · · · · · · · · · · · · · ·	•	0	0	0	
0		0	0		0
NOTES:	ALL SAMPI 12 POINT C	ALL SAMPLES TAKEN 10" TO 12" INTO CELL. 12 POINT COMPOSITE SAMPLE	CELL.		

.

WELL NAME: SAMPLE DATE: DIMENSIONS:	JAT 363 # 1 C 6/13/98 114' X 82' X 12"	CELL#3	1 1	0	= SAMPLE AREA
0		0	Ο		0
	, O	0	0	0	
0		0	0		0
NOTES:	ALL SAMPLE 12 POINT CO	ALL SAMPLES TAKEN 10" TO 12" INTO CELL. 12 POINT COMPOSITE SAMPLE	OELL.		

WELL NAME: SAMPLE DATE:	JAT 363 # 1 CELL # 4 6/13/98)ELL # 4		0	= SAMPLE AREA
DIMENSIONS:	108' X 96' X 12"				
0		0	0		0
	* O	0	0	0	
0		0	0		0
NOTES:	ALL SAMPLES	ALL SAMPLES TAKEN 10" TO 12" INTO CELL 12 POINT COMPOSITE SAMPLE	EIT.		

-



7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (\$05) 345-8964 • FAX (505) 345-7259

3332 Wedgewood, E-5 • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820

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
-9	see footnote

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: Project:

APACHE CORPORATION

9806202

X98330

JICARILLA

06/13/98 Sample Sample Client JAT 363 #1 CELL #1 SOIL Matrix Collected Sample ID 10:40:00 Dilution Detection Run <u>Factor</u> Result **Units** Limit Sequence Date Fraction QC Group CAS# SW846-8020 Volatiles 71-43-2 50 0.005 XG.1998.551-10 06/17/98 ND mg / Kg 9806202-01A X98330 Benzene X98330 100-41-4 Ethylbenzene ND mg / Kg 50 0.005 XG.1998.551-10 X98330 95-47-6 ND ma / Ka 50 0.005 XG.1998.551-10 o-Xylene

	X98330	108-88-3	Toluene	ND	mg / Kg	50	0.005	XG.1998.551-10	
			SW846-8015 Modified TPH						
9806202-01B	X98328	1	Diesel Range Organics	1700	ma / Ka	25	25	XG.1998.556-23	06/22/98

ND

mg / Kg

50

0.01

XG.1998.551-10

Client Sample ID	JAT 363	3 #1 C	ELL #2		mple SOIL	-			Sample Collected	06/13/98 10:50:00
Fraction	QC Group	CAS#		Result	<u>Units</u>	Dilution <u>Factor</u>	Detection <u>Limit</u>	*	Sequence	Run <u>Date</u>
			SW846-8020 Volatiles							
9806202-02A	X98330	71-43-2	Benzene	ND	mg / Kg	50	0.005		XG.1998.551-11	06/17/98
	X98330	100-41-4	Ethylbenzene	ND	mg / Kg	50	0.005		XG.1998.551-11	
	X98330	95-47-6	o-Xylene	ND	mg / Kg	50	0.005		XG.1998.551-11	
	X98330		p/m Xylenes	ND	mg/Kg	50	0.01		XG.1998.551-11	
	X98330	108-88-3	Toluene	ND	mg / Kg	50	0.005		XG.1998.551-11	
			SW846-8015 Modified TPH							
9806202-02B	X98328	1	Diesel Range Organics	840	mg / Kg	25	25		XG.1998.556-24	06/22/98

Page 1 of 2

Coyote Reports

p/m Xylenes

ver 1.1 / 980406

Report Date

6/24/98 11:35:23 AM



Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: APACHE CORPORATION
Project: 9806202 JICARILLA

Client Sample ID	JAT 36:	3 #1 CE	ELL #3		ample SOIL	,			Sample Collected	06/13/98 11:00:00
						Dilution	Detection			Run
<u>Fraction</u>	QC Group	CAS#		Result	<u>Units</u>	Factor	Limit	*	Sequence	Date
			SW846-8020 Volatiles							
9806202-03A	X98330	71-43-2	Benzene	ND	mg / Kg	50	0.005		XG.1998.551-12	06/17/98
	X98330	100-41-4	Ethylbenzene	ND	mg / Kg	50	0.005		XG.1998.551-12	00/1/100
	X98330	95-47-6	o-Xylene	ND	mg / Kg	50	0.005		XG.1998.551-12	
	X98330		p/m Xylenes	ND	mg / Kg	50	0.01		XG.1998.551-12	
	X98330	108-88-3	Toluene	ND	mg / Kg	50	0.005		XG.1998.551-12	
			SW846-8015 Modified TPH							
		,								
9806202-03B	X98331		Diesel Range Organics	920	mg / Kg	25	25		XG.1998.557-4	06/21/98
Client	JAT 363	3 #1 CE		Sa	mg / Kg		25		XG.1998.557-4 Sample Collected	06/21/98 06/13/98 11:10:00
Sample ID	JAT 363			Sa	mple SOII		25 Detection		Sample	06/13/98
Client Sample ID		3 #1 CE		Sa	mple SOII			*	Sample	06/13/98 11:10:00
Client Sample ID	JAT 363	CAS#		Sa Ma	mple SOIL	Dilution	Detection	*	Sample Collected	06/13/98 11:10:00 Run
Client Sample ID Fraction	JAT 363	CAS#	LL #4	Sa Ma	mple SOIL	Dilution	Detection	*	Sample Collected Sequence	06/13/98 11:10:00 Run <u>Date</u>
Client Sample ID Fraction	JAT 363	CAS#	LL #4 SW846-8020 Volatiles	Sa Ma <u>Result</u>	mple SOIL Units	Dilution Factor	Detection <u>Limit</u>	*	Sample Collected Sequence XG.1998.551-13	06/13/98 11:10:00 Run
Client Sample ID Fraction	QC Group x98330	CAS #	SW846-8020 Volatiles Benzene	Sa Ma <u>Result</u> ND	mple SOIL Units mg/Kg	Dilution Factor	Detection <u>Limit</u>	*	Sample Collected Sequence	06/13/98 11:10:00 Run <u>Date</u>
Client Sample ID Fraction	QC Group X98330 X98330	71-43-2 100-41-4	SW846-8020 Volatiles Benzene Ethylbenzene	Sa Ma Result ND ND	units mg / Kg mg / Kg	Dilution Factor	Detection Limit 0.005 0.005	*	Sample Collected Sequence XG.1998.551-13 XG.1998.551-13	06/13/98 11:10:00 Run <u>Date</u>
Client Sample ID Fraction	QC Group X98330 X98330 X98330	71-43-2 100-41-4	SW846-8020 Volatiles Benzene Ethylbenzene o-Xylene	Sa Ma Result ND ND	mple SOIL Units mg / Kg mg / Kg mg / Kg	Dilution Factor 50 50	Detection Limit 0.005 0.005 0.005	*	Sample Collected Sequence XG.1998.551-13 XG.1998.551-13	06/13/98 11:10:00 Run <u>Date</u>
9806202-03B Client Sample ID Fraction 9806202-04A	QC Group X98330 X98330 X98330	71-43-2 100-41-4 95-47-6	SW846-8020 Volatiles Benzene Ethylbenzene o-Xylene p/m Xylenes	Result ND ND ND ND ND	Units Units mg / Kg	50 50 50 50	Detection <u>Limit</u> 0.005 0.005 0.005 0.005	*	Sample Collected Sequence XG.1998.551-13 XG.1998.551-13 XG.1998.551-13	06/13/98 11:10:00 Run <u>Date</u>

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

Cuain of Casiony necola P.00 6203 ANALYTICAL
ABORATORIES, INC.

Project Manager / Contact Jeff Cross

Client Apache Corporation

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

Analysis Required	Remarks .		Date Opic If July Signature Robur (LOSlos) Films Opisson Alter analysis, samples are to be: Disposed of (additional
Address 2855 SQUINSIDE RIVER RD, Ste. ATELEPHONE NO. (505) 774-6643	City/State/Zip RakmingLon, NM 87401=7947 Fax No. (505) 774=6624 Project Hame/Number Contract/Purchase Order/Ounte	CELC#2 Dote Thre Sample Type/Size of Container Temp. Chamical Temp. Chamical CELC#2 O / 50	Relinquistic by Heart Signature Sign