1000 Rio Brazos Rd Energy, Mine Azte NM 87410

F16 0 (1939

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

/_/	THE COLET	<u></u>					$\underline{\hspace{0.1cm}}$	<u> </u>
Operator: ½	Apache Corporation \ MW Petr	roleum		_Telephone	2 :	505-325-0	0318	(E)
Address: _	2855 Southside River Road, S	uite A, Farm	ington, Ni	/ 87401				
Facility or V	Vell Name:	Jic Apach	e Tribal A1	18 #13 P	it #1			
Location:	Unit or Qtr/Qtr Sec	F	Sec 35	T 26 N	R 3W	County	Rio Arriba	
Pit Type:	Separator:	_ Dehydrator	r	Other	Blow Pit			,
Land Type:	Jicarilla Tribal							
	Beginning Pit Dimensions:	Length	10'	Width	10'	_ Depti	h	
Pit Location: (Attach diag	Ending Pit Dimensions:	Length	18'	Width	18'	_ Depti	h8'	
(Reference:	Wellhead	XX	Other				
	Footage from reference:		90'	-	_			
	Direction from reference:		20	Degrees	X	East	North	XX
						o _West	of South	
Depth To G	Groundwater:			Less than	50 feet		(20 points)	
(vertical distan				50 feet to 9	99 feet		(10 points)	
contaminants t high water elev				Greater tha	an 100 feet		(0 points)	0
groundwater)	ration of							
Wellhead P	Protection Area:					Yes	(20 points)	
	200 feet from a private					No	(0 points)	0
	ater source, or; less than om all other water sources)							
Î	o Surface Water:			Less than 2			(20 points)	
	distance to perennial s, rivers, streams, creeks,			200 feet to	1000 feet an 1000 fee	4	(10 points)	
	nals and ditches)			Greater tric	dii 1000 iee	ι	(0 points) _	0
				RANKING	SCORE (To	NO9 JATC	NTS)	0

Date Remediation Star	ted:	9/8/97		_Date Compl	eted:	9/9/97
Remediation Method: (Check all appropriate		Excavation .	XXX	_Approx. cub	oic yards	88
sections)	Landfarmed		ХХ	_Insitu Biorei	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 8', to	ok PID reading	gs. Spread soil on
location for	remediation. Took	soil sampl	es. Hit B	edrock, spra	y with 46-0-0	fertilizer.
		<u> </u>				
Groundwater Encoun	tered:	No	x	X Yes		Depth
Final Pit:	Sample location		4 point con	nposite sample	taken from pit si	dewalls. Grab sample
Closure Sampling: (in multiple samples,	·	taken from p	nit hottom ce	onter		
attach sample results					velle 40" into	nit hattam
and diagram of sample locations and depths)	Sample depth	8'	8 to 10"	nto pit sidev	valls 10" into _l	
	Sample Date Sample results		9/9/9	7	Sample Time	9:00 AM
	Benzene		(ppm)	ND		
	Total BTEX		(ppm)	ND		
	Field Headspace		(ppm)	50.5		
	TPH			side/3200		
Groundwater Sample		Yes		Btm/3000 No	XX(If	yes attach sample results)
I HEREBY CERTIFY T KNOWLEDGE AND B		TION ABO	VE IS TRU	JE AND COM	IPLETE TO TH	IE BEST OF MY
DATE	December 1, 199	8	PRINTE	D NAME	Jeff Cross	
SIGNATURE	uf los		_AND TIT	LE	Project Mana	nger

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 Pet	roleum		_Telephone	: :	505-325-0	318	
Address: 2	2855 South	side River Road, S	uite A, Farm	ington, N	VI 87401				
Facility or W	Vell Name:		Jic Apach	e Tribal A	118 #13 Pi	it #2			
Location: (Jnit or Qtr/C	Qtr Sec	F	Sec 35	T 26 N	R 3W	County	Rio Arriba	
Pit Type:	Separator:	xx	_Dehydrator	————————————————————————————————————	_Other				
Land Type:		Jicarilla Tribal							
	Beginniı	ng Pit Dimensions:	Length	6	<u>'</u> Width	6		ı 2'	
Pit Location: (Attach diag		g Pit Dimensions:	Length	12	_ Width	12	_ Depth	6'	
(r maorr arag	Referer	nce:	Wellhead	XX	_Other				
	Footage	e from reference:		100	·	_			
	Directio	n from reference:		44	Degrees	X	_East	North	XX
							o _West	f South _	
Depth To G	roundwate	r:			Less than t	50 feet		(20 points)	
(vertical distance					50 feet to 9			(10 points)	
contaminants to	o seasonal				Greater tha	an 100 feet		(0 points)	0
high water elev groundwater)	ation of							-	
Wellhead P							Yes	(20 points)	
(Less than 2							No	(0 points)	0
		or; less than water sources)							
Distance To	Surface W	/ater:			Less than 2	200 feet		(20 points)	
(Horizontal o	•				200 feet to			(10 points)	
		eams, creeks,			Greater tha	an 1000 fee	t	(0 points)	0
irrigation car	iais ailu ulto	nies)			RANKING	SCORE (T	AIO9 JATC	ITS) _	0

Date Remediation Sta	arted:	9/9/97	·	_Date Comp	oleted:	9/9/97
Remediation Method: (Check all appropriate	:	Excavation	xxx	_Approx. cu	bic yards	28
sections)	Landfarmed	Í	XX	_Insitu Biore	emediation	
		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 6', to	ok PID readir	ngs. Spread soil on
location fo	r remediation. Took	soil samp	les. Hit B	edrock, spra	y with 46-0-0) fertilizer.
				-		
Groundwater Encoun	tered:	No		<u>Yes</u>		Depth
Final Pit: Closure Sampling:	Sample location		4 point com	posite sample	taken from pit s	idewalls. Grab sample
(in multiple samples,		taken from p	it bottom ce	nter.		
attach sample results and diagram of sample	Sample depth	6'	8 to 10" ir	nto pit sidev	valls 10" into	pit bottom
locations and depths)	Sample Date Sample results		9/9/97	,	Sample Time	3:00 PM
	Benzene		(ppm)	ND		
	Total BTEX		(ppm)	ND		
	Field Headspace		(ppm)	46.26		
	TPH			side/2200 Btm/3000		
Groundwater Sample	:	Yes		_ No	XX (If	yes attach sample results)
I HEREBY CERTIFY T KNOWLEDGE AND B	HAT THE INFORMAT ELIEF.	TION ABOV	/E IS TRUE	E AND COM	PLETE TO TH	HE BEST OF MY
DATE	December 1, 1998		PRINTED	NAME	Jeff Cross	
SIGNATURE	Inf Cuon		AND TITL	E .	Project Mana	ager

 \overline{c}

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

M W	PETROLEUM			_Telephone	505-3	25-0318		
2855	SOUTHSIDE RI	VER ROAD	/ SUITE A	/ FARMING	STON N.M	. 87401-794	17	
ell Na	me:	JAT A118	# 13 PIT	# 1				
Unit	or Qtr/Qtr Sec	F	SEC 35	T 26N	R 3W	_County	RIO ARRIBA	
Sepa	arator:	Dehydrato	r	_Other	BLOW PI	Τ		
	JIC. TRIBA	AL					· · · · · · ·	· · · · · ·
	Pit Dimensions:	Length	18'	Width	18'	Dept	h8'	
am)	Reference:	Wellhead	XXX	_ _Other				
	Footage from ref	ference:	90'					
	-		20	_Degrees	X	East	North	XX
						West	of South	
round	lwater:						(20 points)_	
e from	al					et		0
tion of	vari			2.03.0				
-							(10 points)	
nt dry idth	wash greater tha	n		Greater th	an 100 fee	et	(0 points)	0
	•	or Waterin	g Pond:			.1	(10 points)	0 .
				Greater th	ian 100 tee	et	(o points)	<u> </u>
							(20 points)	
iter so	urce, or less than				N	10	(u points)	0
Surf	face Water:						(20 points)	
	•	_						0
		.5,						0
	2855 ell Na Unit Sepa am) round from season ion of An En nt dry dth Near nt lak wildlif rotect ter so mall stand rive	Pit Dimensions: Toundwater: Footage from ref Direction from ref seasonal ion of Toundwater: from seasonal ion of	2855 SOUTHSIDE RIVER ROAD ell Name: JAT A118 Unit or Qtr/Qtr Sec F Separator: Dehydrato JIC. TRIBAL Pit Dimensions: Length am) Reference: Wellhead Footage from reference: Direction from reference: from seasonal ion of an Ephemeral Stream: nt dry wash greater than dth Nearest Lake, Playa, or Waterin nt lakes, playas and wildlife watering ponds) rotection Area: 00 feet from a private ter source, or less than am all other water sources) Surface Water: listance to perennial , rivers, streams, creeks,	2855 SOUTHSIDE RIVER ROAD / SUITE A Ell Name: JAT A118 # 13 PIT a Unit or Qtr/Qtr Sec F SEC 35 Separator: Dehydrator JIC. TRIBAL Pit Dimensions: Length 18' Reference: Wellhead XXX Footage from reference: 90' Direction from reference: 20 Foundwater: from seasonal ion of an Ephemeral Stream: nt dry wash greater than dth Nearest Lake, Playa, or Watering Pond: nt lakes, playas and wildlife watering ponds) Fotection Area: 00 feet from a private ter source, or less than am all other water sources) Surface Water: listance to perennial private, streams, creeks,	2855 SOUTHSIDE RIVER ROAD / SUITE A / FARMING BIL Name: JAT A118 # 13 PIT # 1 Unit or Qtr/Qtr Sec F SEC 35 T 26N Separator: Dehydrator Other JIC. TRIBAL Pit Dimensions: Length 18' Width Reference: Wellhead XXX Other Footage from reference: 90' Direction from reference: 20 Degrees Foundwater: Less than 50 feet to Greater the seasonal Greater the dith Nearest Lake, Playa, or Watering Pond: Less than Greater the dith Nearest Lake, Playa, or Watering Pond: Less than Greater the wildlife watering ponds) Fotection Area: 00 feet from a private ther source, or less than am all other water sources) Surface Water: Less than 100 feet to Greater the listance to perennial 100 feet to Greater the listanc	2855 SOUTHSIDE RIVER ROAD / SUITE A / FARMINGTON N.M. Ell Name: JAT A118 # 13 PIT # 1 Unit or Qtr/Qtr Sec F SEC 35 T 26N R 3W Separator: Dehydrator Other BLOW PI JIC. TRIBAL Pit Dimensions: Length 18' Width 18' Reference: Wellhead XXX Other Footage from reference: 90' Direction from reference: 20 Degrees X Foundwater: Less than 50 feet 50 feet to 99 feet Greater than 100 feet Greater than 100 feet mt lakes, playas and wildlife watering ponds) Footection Area: Yes Other Greater than 100 feet to source, or less than mm all other water sources) Po Surface Water: Less than 100 feet to 1000 feet to 1000 feet in listance to perennial in rivers, streams, creeks, lais and ditches)	2855 SOUTHSIDE RIVER ROAD / SUITE A / FARMINGTON N.M. 87401-794 all Name: JAT A118 # 13 PIT # 1 Unit or Qtr/Qtr Sec F SEC 35 T 26N R 3W County Separator: Dehydrator Other BLOW PIT JIC. TRIBAL Pit Dimensions: Length 18' Width 18' Deption of Separator S	2855 SOUTHSIDE RIVER ROAD / SUITE A / FARMINGTON N.M. 87401-7947 Ell Name: JAT A118 # 13 PIT # 1 Unit or Qtr/Qtr Sec F SEC 35 T 26N R 3W County RIO ARRIBA Separator: Dehydrator Other BLOW PIT JIC. TRIBAL Pit Dimensions: Length 18' Width 18' Depth 8' ann) Reference: Wellhead XXX Other Footage from reference: 90' Direction from reference: 20 Degrees X East North of West South Foundwater: Less than 50 feet (20 points) Greater than 100 feet (10 points) Greater than 100 feet (0 points) Middlife watering ponds) Footage from reference: 20 Degrees X East North of West South Greater than 100 feet (10 points) Greater than 1000 feet (10 points) Greater than 1000 feet (10 points) Grea

:						
Date Remediation Start	ed: 9/8	3/97	_Date Comp	leted:	9/9/97	
Remediation Method:	Excavation	on XXX	_Approx. cub	oic yards	88	
(Check all appropriate sections)	Landfarm	ned XX	_Insitu Biore	mediation		
	Other					
Remediation Location: (i.e. landfarmed onsite, name and location of offsite facility)	On	site XX	_Offsite _			
General Description of	Remedial Action:	Excavate pit	to 8',took Pl	D readings. spr	ead soil on	
location fo	or remidiation. To	ok soil sampl	es.	HIT BEDROCK,	SPRAY WITH 4	6-0-0 FERT.
Groundwater Encounte	red:	No xxx	_ Yes_		Depth	_
Final Pit: Closure Sampling: (in multiple samples,	Sample location	4 point co	2	n from pit sidewa		
attach sample results and diagram of sample	Sample depth	8'	· ·			
locations and depths) Sample Da Sample re		9/9/9	7	Sample Ti <u>me</u>	9:00AM	
Soil:	Benzene	(ppm)	ND	Water: Benz	ene (ppb)	NA
	Total BTEX	(ppm)	ND	Tolue	ene (ppb)	NA
·	Field Headspace	(ppm)	50.5	Ethylben	zene (ppb)	NA
	TPH	(ppm)	SIDE\3200	_	enes (ppb)	NA
Groundwater Sample:		Yes	BTM\3000 No		s attach sample	results)
I HEREBY CERTIFY TH KNOWLEDGE AND BE		ATION ABOVI	E IS TRUE A	ND COMPLETE	TO THE BEST	OF MY
DATE <u>9-2</u>	2-98	PRINTE	NAME	JEFF	CROSS	
SIGNATURE		AND TIT		PRO	JECT MANAGE	R
AFTER REVIEW OF THE JICARILLA APAC				URE IS APPRO	VED IN ACCOR	RDANCE TO
APPROVED: YES		NO	_(REASON)			
SIGNED:	C Ma		DATE:	11-13	-98	

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

Operator:	MW	PETRO	DLEUM			_Telephone	·	505-32	5-0318		
Address:	2855	SOUTH	ISIDE RI	VER ROAD	/ SUITE A	/ FARMING	зто	N N.M.	87401-794	17	
Facility or We	eli Na	me: _		JAT A118	# 13 PIT	# 2					
Location:	Unit	or Qtr/Q	tr Sec	F	SEC 35	T 26N	R:	3W	County	RIO ARRIBA	\
Pit Type:	Sepa	arator: _	XX	_Dehydrato	r	_Other					
Land Type:		J	IC. TRIB	AL						22	
Pit Location: (Attach diagr		Refere		Length Wellhead	xxx	Width _Other	1	12'	_ DeptI	n <u>6'</u>	
		_	e from re on from re	eference:	44	Degrees	_	X	_East o	-	XX
									_West	South	
Depth To Gr	round	water:				Less than	50 f	eet		(20 points)	
(vertical distance	e from					50 feet to				(10 points)_	
contaminants to	seasona	al				Greater th	ıan 1	00 feet		(0 points) _	0
high water elevat groundwater)	tion of										
Distance to	an En	hemera	al Stream	1 :		Less than	100	feet		(10 points)	
(Downgradie ten feet in wi	ent dry					Greater th				(0 points) _	
Distance to	Neare	est Lake	e, Playa,	or Waterin	g Pond:	Less than	100	feet		(10 points)_	
(Downgradie livestock or v						Greater th	an 1	00 feet		(0 points) _	0
Wellhead Pr								Yes		(20 points)_	
(Less than 20 domestic wat 1000 feet fro	ater so	urce, or	less than					No)	(0 points) _	0
Distance To	Surf	ace Wat	er.			Less than	100	feet		(20 points)	
(Horizontal d						100 feet to				(10 points)	· · · · · · · · · · · · · · · · · · ·
lakes, ponds		-		s,		Greater th			et	(0 points)	0
irrigation can				•		RANKING	sc	ORE (1	OTAL PO	NTS)	0
L											

Date Remediation Star	ted: 9/9/97		Date Comp	leted:		9/9/97	
Remediation Method:	Excavation	XXX	Approx. cut	oic yards		28	
(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 of	Remedial Action: Ex	cavate pit t	o 6'.took Pl	D reading	s. spread s	oil on	
	or remidiation. Took					Y WITH 46-	0-0 FERT.
Groundwater Encount		··					
Final Pit: Closure Sampling:	Sample location	4 point cor	nposite take	n from pit :	sidewalls, G	Grab sample	from pit
(in multiple samples, attach sample results	bottom ce	nter.	8" to 10" in	to pit side v	n "10, alls walls	to pit bottom	1.
and diagram of sample	Sample depth	6'	-				·
locations and depths) Sample D Sample re		9/9/97		Sample Ti	me	3:00PM	
Soil:	Benzene	(ppm)	ND	Water:	Benzene	(ppb)	NA
	Total BTEX	(ppm)	ND		Toluene	(ppb)	NA
	Field Headspace	(ppm)	46.26	Eth	ylbenzene	(ppb)	NA
	TPH	(ppm)	SIDE\2200 BTM\3000	i e	al Xylenes	(ppb)	NA
Groundwater Sample:	Yes	s	No.		_(If yes atta	ich sample r	esults)
I HEREBY CERTIFY THE KNOWLEDGE AND BE		ON ABOVE	IS TRUE A	ND COMP	LETE TO T	HE BEST C	OF MY
DATE <u>9-</u>	12.98	PRINTED	NAME		JEFF CR	oss	
SIGNATURE	12.98 Mus	_AND TITL	E		PROJECT	MANAGER	!
AFTER REVIEW OF THE JICARILLA APAC				SURE IS A	PPROVED	IN ACCORD	ANCE TO
APPROVED: YES	s NO)	_(REASON))			
SIGNED:	of Mand	2(DATE:		13 -9	8	

M W PETROLEUM/FARMINGTON DISTRICT PIT EXCAVATION AND CLOSURE REPORT

PIT E	XCAVATIO	ON AND C	LOSURE I	REPORT	Γ.	Jicarilla Apach	e Tribal EPO/	OCD/BLM	
LOCAT	TION .	JAT A118 # 13	3			Review and Ap			
	S. 16.1 	0				EPO Represe	ntative		
PIT CC	JUNI	2				Date of Review	,		
					L				
	START:	PIT#1 9/9/97			FINISH:	PIT#1 9/9/97			
DIMENS		PIT#2 9/9/97				PIT#2 9/9/97			
DIMEN	W	L	D			W	L	D	CU YDS
Pit 1	10'	10'	4'	Pit 1		18'	18'	8'	88
Pit 2	6'	6'	2'	Pit 2		12'	12'	6'	28
Pit 3	<u>-</u> -			Pit 3					
PRS		Pit 1 @ 8'	Pit 2 @ 6'	Pit 3 @			Pit 1 @ 8'	Pit 2 @ 6'	Pit 3 @
	Center	72.7	86.5	 		Center	72.7	86.5	
	Center	52.1	36.4		P	NW Corner	52.1	36.4	
P	NW Corner	50.6	38.1			NE Corner	50.6	38.1	
1	NE Corner	 	29.8		d f	SW Corner	34.6	29.8	
D	SW Corner	34.6	40.5	 	1	SE Corner	42.5	40.5	
NOTES	SE Corner	42.5	40.5	<u></u>					
	PIT #1 PID R 9/9/97 STAR 9/9/97 FINIS PIT #2 PID I	EADINGS GO T EXCAVATION H EXCAVATION READINGS GO PLED PIT # 1&	OD @ 8' , HIT ON ON PIT # 2 OOD @ 6' HIT	, NO STAINI ROCK BOTT LIGHT STAIN ROCK BOTT TO ASSAIGA	OM, SPR NING AND NG OR O OM,SPRA	AYED WITH 4 O ODOR @ 4' DOR @ 6'	·		
	SAMP DATE	Pit 1 @	Pit 2 @	Pit 3 @	ANALY	SIS RESULTS		PER LAB	Assaigai
	Conton	72.7	86.5	1	PIT	TPH	BETEX	WITNESS	DATE
	Center	52.1	36.4	- 	NO	SIDE\BTM			
P	NW Corner			+	1	3200\3000		J.C.	9/15/97
	NE Corner	50.6	38.1		1 2	2200\3000		J.C.	9/15/97
0	SW Corner	34.6	29.8	_	3	220010000	+		
	SE Corner	42.5	40.5	DE 643451					
			T=	RE-SAMPL		CIC DECLII TO		PER LAB	
DATE	:	Pit 1 @	Pit 2 @	Pit 3 @		SIS RESULTS		WITNESS	DATE
	Center				PIT	TPH	BETEX		DATE
ρ	NW Corner		ĺ		NO	SIDE\BTM	SIDE\BTM		
1	NE Corner				11				
ä	SW Corner				2				
	SF Corner		1		3				

RE-SAMPLE

Pit 3 @

Pit 2 @

Pit 1 @

DATE:

P

D

Center

NW Corner

NE Corner

SW Corner

SE Corner

ANALYSIS RESULTS

PIT

NO

1

2

3

TPH

SIDE\BTM

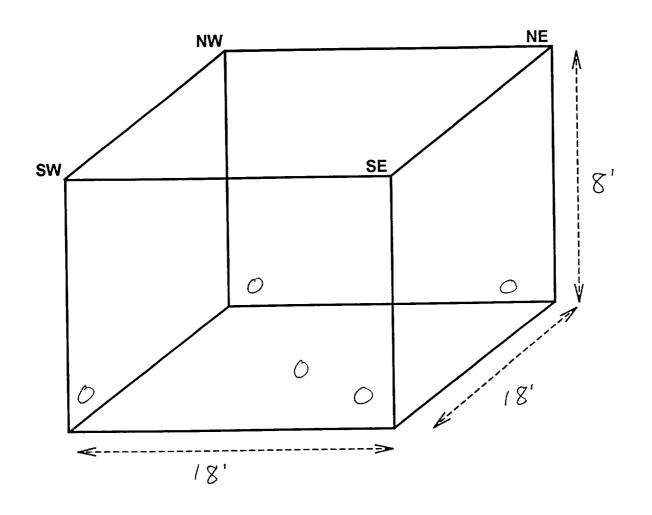
PER LAB

BETEX

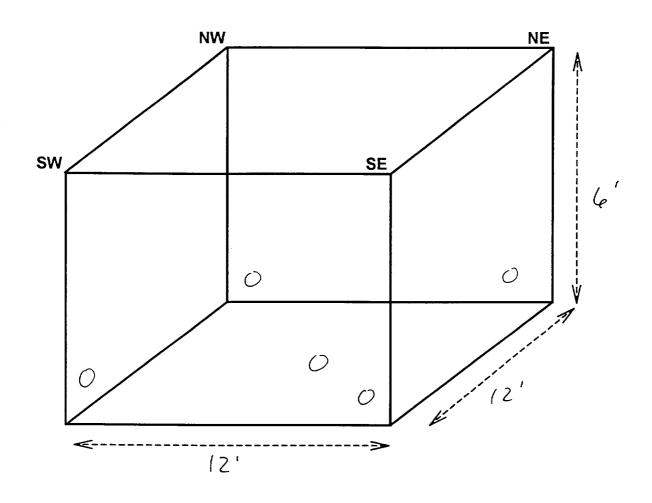
SIDE\BTM

WITNESS

DATE



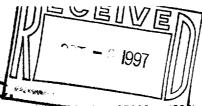
				. (= SAMPLE AREA
WELL NAI	ME	JAT A 118 # 13	PIT#1		
SAMPLE	DATE	9.	/9/97		
NOTES	4 POIN	IT COMPOSITE S	AMPLE TAKEN 8'	' TO 10" INTO	PIT
110120	SIDEV				
	1 POII	NT GRAB SAMPLI	E TAKEN 10" TO	12" INTO BOT	TOM CENTER
	HIT BED	ROCK @ 8'			



						= SAMPLE AREA
WELL NA	ME	JAT A 118 # 13	PIT#2			
SAMPLE I	DATE	9/	9/97			
NOTES	4 POIN	T COMPOSITE SA	AMPLE TAKEN	1 8" TO 10" IN	ITO PIT	
	SIDEW	VALL				
	1 POIN	NT GRAB SAMPLE	TAKEN 10" T	O 12" INTO E	воттом (CENTER
						· ·
	HIT BED F	ROCK @ 6'				
						-
					· · · · · · · <u>-</u> !	



ASSAIGAI ANALYTICAL LABORATORIES, INC.



7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (50b) 345-8964 • FAX (505) 345-7259

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

Report Generated:

September 23, 1997 11:07

CERTIFICATE OF ANALYSIS RESULTS BY SAMPLE

SENT APACHE CORPORATION

WORKORDER #

: 9709121

TO: 2855 SOUTHSIDE RIVER RD STE AWORK ID

: JICARILLA PIT CLOSURES

FARMINGTON, NM 87401-7947

CLIENT CODE

: APA01

DATE RECEIVED: 09/12/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9709121-01A

Sample ID: A118 #13 PIT 1 SIDES

Collected: 09/09/97 09:00:00

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	09/15/97	X97265
	ND	mg/kg	0.0050	100	09/15/97	X97265
	ND	mg/kg	0.0050	100	09/15/97	X97265
	ND	mg/kg	0.010	100	09/15/97	X97265
	ND	mg/kg	0.0050	100	09/15/97	X97265

Lab ID: 9709121-01B

Sample ID: A118 #13 PIT 1 SIDES

Collected: 09/09/97 09:00:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID		
Diesel Range OG Soil/M8015 Diesel Range OG in Soil	3200	mg/Kg	25	25	09/18/97	SDRO053		

Lab ID: 9709121-02A

Sample ID: A118 #13 PIT 1 BOTTOM

Collected: 09/09/97 09:30:00

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	0.0050 0.0050 0.0050 0.010 0.0050	250 250 250 250 250 250	09/15/97 09/15/97 09/15/97 09/15/97 09/15/97	X97265 X97265 X97265 X97265 X97265



JID: 9709121-02B
Sample ID: A118 #13 PIT 1 BOTTOM

Collected: 09/09/97 09:30:00 **Matrix:** SOLL

Sample ID: All8 #13 PIT 1	BOTTOM	Matrix: SOIL							
TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID			
Diesel Range OG Soil/M8015 Diesel Range OG in Soil	3000	mg/Kg	25	25	09/18/97	SDRO053			
Lab ID: 9709121-03A Sample ID: A118 #13 PIT 2	s SIDES	Collected: Matrix: SO		97 15	:00:00				
rest / 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	250 250 250 250 250 250	09/15/97 09/15/97 09/15/97 09/15/97 09/15/97	X97265 X97265 X97265 X97265 X97265			
Lab ID: 9709121-03B Sample ID: A118 #13 PIT 2	2 SIDES	Collected: Matrix: So		97 15	:00:00				
GT / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID			
Diesel Range OG Soil/M8015 Diesel Range OG in Soil	2200	mg/Kg	25	25	09/18/97	SDRO053			
Lab ID: 9709121-04A Sample ID: A118 #13 PIT :	2 BOTTOM	Collected: Matrix: So		97 15	:30:00				
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	250 250 250 250 250 250	09/15/97 09/15/97 09/15/97 09/15/97 09/15/97	X97265 X97265 X97265 X97265 X97265			
Lab ID: 9709121-04B Sample ID: A118 #13 PIT	2 BOTTOM	Collected: Matrix: S		97 15	:30:00				
TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID			
Diesel Range OG Soil/M8015 esel Range OG in Soil	3000	mg/Kg	25	25	09/18/97	SDRO053			

William P. Biava

President

WORKORDER COMMENTS

DATE : 09/23/97

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

6411 LOCAL UNO CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320 3332 WEDGEWOOD EL PASO, TEXAS 79925 (915) 593-6000 $\overline{>}$ Surveyor C Scott PrAT Clail of Austriay necola Preservation mp. Chemical TCE Project Manager / Contact_Jeff_Cross Telephone No. (505) 774-6643 Relinquished by: Temp Signature Printed_ Fax No. (505) 774-6624 Type / Size of Container 4/02 hlass Samplers: (Signature) _ はすく Page 1000 Lab job no. 118#3 Pit# (Sides 9.9-97 9:00 Sil Sample Type Project Name / Number JICARILLA PIT CLOSURES 3:8 A K 2.2 Ę Received by: Signature Date City/State/ZipEarmington, NM 87401 Allots P. It Bottom 4118#38:4 2 Sides Date Allot 3 CitaBotton Client Apache Corporation Field Locadon Address 304 N. Behrend Contract / Purchase Order / Quote __ John Mulaix 03H りより 023 027 せてい せつ Refinquished by: The second Signature Printed __

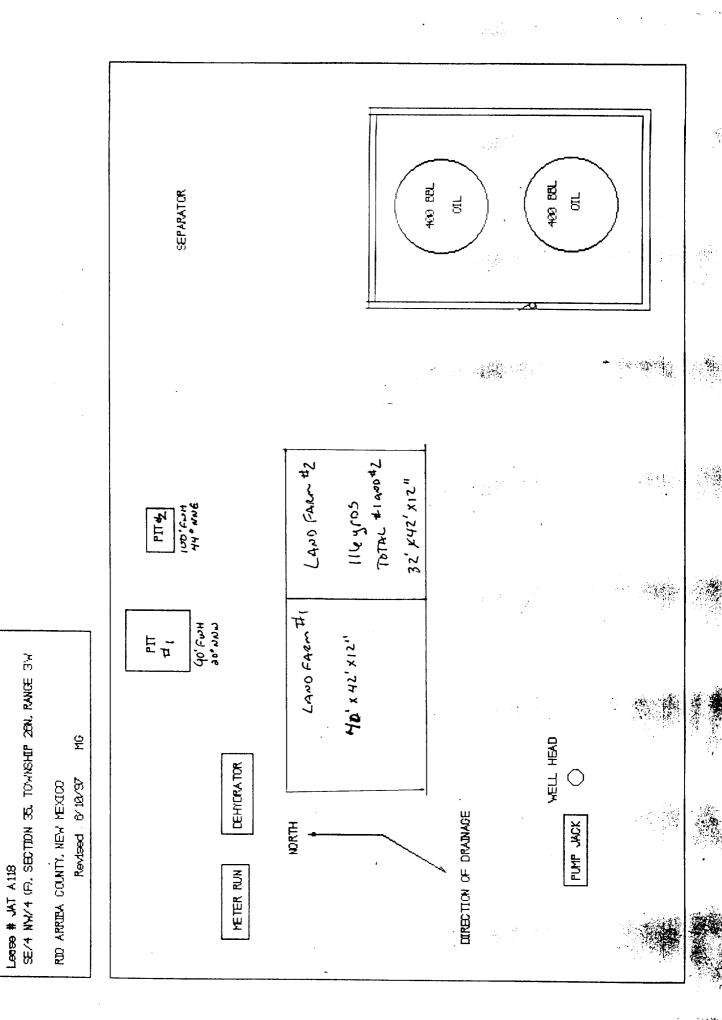
1910 N. BIG. SPRING MIDLAND, TEXAS 79705 (915) 570-1116

MELQUIADES ALANIS

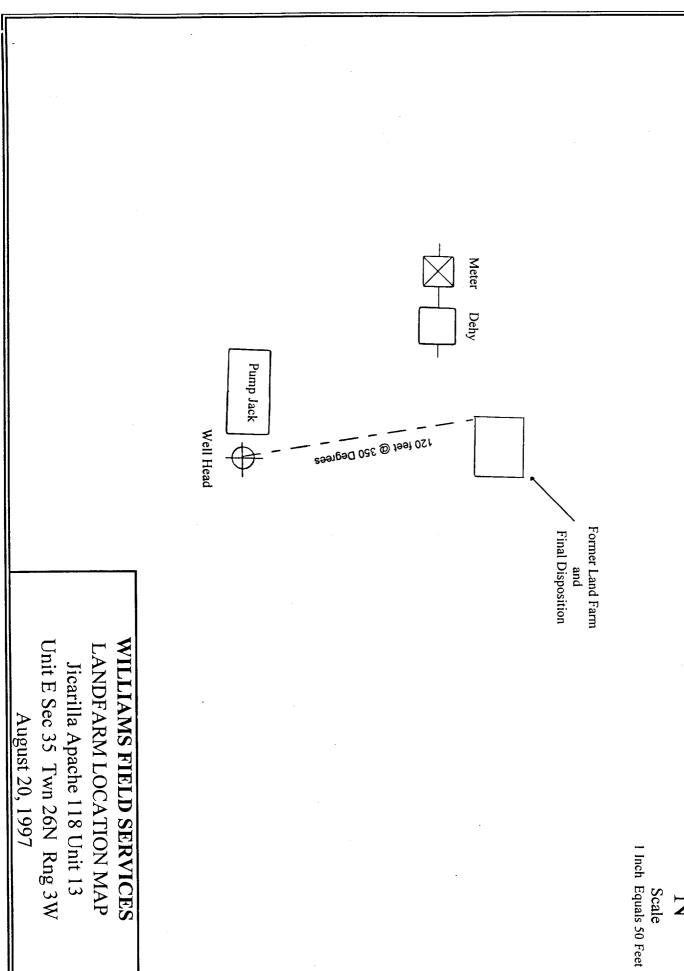
ALBUQUERQUE, NEW MEXICO 873-99, (505) 245-8964

Remarks Stored over 30 days (additional fee) Disposed of (additional fee) Returned to customer Stored (30 days max) Analysis Required After analysis, samples are to be: 12 Sept. Asignature Сотрану Reason 10,30 Company Reason Comments: Company Reason Ë Heachs Cosp. Wethod of Shipment Special Instructions: Shipment No. Company Reason

LABORATORY



M W RETROLEUM JICARILLA APACHE 118 NUMBER 13



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

ON-SITE SOIL REMEDIATION REPORT

Operator:	M W PET	ROLUEM			Telephon	e	505-325-0	318					
Address:	•••	2855 SOUTHS	IDE RI	VER ROAD	/SUITE A	/FARMING	TON, N.M.	87401-7947					
Facility or W	ell Name:	JAT	Γ Α118 :	#13 CEL	L#1		.,,						
Location:		r/Qtr Sec				R3W	_County	RIO ARRI	ВА				
Land Type		JIC. TRIBAL											
Date Remed	iation Starte	ed: 9	/8/97		_Date Con	npleted:		6/14/98					
Remediation	Method:	Landfarmed		XXX	Approx. o	cubic yards		65					
		Composted											
<u>.</u>		Other			REMEDI	ATED SOIL	TO BE SP	READ ON L	OCATION.				
Depth to Gro	oundwater:	<u>, ,</u>	(pts)	0		Final Clo	sure Samp	oling					
Distance to	an Epheme	ral Stream:	(pts)	0	Sampling	g Date:	6/14/98	_Time:	12:50PM				
Distance to or Watering		ce, Playa,	(pts)	00	Sample I		_						
Wellhead P	rotection Ar	ea:	(pts)	0		space (ppm) (ppm	0 n) 2900	— Method	M8015				
Distance To	Surface W	ater:	(pts)	0	TPH (ppm) 2900 Method M8 Other BTEX \ SW846 , 8020A (ND)								
RANKING S	SCORE (TO	TAL POINTS)		0	-	CI BIEX (C	341010,00						
RANKING SCORE (TOTAL POINTS) I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF													
DATE:		9/22/98		_PRINTED	NAME		JEFF C	ROSS					
SIGNATUR	E	eff Coo	2	TITLE		PROJEC	T MANAG	ER					
AFTER REY	VIEW OF T	HE SOIL REME HE JICARILLA A	DIATIC PACHE	N INFORM	MATION. (T CLOSUF	ON-SITE RE	MEDIATIO NCE.	N IS APPR	OVED IN				
APPROVE	D: YE	s	NO	D	_(REASC)N)							
SIGNED:	Ke	-C Ma		DATE:		- 13-9	8		-				

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

ON-SITE SOIL REMEDIATION REPORT

Operator:	M W PETF	ROLUEM			_Telephon	Telephone 505-325-0318							
Address:		2855 SOUTH	ISIDE RI	VER ROAD	D /SUITE A/FARMINGTON, N.M. 87401-7947								
Facility or W		J/											
Location:		-/Qtr Sec				R3W	County	RIO ARR	IBA				
Land Type	•	JIC. TRIBAL	•					·					
Date Remed	iation Starte	ed:	9/8/97		_Date Cor	mpleted:		6/14/98					
Remediation	Method:	Landfarmed		XXX	_Approx. o	cubic yards	51						
		Composted			_								
		Other			REMEDI	ATED SOIL	TO BE SP	READ ON	LOCATION.				
Depth to Gro	oundwater:		(pts))0		Final Clo	sure Sam	pling					
Distance to a	an Ephemer	ral Stream:	(pts)0	Sampling	g Date:	6/14/98	Time:	1:00PM				
Distance to l or Watering		e, Playa,	(pts	00	Sample I	Results:	0						
Wellhead Pr	rotection Are	еа:		0		— Method	M8015						
Distance To	Surface Wa	ater:	(pts	0	Oth	D)							
RANKING S	CORE (TO	TAL POINTS)	0	-								
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF													
DATE:		9/22/98		_PRINTED	NAME		JEFF C	ROSS					
SIGNATUR	E	floor	2	_TITLE		PROJEC	T MANAG	ER					
AFTER REV	VIEW OF TH	HE SOIL REM E JICARILLA	EDIATIC APACHE	N INFORM	MATION. (T CLOSUF	ON-SITE RE	MEDIATIC NCE.	N IS APPR	OVED IN				
APPROVED	D: YES	s_X_	N	٥	_(REASC)N)	, , , ,		<u> </u>				
SIGNED:	X.	C Man		DATE:		1-13-9	78						

M W PETROLEUM/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE	: 	JAT A118 # 13			
* AMOUNT OF SOIL	UNDERG	OING REMEDIATION	116	Yds.	
CELL No.	1		SampDATE 6/14/98	TPH 2900	BTEX ND
DIMENSIONS(LxWxH)	40)' X 42' X 12"	-		
CELL LOCATION (dir. fr	om well hea	d NORTH			
* DATE BEGAN:	9/9/97	<u> </u>			
		ppm/BTEX< 50 ppm/Benzene < 1	0 ppm) 6/14/9	8	-
			SampDATE	TPH	BTEX
CELL No.	2		6/14/98	3500	ND
DIMENSIONS(LxWxH)	32	2' X 42' X 12"			
CELL LOCATION (dir. fi	om well hea	d NORTH EAST			
* DATE BEGAN:	9/9/97				
_	· · · · · · · · · · · · · · · · · · ·	ppm/BTEX< 50 ppm/Benzene < 1	10 ppm)6/14/9	8	_
			SampDATE	TPH	BTEX
CELL No.	3				
DIMENSIONS(LxWxH)	_				
CELL LOCATION (dir. f	rom well hea	ad			
* DATE BEGAN:					
DATE TERMINATED (1	PH <5,000	ppm/BTEX< 50 ppm/Benzene < 1	10 ppm)		-
REMEDIATION RECOF	RD: (Date, T	reatment, Tilling)			
9/12/97 TREAT BOTH	CELLS WIT	H 46-0-0 FERTILIZER,WATER,P	LOW AND TILL.		
9/23/97 PLOW AND TIL					
4/23/98 PLOW AND TIL		F.1.0			A
5/5/98 WATER,PLOW		ELLS.			
5/21/98 PLOW AND TH					
5/29/98 PLOW AND TIL 6/3/98 WATER,PLOW		EIIS			
6/12/98 PLOW AND TII		LLLU.			
16/12/98 PLOW AND TH	L CELLO.				

From excavation reports.

WELL NAME:	JAT A118 # 13 CELL # 1)	
DIMENSIONS:	40' X 42' X 12"	(<u></u>	י מאַציין רה אַאָהאָ
0	0		0
	Ο	0	
0	Ο		0
NOTES:	ALL SAMPLES TAKEN 10" TO 12" INTO CELL. 8 POINT COMPOSITE SAMPLE		

WELL NAME: SAMPLE DATE: DIMENSIONS:	JAT A118 # 13 CELL # 2 6/14/98 32' X 42' X 12"	0	= SAMPLE AREA
0	0		
	0	0	
0	0		
NOTES:	ALL SAMPLES TAKEN 10" TO 12" INTO CELL. 8 POINT COMPOSITE SAMPLE		





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
3	analyte detected in Method Blank
=	result is estimated
1	analyzed out of hold time
	tentatively identified compound
	subcontracted
9	see footnote

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client:

APACHE CORPORATION

Project: 9806208

JICARILLA

William P. Blava: President of Assaigal Analytical Laboratories, Inc.

Client Sample ID	JAT A11	18 #13 (CELL 1	Sar Mai	nple SOIL trix				Sample Collected	06/14/98 12:50:00
	00 0	CAS #		Result	Units	Dilution Factor	Detection <u>Limit</u>	*	Sequence	Run <u>Date</u>
raction	QC Group	CAS#			<u></u>					
		5	SW846-8020 Volatiles				0.005		XG.1998.551-22	06/18/98
806208-01A	X98330	71-43-2	Benzene	ND	mg / Kg	50			XG.1998.551-22	00.10.04
	X98330	100-41-4	Ethylbenzene	ND	mg / Kg	50	0.005		XG.1998.551-22	
	X98330	95-47-6	o-Xylene	ND	mg / Kg	50	0.005		XG.1998.551-22	
	X98330		p/m Xylenes	ND	mg / Kg	50	0.01		XG.1998.551-22	
	X98330	108-88-3	Toluene	ND	mg / Kg	50	0.005		XG. 1990.551-22	
	JAT A1	18 #13	CELL 2		ample SOIL	_			Sample Collected	
Sample ID	JAT A1	18 #13 CAS#	CELL 2			Dilution Factor	Detection <u>Limit</u>	*		
Client Sample ID Fraction		CAS#	CELL 2	Ma	<u>Units</u>	Dilution Factor	<u>Limit</u>	*	Collected Sequence	13:00:0 Run <u>Date</u>
Fraction	QC Group	CAS#		Ma	Units	Dilution Factor	<u>Limit</u>	*	Sequence XG.1998.551-23	13:00:0 Run
Fraction	QC Group	CAS#	SW846-8020 Volatiles	Result	<u>Units</u>	Dilution Factor	0.005 0.005	*	Sequence XG.1998.551-23 XG.1998.551-23	13:00:0 Run <u>Date</u>
raction	QC Group	<u>CAS #</u>	SW846-8020 Volatiles Benzene	Result ND	Units	Dilution Factor 50 50	0.005 0.005 0.005	*	Collected Sequence XG.1998.551-23 XG.1998.551-23 XG.1998.551-23	13:00:0 Run <u>Date</u>
Sample ID	QC Group X98330 X98330 X98330	CAS #	SW846-8020 Volatiles Benzene Ethylbenzene o-Xylene	Result ND ND	Units mg/Kg mg/Kg	Dilution Factor	0.005 0.005 0.005 0.005	*	XG.1998.551-23 XG.1998.551-23 XG.1998.551-23 XG.1998.551-23	13:00:0 Run <u>Date</u>
Fraction	QC Group X98330 X98330	CAS #	SW846-8020 Volatiles Benzene Ethylbenzene	Result ND ND	Units mg / Kg mg / Kg mg / Kg	Dilution Factor 50 50	0.005 0.005 0.005	*	Collected Sequence XG.1998.551-23 XG.1998.551-23 XG.1998.551-23	<u>Date</u>
Fraction	QC Group X98330 X98330 X98330 X98330	CAS# 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 mg / Kg	50 50 50 50	0.005 0.005 0.005 0.005	*	XG.1998.551-23 XG.1998.551-23 XG.1998.551-23 XG.1998.551-23	13:00:0 Run <u>Date</u>

Page 1 of 2

9806208-02B

1 of 2

X98331





Diesel Range Organics

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: APACHE CORPORATION
Project: 9806208 JICARILLA

 Page 2 of 2
 Coyote Reports
 ver 1.1 / 980406
 Report Date
 6/24/98 10:43:36 AM

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

ASSAIGAI

Chain of Custony necolu

Date 6200

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

(505) 345-8964

コく)ニーコくフィ		1000 134
LABORATORIES, INC.	of	cc (c16)
Client Apache Corporation Project Manager / Co	Project Manager/Contact Jeff Cross	
Address 2855 Southside River RD, Ste. Arelephone No. (505) 774-6643	05) 774-6643	Analysis Required
City / State / Zip Rarming ton, NM 87401-7947 Fax No. (505) 774-6624	774-6624	
Project Name / Number	ure) Hamuy My Il On	Nonietros.
Contract / Purchase Order / Quote		TARTIES OF THE PROPERTY OF THE

Remarks .

				<u>,</u>				Kar	Lance John	20.00			(56)		
								Date Received by:	Time Printed	7.30 Company	After analysis, samples are to be:	Disposed of (additional	[_] Slored (30 days max) [_] Slored over 30 days (add		
Temp. Chemical City	The X	- X	×						TPVATT	AA(A				
Type / Size of Contuiner (2007)		4 oz a lass							Scott WALL Printed	74	TIOSPOIL COMME				LABORATORY
Time Sample Type	6/4/98 17:50 Soil	-	(;oa					Received by:			Rea	Comments			-
Sample Humber / Location Date	7	ור וו וו וו ון	JAT A 118#13 (ALL 7					Date Received by:		Time // // //					
FAACTION Sample 1				12 C				Relinquished by//	Signature Helf Lieux	Company Apache Colp	Reason	Hethod of Shipment:	Shipment No.	Special Instructions:	