State of New Mexico

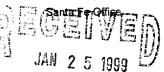
1000 Rio Brazos Rd Energy Minerals and Natural Resources Department

Azternily 87410 GAS INSPECTOR State of New Mexico

JAN 2 9 1999

OIL CONSERVATION DIVISION

2040 S. PACHECO Santa Fe, New Mexico 87505 Appropriate District and 1 copy to



REMEDIATION AND CLOSURE REPORT

Aa	PIT REMEDIA	ATION AN	ND CLO	SURE R	EPORT		GON. DI	JV.
Operator: Apa	che Corporation \ MW Petr	oleum		Telephone		505-325-0	318	
Address: 285	5 Southside River Road, St	uite A, Farm	ington, N	N 87401				
Facility or Well	Name:	Jic Apach	e Tribal A1	18 #7 Pit #	¥1			
Location: Unit	or Qtr/Qtr Sec	N	Sec 25	T 26 N	R 3W	County	Rio Arriba	
Pit Type: Sep	arator:	_Dehydrato	r	Other	Blow Pit			
Land Type:	Jicarilla Tribal							<u> </u>
	Beginning Pit Dimensions:	Length	35	• Width	30'	Depth	n	
Pit Location:	Ending Pit Dimensions:	Length	50	<u>'</u> Width	35'	Depth	n <u>15'</u>	
(Attach diagran	n) Reference:	Wellhead	XX	_Other				
	Footage from reference:		100	1	_			
	Direction from reference:		224	_Degrees		East	North	
					X	_West	of South <u> </u>	XX
Depth To Gro (vertical distance f contaminants to se high water elevation	from easonal		-	Less than 50 feet to Greater th			(20 points) _ (10 points) _ (0 points) _	0
domestic wate	tection Area:) feet from a private or source, or; less than or all other water sources)					Yes No	(20 points) _ (0 points) _	0
Distance To S (Horizontal dis lakes, ponds,	Surface Water: stance to perennial rivers, streams, creeks, lls and ditches)			Greater th	o 1000 feet nan 1000 fe	et	(20 points) (10 points) (0 points)	0
				KANKING	SCORE (DIALPU		

Date Remediation Star	ted:	7/9/97		_Date Compl	eted:	7/14/97
Remediation Method: (Check all appropriate		Excavation	XXX	_Approx. cub	ic yards	777
sections)	Landfarmed		XX	_Insitu Biorer	mediation	
		Other				
Remediation Location (i.e. landfarmed onsite, name and location of offsite facility)	:	Onsite	XX	Offsite _		
General Description o	f Remedial Action:		Excavate	e pit to 15' , to	ook PID reading	s. Spread soil on
location for	remediation. Took	soil samp	les.			
	110					

Groundwater Encoun	tered:	No	x	X Yes		Depth
Final Pit:	Sample location	' ∃(5 point co	mposite sample	taken from pit side	walls and pit
Closure Sampling: (in multiple samples,			bottom ce	nter		
attach sample results and diagram of sample	Sample depth	15'	8 to 10"	into pit sidev	valls 10" into pi	t bottom
locations and depths)						
	Sample Date Sample results		7/14/9	37	Sample Time	9:30 AM
	Benzene		(ppm)	ND		
	Total BTEX		(ppm)	ND		
	Field Headspace		(ppm)	18.98		
	TPH			ND	-	
Groundwater Sample	:	Ye	s	No	XX (If ye	es attach sample results)
I HEREBY CERTIFY I KNOWLEDGE AND B		ATION ABO	VE IS TRI	UE AND COM	PLETE TO THE	BEST OF MY
DATE	January 8, 199	9	PRINTE	D NAME	Jeff Cross	
SIGNATURE	M Cron		AND TI	ΓLE	Project Manag	er

 $\overline{\mathcal{U}}$

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:	perator: Apache Corporation \ MW Petroleum					: :	505-325-0		
Address:	2855 South	side River Road, St	uite A, Farm	ington, NN	1 87401				
Facility or	Well Name:		Jic Apach	e Tribal A1	18 #7 Pit	#2		-	
Location:	Unit or Qtr/0	Qtr Sec	N	Sec 25	T 26 N	R 3W	County	Rio Arriba	
Pit Type:	Separator:	XX	_Dehydratoi		Other				
Land Type	e <u>:</u>	Jicarilla Tribal					 -		
	Beginni	ng Pit Dimensions:	Length	20	Width	20	Dept	h 3'	
Pit Location:		ng Pit Dimensions:	Length	28	- Width	25	_ _ Dept	h <u>12'</u>	
(Attach dia	agram) Refere	nce:	Wellhead	XX	Other				
	Footag	e from reference:		70	1				
	Direction	on from reference:		310	Degrees		East	North	Х
						XX	_West	of South	
Denth To	Groundwate	ar:			Less than	50 feet		(20 points)	
(vertical dist					50 feet to			(10 points)	
`	s to seasonal					an 100 feet		(0 points)	0
high water e	levation of							· /	
groundwater									
1	Protection /						Yes	(20 points)_	
,	n 200 feet from						No	(0 points) _	0
B		, or; less than r water sources)							
	To Surface \				Less than			(20 points)	
1.	al distance to	•				o 1000 feet		(10 points)	
		reams, creeks,			Greater th	nan 1000 fe	et	(0 points) _	0
ingation (canals and di	iones)			RANKING	SCORE (T	OTAL POI	NTS)	0
<u></u>				:					

Date Remediation Sta	ırted:	8/7/97		_Date Comple	eted:	8/8/97
Remediation Method: (Check all appropriate		Excavation	xxx	_Approx. cubi	c yards	233
sections)	Landfarmed		XX	_Insitu Biorem	nediation	
		Other				
Remediation Location (i.e. landfarmed onsite, name and location of		Onsite	xx	_Offsite		
offsite facility)						
General Description o	of Remedial Action:		Excavate	pit to 12' , too	ok PID reading:	s. Spread soil on
. location for	r remediation. Took		<u> </u>	-		
		-			· · · · · · · · · · · · · · · · · · ·	

Groundwater Encoun	tered:	No	XX	Yes_		Depth
Final Pit:	Sample location		5 point com	posite sample ta	ken from pit sidev	valls and pit
Closure Sampling: (in multiple samples,			bottom cent	ter		
attach sample results and diagram of sample	Sample depth	12'	8 to 10" in	ıto pit sidewa	lls 10" into pit	bottom
locations and depths)	Sample Date Sample results		8/8/97	<u>,</u> s	ample Time	10:00 AM
	Benzene		(ppm)	ND		
	Total BTEX		(ppm)	ND		
	Field Headspace		(ppm)	22.94		
	TPH			1100/side		
Groundwater Sample:		Yes		2900/BTM No		s attach sample results)
I HEREBY CERTIFY TO KNOWLEDGE AND BI		TION ABOV	E IS TRUE	AND COMPI	LETE TO THE E	BEST OF MY
DATE	January 8, 1999		PRINTED	NAME J	eff Cross	
SIGNATURE	Jeff lion		AND TITL	E <u>P</u>	roject Manage	•

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

PIT REMEDIATION AND CLOSURE REPORT

Operator: <u>N</u>	W PETROLEUM			_Telephone	50	5-32	5-0318		
Address: 2	855 SOUTHSIDE R	IVER ROAL) / SUITE A	/ FARMING	GTON I	N.M.	87401-794	7	
Facility or Well	Name:	JAT A118	#7	PIT#1					· .
Location: L	Jnit or Qtr/Qtr Sec	N	SEC 25	T 26N	R 3W	<u> </u>	County	RIO ARRIBA	<u> </u>
Pit Type: S	Separator:	_Dehydrato	or	_Other	BLOV	VPIT			
Land Type: _	JIC. TRIB	AL				.,			
Pit Location:	Pit Dimensions:	Length	n 50'	Width	n 35	5'	Depth	15'	
(Attach diagrar	n) Reference:	Wellhead	XXX	_ Other					
	Footage from re	eference:	100'	,,	_				
	Direction from r	eference:	224	_Degrees			East	North _	
					X		of West	South	XX
Depth To Gro	undwater:			Less than	50 feet	t		(20 points)	
(vertical distance from				50 feet to				(10 points)	
contaminants to se				Greater th				(0 points)	0
high water elevatior groundwater)	n of								
Distance to a	n Ephemeral Strear	n·		Less than	100 fe	et		(10 points)	
	dry wash greater the			Greater th				(0 points)	
	uu learest Lake, Playa,	or Waterin	a Pondi	Less than	100 fo	et		(10 points)	
(Downgradient	lakes, playas and		_	Greater th				(0 points)	0
livestock or wi	Idlife watering ponds)							
Wellhead Pro	tection Area:					Yes		(20 points)_	
B *) feet from a private					No		(0 points) _	0
	er source, or less that n all other water sour								
Distance To S	Surface Water:			Less than	100 fe	et		(20 points)	
	stance to perennial			100 feet t				(10 points)	
lakes, ponds, i	rivers, streams, cree	ks,		Greater tl	han 100	00 fee	et	(0 points)	0
irrigation cana	ils and ditches)			RANKING	scof	RE (T	OTAL POI	NTS) _	0
1									

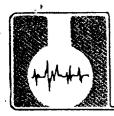
Date Remedi	ation Start	ted:	7/9/97		_Date Comp	oleted:	7-	14-97	
Remediation		-	cavation	xxx	Approx. cu			777	
(Check all ap			dfarmed	XX	Insitu Biore	•	1		
3collon3)			ther			,,,,ouldie.	•		
Remediation (i.e. landfarm	ed onsite,		Onsite	XX	_Offsite				
name and loc offsite facility									
General Des	cription of	Remedial Ac	tion: Exc	cavate pit	to 15',took	PID readi	ngs. spread	soil on	
		or remidiation		<u> </u>					
Groundwate			No				Depth	1	· "
					_		· ·		·
Final Pit:		Sample locat	ion	5 point co	mposite take	en from pi	t sidewalls a	nd pit botton	n center.
Closure San (in multiple s	amples,	_							
attach sample and diagram		Sample dept	h 15'	8" to 10" i	into pit side v	walls ,10"	into pit botto	m	
locations and	l depths) Sample D			7/14/9	7	Sample 1	Time	9:30AM	
ļ	Sample re	esults				•			
	Soil:	Benzene		(ppm)	ND	_Water:	Benzene	(ppb)	NA
		Total BTEX		(ppm)	ND	-	Toluene	(ppb)	NA
		Field Headsp	ace	(ppm)	18.98	E	thylbenzene	(ppb)	NA NA
		TPH		(ppm)	ND	_ т	otal Xylenes	(ppb)	NA
Groundwate	er Sample:		Yes		_ No	XXX	(If yes atta	ach sample i	results)
		HAT THE INFO	ORMATIC	ON ABOVI	E IS TRUE A	ND COM	PLETE TO	THE BEST	OF MY
KNOWLEDG							,,,,,	.000	
DATE		25-98 Neff loo		PRINTE	NAME		JEFF CR	oss	
SIGNATURE		ref (10.	2	_AND TIT	LE		PROJEC*	T MANAGE	R
		HE PIT CLOS				SURE IS A	APPROVED	IN ACCOR	DANCE TO
APPROVED	: YES	s_ <u>X</u>	NO		_(REASON)			
	ı			Λ.					
SIGNED:	Ko	<u>CM</u>	c	<u> </u>	_DATE:	12-	28-9	8	

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

PIT REMEDIATION AND CLOSURE REPORT

Operator:	MW	/ PETROI	LEUM	-		_Telephone)	505-32	25-0318		
Address:	2855	SOUTH	SIDE RI	VER ROAL) / SUITE A	/ FARMING	STC	N.M.	87401-79	47	
Facility or W	ell Na	me:		JAT A118	#7	PIT#2					
Location:	Unit	or Qtr/Qt	r Sec	N	SEC 25	T 26N	R	3W	County	RIO ARRIB	Α
Pit Type:	Sepa	arator:	хх	Dehydrato	or	_Other		···········			
Land Type:		JI	C. TRIBA	AL							
Pit Location: (Attach diagr	am)	Pit Dime		Length Wellhead	<u>-</u>	_ Width _Other		25'	_ Dept	th 12'	
		Footage	from re	ference:	70'		_				
		Direction	n from re	eference:	310	_Degrees	_		_East	North _	Х
								ХХ	_West	South _	
Depth To Gi (vertical distance contaminants to a high water elevate groundwater)	from season					Less than 50 feet to Greater th	99 f	feet		(20 points) (10 points) (0 points)	0
Distance to (Downgradie ten feet in wi	nt dry					Less than Greater th			t	(10 points) (0 points)	
Distance to (Downgradie livestock or v	nt lak	es, playa	s and		g Pond:	Less than Greater th			i.	(10 points) (0 points)	
Wellhead Pr (Less than 20 domestic wa 1000 feet fro	00 fee ter so	et from a ource, or l	private ess than					Yes No		(20 points) (0 points)	
Distance To (Horizontal d lakes, ponds irrigation car	listand , rive	ce to perers, stream	ennial ns, creek	s,		Less than 100 feet to Greater th	o 10 ian	000 feet 1000 fee	et	(20 points) (10 points) (0 points)	0
						RANKING) SC	OKE (I	IOTAL PC	/IIV10)	0

Date Remediation Started	l: <u>8/7/97</u>	· · · · · · · · · · · · · · · · · · ·	_Date Comp	leted: <u>8-8</u>	3-97	
Remediation Method:	Excavation	XXX	_Approx. cut	oic yards	233	
(Check all appropriate sections)	Landfarmed	xx	_Insitu Biore	mediation		
	Other					
Remediation Location:	Onsite	XX	Offsite			
(i.e. landfarmed onsite, name and location of						
offsite facility)						
General Description of Ro	emedial Action: Ex	cavate pit	to 12',took F	PID readings. spread	l soil on	
location for	remidiation. Took	soil sampl	es.			
Groundwater Encountere	ed: No	XXX	_ Yes_	Depti	1	
Final Bits	and tootion	F maint as		n from nit sidewalls o	nd nit battam a	ontor.
Closure Sampling: (in multiple samples,	ample location	5 point co	mposite take	n from pit sidewalls a	na pii bottom c	enter.
attach sample results and diagram of sample S	ample depth 12	8" to 10" i	nto pit side w	alls ,10" into pit botto	m.	
locations and depths) Sample Date Sample resu		8/8/97	<u>, </u>	Sample Ti <u>me</u>	10:00 AM	,
Soil: B	enzene	(ppm)	ND	Water: Benzene	(ppb)	NA
т	otal BTEX	(ppm)	ND	Toluene	(ppb)	NA
F	ield Headspace	(ppm)	22.94	Ethylbenzene	(ppb)	NA
т	PH	(ppm)	1100\SIDE 2900\BTM	Total Xylenes	(ppb)	NA
Groundwater Sample:	Yes	S		XXX (If yes att	ach sample res	ults)
I HEREBY CERTIFY THA		ON ABOVE	IS TRUE A	ND COMPLETE TO	THE BEST OF	MY
KNOWLEDGE AND BELIE						
DATE						
یر SIGNATURE	<u></u>					
AFTER REVIEW OF THE THE JICARILLA APACHE			-	URE IS APPROVED	IN ACCORDA	NCE TO
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	•	(REASON)			
APPROVED: YES_	NO.		_(



ASSAIGAI ANALYTICAL LABORATORIES, INC.

AUG 4 1997

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: July 22, 1997 11:19

CERTIFICATE OF ANALYSIS RESULTS BY SAMPLE

SENT APACHE CORPORATION

TO: 304 N. BEHREND

FARMINGTON, NM 87401

PARMINGION, NM 87

WORKORDER # : 9707176

WORK ID : JICARILLA PIT CLOSURES

CLIENT CODE : APA01

DATE RECEIVED : 07/18/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9707176-01A P+#1
Sample ID: AP 118 #7 SIDES

ES Matrix: SOIL

Collected: 07/14/97 09:30:00

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/kg	0.0050	100	07/21/97	SBTXME179
Toluene	ND	mg/kg	0.0050	100	07/21/97	SBTXME179
Ethylbenzene	ND	mg/kg	0.0050	100	07/21/97	SBTXME179
P-&m-Xylene	ND	mg/kg	0.010	100	07/21/97	SBTXME179
O-Xylene	ND	mg/kg	0.0050	100	07/21/97	SBTXME179

Lab ID: 9707176-01B P.+#1

Sample ID: AP 118 #7 SIDES

Collected: 07/14/97 09:30:00

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	07/21/97	SDRO43

Lab ID: 9707176-02A P. + |

Sample ID: AP 118 #7 BOTTOM

Collected: 07/14/97 09:45:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A				····	•	
Benzene	ND	mg/kg	0.0050	100	07/21/97	SBTXME179
Toluene	ND	mg/kg	0.0050	100	07/21/97	SBTXME179
Ethylbenzene	ND	mg/kg	0.0050	100	07/21/97	SBTXME179
P-&m-Xylene	ND	mg/kg	0.010	100	07/21/97	SBTXME179
O-Xylene	ND	mg/kg	0.0050	100	07/21/97	SBTXME179



Page: 2

Sample ID: AP 118 #7 BOTTOM

Collected: 07/14/97 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	07/21/97	SDRO43

President

WORKORDER COMMENTS

DATE : 07/22/97

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"

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

Lab Job no.:

Client Apache Corporation

Chain of Custr 1y Record

Page

Project Manager / Contact Jeff Cross

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

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

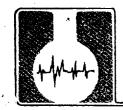
ALBUQUERQUE, NEW MEXICO 871 (505) 345-8964

MELOUIADES ALANIS 6411 LOCAL UNO CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

Address 304 N. Behrend	Telephone No. (505) 774-6643	Analysis Required
Siry/State/ZipEarmington, NM 87401	Fax No. (505), 774-6624	
roject Name / Number JICARILLA PIT	stube 1	A Remarks
ontract / Purchase Order / Quote	A o ol Con	
PAAL Fleid Fleid Location Sample Number / Location	Date Time Type / Size of Container Temp. Chemical	
1A AP118 # 7 5: des 7.	<u>. </u>	
 		
2A AP/18#7 Botten	54:6	
(1)		

0.00		
, i i i i i i i i i i i i i i i i i i i		
Carlot Date	Received by:	Date Received by: Co. L. T. Si.
Mickey AMENS	Printed	Signature
Ache Court 1'03	" AAL	
4.5	Reason Reason	(6, 00 Resson
		-
	Comments:	Disposed of (additional fee)
		Stored over 30 days (additional fee)
		- 1

CONTRABOLIST OF THE PARTY OF TH



ASSAIGAI ANALYTICAL LABORATORIES, INC.

SEP - 4 1997

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

Report Generated:

August 22, 1997 14:41

CERTIFICATE OF ANALYSIS RESULTS BY SAMPLE

SENT APACHE CORPORATION

TO: 304 N. BEHREND

FARMINGTON, NM 87401

ATTN: JEFF CROSS

WORKORDER # : 9708167

WORK ID : JICARILLA PIT CLOSURES

CLIENT CODE : APA01

DATE RECEIVED : 08/15/97

Page: 1

Lab ID: 9708167-01A

Sample ID: 8 #7 PIT #2 SIDES

Collected: 08/08/97/10:00:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A Benzene Toluene Ethylbenzene P-&m-Xylene O-Xylene		mg/kg mg/kg mg/kg mg/kg mg/kg	0.0050 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

וב. **ID:** 9708167-01B

Sample ID A118 #7 PIT #2 SIDES

Collected: 197 10:00:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015 Diesel Range OG in Soil	£100°	mg/Kg	25	25	08/20/97	SDRO047

Lab ID: 9708167-02A

Sample ID: A 118 47 PIT #2 BOLTOM

Collected: \$08/08/97 10:30:00

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	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



Page: 2

h ID: 9708167-02B

.nple ID: 1118 #7 22 BOTTOM

Collected: **68.08/93** 10:30:00 **Matrix:** SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015 Diesel Range OG in Soil	5 00	mg/Kg	25	25	08/20/97	SDRO047

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"

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

Project Manager / Contact <u>Jeff 은 Kogg</u> Leb pob no. Client Apache Corporation NOSALGA NALYTIO THE CABORATO

Chain of Cusiony Record

Page

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

AL BUDUEROUE, NEW MEXICO 87109 (505) 245-8964

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

MELQUIADES ALANIS 6411 LOCAL UNO CIUDAD JUAREZ. CHIHUAHUA MEXICO 32320

Address 304 N. Behrend	Telephone No. (505) 774-6643	Analysis Required
Cir/State/ZipEarmington, NM 87401	1 Fax No. (505) 774-6624	
Project Name / Number JICARILLA PIT CLOSURES.	Samplers: (Signature) John Mulu-	No marks
Contract / Purchase Order / Quote	1003 10 1	
, Per	Santole Preservation	
Sample Number	Time Type Type / Size of Container Temp. Chemical	>
1 A 118#7 Siches 8-8.97	97 10:00 soil 4026/435 4:0 ICE 1-	
JA 4118 # > 130TTem	(3.0)	
	5781/0. De	
•		/
16.5 m		
inquished by:	" The faller	(2, 18, 5) Received by: (w/ex /2, 5, 5)
۲ ا	Signature Section (Comment of the C	Signature
mpony Agache (CTD).	40.2	
	Reason Reason	Hesson Resson
		After analysis, samples are to be:
educid of Shipment:	Comments:	Disposed of (additional fee)
ignment No.		
Sectal Instructions:		Stored over 30 days (additional fee)
	LABORATORY	1
と、神の世界の大は大きなない。人間の		

Leasea # JAT A118

M W FETROLBUM, JOARILLA APACHE 118 NUMBER 7

M W PETROLEUM/FARMINGTON DISTRICT PIT EXCAVATION AND CLOSURE REPORT

JAT A118 # 7

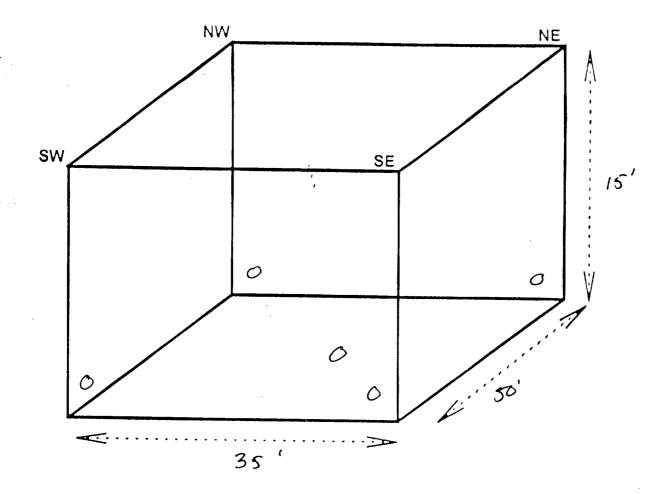
LOCATION

PIT COUNT **EPO Representative** 2 Date of Review FINISH: PIT #1 7/14/97 PIT #1 7/9/97 START: DIMENSIONS PIT # 2 8/7/9 PIT #2 8/8/97 **CU YDS** D W D 30' 35' 3' Pit 1 35 50' 15' 777 Pit 1 12' 233 20' 20' 3' Pit 2 25' 28' Pit 2 Pit 3 Pit 3 Pit 3 @ Pit 1 @ Pit 2 @ 12' Pit 1 @ 12' Pit 2 @ 8' Pit 3 @ 30.5 88 Center 580 560 Center **NW Corner** 1.1 28 ρ **NW Corner** 221 700 P NE Corner 0.5 20.1 NE Corner 248 520 3.9 25.6 SW Corner SW Corner b 320 605 O SE Corner 1.4 10.5 SE Corner 388 425 NOTES: 7/9/97 START EXCAVATION ON PIT # 1, HEAVY STAINING AND ODOR TO 6' 7/10/97 CONTINUE EXCAVATION, LIGHT STAINING AND ODOR, PID READINGS HIGH @ 7' 7/11/97 EXCAVATE TO 12' LITTLE STAINING AND ODOR, PID READINGS STILL HIGH. TOOK SOIL SAMPLES. 7/14/97 EXCAVATE PIT TO 15', NO STAINING OR ODOR, PID READINGS G 8/7/97 START EXCAVATION ON PIT # 2 , EXCAVATE TO 8' , LIGHT STAINING AND ODOR ,PID READINGS HIGH. 8/8/97 TOOK SOIL SAMPLES ON PIT 2 SAMP DATE 7/14/97 8/8/97 ANALYSIS RESULTS PER LAB Assaigai Pit 1 @ 15' Pit 2 @ 12' Pit 3 @ **BETEX** WITNESS DATE 88 30.5 PIT **TPH** Center **NW Corner** ρ 1.1 28 NO 7/21/97 ND J.C. NE Corner 0.5 20.1 1 ND D SW Corner 3.9 25.6 2 1100\2900 ND J.C. 8/20/97 SE Corner 1.4 10.5 RE-SAMPLE OR CELL(S) SAMPLE PER LAB ANALYSIS RESULTS DATE: Pit 1 @ Pit 2@ Pit 3 @ **BETEX WITNESS** DATE PIT **TPH** Center ρ **NW Corner** NO NE Corner 1 SW Corner 2 D SE Corner 3 RE-SAMPLE OR CELL(S) SAMPLE DATE: ANALYSIS RESULTS PER LAB Pit 1 @ Pit 2 @ Pit 3 @ **WITNESS** DATE PIT **TPH BETEX** Center p NO **NW Corner** NE Corner 1 2 D SW Corner SE Corner 3

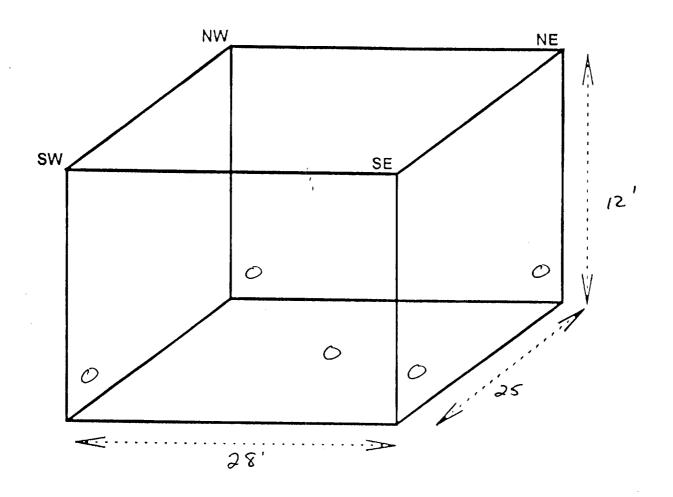
Jicarilla Apache Tribal EPO/OCD/BLM

Review and Approval

OCD-BLM



						= SAMPLE AREA				
WELL NAM	ИΕ	JAT	A118#7	p.+#1						
SAMPLE DATE		7-14-97								
NOTES	4 POINT	COMPOSITE	SAMPLE TA	KEN 8" TO 1	0" INTO PIT					
	SIDEW	ALL								
	1 POINT GRAB SAMPLE TAKEN 10" TO 12" INTO BOTTOM CENTER									
_		,								
_										
										
•										
-			·							
-			**							
_										
-										



WELL NAME SAMPLE DATE		JAT A118#7 8-8-97	P,+#z	= SAMPLE AREA						
NOTES -	4 POINT COMPOSITE SAMPLE TAKEN 8" TO 10" INTO PIT SIDEWALL									
	1 POII	NT GRAB SAMPLE TAKE	N 10" TO 12" INT	O BOTTOM CENTER						

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

Operator: <u>MW</u> F	PETROLUEM	<u>.</u>	Telephone505-325-0318			0318			
Address:	2855 SOUTHS	SIDE RI	VER ROAL	D/SUITE A	/ FARMING	TON N.M.	87401-7947	,	
Facility or Well Nan	ne: JA	T A 118	#7 CE	LL#1					
Location: Unit o	r Qtr/Qtr Sec	N	SEC 25	T 26 N	R 3 W	_County	RIO ARR	IBA	
Land Type	JIC. TRIBAL								
Date Remediation S	Started: 7	7/9/97		_Date Cor	}				
Remediation Method: Landfarmed			xxx		Approx. cubic yards		250		
	Composted			_					
	Other			SOIL TO	BE PUT BA	ACK IN PIT	····	ş.	
Depth to Groundwater: (pts) 0 Final Closure Sampling									
Distance to an Ephe	emeral Stream:	(pts)	0	Sampling	g Date:	11/11/98	3_Time:	11:00AM	
Distance to Nearest or Watering Pond:	Lake, Playa,	(pts)	0	Sample I		_			
Wellhead Protection	n Area:	(pts)	0		space (ppm)		_	110045	
Distance To Surfac	e Water:	(pts)	0) <u>ND</u>		M8015	
RANKING SCORE	(TOTAL POINTS)		0	Oth	er <u>BTEX</u> \S	SVV846 , 80	20A (NI))	
I HEREBY CERTIF KNOWLEDGE AND	Y THAT THE INFOR BELIEF	RMATIC	ON ABOVE	IS TRUE	AND COMP	LETE TO 1	THE BEST (OF MY	
DATE:	11/25/98		PRINTED	NAME		JEFF CF	ROSS		
SIGNATURE	Jefflion		TITLE		PROJEC	T MANAG	ER		
ł	F THE SOIL REMEI THE JICARILLA AF						N IS APPR	OVED IN	
APPROVED:	YES	NC)	_(REASO	N)(N	as f	Back	full	
SIGNED:	C Ma	0	DATE:	12-	- 28 - 9	8		-	

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

Operator:	MW PETR	OLUEM			Telephon	Telephone 505-325-0318				
Address:		2855 SOUTHSI	DE RI\	/ER ROAD	/SUITE A/	FARMING	TON N.M. 8	37401-7947		
Facility or We	II Name:	JAT	<u>A</u> 118	#7 CEI	L#2					
		/Qtr Sec				R3W	_County	RIO ARRI	ВА	
Land Type		JIC. TRIBAL		·						
Date Remediation Started: 7/9/97 Date Completed: 11/11/98										
Date Remedia	ation Starte	ed: //	9/97		-					
Remediation Method: Landfarmed				XXX	_Approx. o	cubic yards		104		
		Composted			_					
		Other		SOIL TO	BE PUT BA	ACK IN PIT				
Depth to Groundwater: (pts) 0 Final Closure Sampling										
Distance to a		al Stream:		0	Sampling	g Date:	11/11/98	B_Time:	11:10AM	
Distance to N	learest Lak	e, Playa,	(pts)		Sample I	Results:				
or Watering I	Pond:			0	Field Heads	space (ppm)	0			
Wellhead Pro	otection Are	ea:	(pts)	0				Method	M8015	
Distance To	Surface Wa	ater:	(pts)	0		er BTEX \S			 D)	
RANKING S	CORE (TO	TAL POINTS)		0		O DILA C	311070,00			
I HEREBY C		HAT THE INFOF	RMATIC						OF MY	
DATE:		11/25/98		_PRINTED	NAME		JEFF C	KOSS		
SIGNATURE	=	Alion		TITLE		PROJEC	T MANAG	SER		
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION. ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.										
APPROVED	: YE	s_ <u>X</u>	NC		_(REASC	N) we	ar	Backf.	\mathcal{U}	
SIGNED:	X=	-CMa		_DATE:		-28-9	78			

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

Operator:	MW PETR	OLUEM			_Telephon	e	505-325-0318			
Address:		2855 SOUTHS	SIDE RIV	/ER ROAL	SUITE A	/ FARMING	TON N.M. 8	37401-7947		
		JA								
		/Qtr Sec		SEC 25		R3W	County	RIO ARRI	IBA	
Land Type		JIC. TRIBAL								
Date Remed	iation Starte	d:	7/9/97		_Date Cor	Date Completed: 11/11/98				
Remediation Method: Landfarmed				XXX	_Approx.	cubic yards	133			
		Composted			_					
		Other			SOIL TO	BE PUT BA	ACK IN PIT			
Depth to Gro	oundwater:		(pts)	0		Final Clo	sure Sam	pling		
Distance to	an Ephemer	al Stream:	(pts)	0	Samplin	g Date:	11/11/98	B_Time:	11:20AM	
Distance to or Watering	Nearest Lak Pond:	e, Playa,	(pts)	0	Sample Results: Field Headspace (ppm) 0					
Wellhead P	rotection Are	ea:	(pts)	0		Field Headspace (ppm)				
Distance To	Surface Wa	ater:	(pts)	0		er BTEX \ S			 D)	
RANKING S	SCORE (TO	TAL POINTS)		0	-	or Biex ve	3,000,100,100	<u>, , - , - , - , - , - , - , - , - ,</u>		
	CERTIFY TH GE AND BE	AT THE INFO	RMATIC	ON ABOVE	IS TRUE	AND COMP	PLETE TO	THE BEST	OF MY	
DATE:		11/25/98		_PRINTE	NAME		JEFF C	ROSS		
SIGNATUR	E	Alwa	·	TITLE		PROJEC	T MANAG	ER		
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION. ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE. APPROVED: YES NO (REASON) Use are Backfird										
APPROVE	D: YES	s <u>×</u> _	NC		_(REASC	ON) <u>usa</u>	erz (3acKy.	<u>N</u>	
SIGNED:	Kim	CMa	<u> </u>	_DATE:	12	-25-	98			

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

Operator: MV	N PETR	OLUEM			Telephon	e	505-325-0318		
Address:		2855 SOUT	HSIDE RI	VER ROA	AD/SUITE A	FARMING	TON N.M. 8	37401-7947	
Facility or Well N	Name:	J	AT A 118	#7 C	ELL # 4				
Location: Un	nit or Qtr/	'Qtr Sec _	N	SEC 25	T 26 N	R3W	County	RIO ARRI	ВА
Land Type		JIC. TRIBA	<u>L</u>						
Date Remediation Started: 7					Date Cor	npleted:	11/11/98		
Remediation Method: Landfarmed				xxx	Approx. o	cubic yards	200		
		Composted							
Other SOIL TO BE PUT BACK IN PIT									
Depth to Ground	lwater:		(pts)0		Final Clo	sure Samp	oling	
Distance to an E	phemera	al Stream:	(pts	00	Sampling	g Date:	11/11/98	Time:	11:30AM
Distance to Nearest Lake, Playa, or Watering Pond:				00	Sample I				
Wellhead Protec	ction Are	a:	(pts)0		space (ppm)	0		M004 <i>E</i>
Distance To Sur	face Wa	ter:	(pts)0	TPH		n) <u>ND</u>		M8015
RANKING SCO	RE (TO	TAL POINTS	3)	0	Other BTEX \ SW846 , 8020A (ND)				
I HEREBY CER KNOWLEDGE			ORMATI	ON ABO\	/E IS TRUE	AND COMP	PLETE TO 1	THE BEST (OF MY
DATE:		11/25/98		_PRINTE	ED NAME		JEFF CF	ROSS	
SIGNATURE_		flo	7_	TITLE		PROJEC	T MANAG	ER	
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION. ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.									
APPROVED:	YES	X_	N	D	(REASC	DAN (N	as E	Bocky.	W
SIGNED:	Li-	. Me		DATE:		-28-	98		

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

Operator: <u>MW PETR</u>	ROLUEM			Telephone	e	505-325-0	1318	
-	2855 SOUTHS	IDE RIV	/ER ROAD)/SUITE A/	'FARMING1	TON N.M. 8	37401-7947	
Facility or Well Name:				LL#5				
•	r/Qtr Sec			T 26 N	R3W	County	RIO ARRI	IBA .
Land Type								
Date Remediation Starte	e <u>d: 7.</u>	<u>'/9/97</u>		_Date Com	npleted:		11/11/98	<u> </u>
Remediation Method:	Landfarmed		XXX	_Approx. c	cubic yards		311	
	Composted			_				
	Other			SOIL TO	BE PUT BA	CK IN PIT		
Depth to Groundwater:		(pts)	0		Final Clo	sure Samp	oling	
	ral Strages			Sampling	g Date:	_	_	11:40AM
Distance to an Epheme					-	11/11/98		
Distance to Nearest Lak or Watering Pond:	ke, Playa,	(pts)	0	Sample F	Results:			
Wellhead Protection Are	ea:	(pts)	0	Field Heads	space (ppm)	0	_	
				ТРН	(ppm	n) <u>ND</u>	Method	M8015
Distance To Surface W		(pts)	0	Othe	er BTEX \S	SW846 , 80	20A (NI)
RANKING SCORE (TO	·		0	1				
I HEREBY CERTIFY TI KNOWLEDGE AND BE		RMATIC	ON ABOVE	IS TRUE	AND COMP	LETE TO	THE BEST (OF MY
DATE:	11/25/98		PRINTED) NAME		JEFF CF	ROSS	
SIGNATURE	floo		TITLE	· · · · · · · · · · · · · · · · · · ·	PROJEC	T MANAG	ER	
AFTER REVIEW OF T	HE JICARILLA AI	PACHE	TRIBE PI	T CLOSUR	RE ORDINAI	NCE.		
APPROVED: YE	s	NC)	_(REASO)N) <u>لكع</u>	i ae	Back	fill
	C7No-		1					

M W PETROLEUM/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE	JAT A118 # 7		_	
* AMOUNT OF SOIL UNDER	RGOING REMEDIATION	1010	Yds.	
		SampDATE		BTEX
CELL No. 1		6/10/98	8800	ND
		11/11/98	ND	ND
DIMENSIONS(LxWxH)	150' X 45' X 12"			
CELL LOCATION (dir. from well h	nead EAST			
* DATE BEGAN: 7/9/97			<u> </u>	
<i>D</i> /(12 <i>D</i> 2 <i>G</i> /(11)		<u> </u>		
DATE TERMINATED (TPH <5,00	00 ppm/BTEX< 50 ppm/Benzene < 10 ppm)	11-11-98		-
		SampDATE	TPH	BTEX
CELL No. 2		6/10/98	4600	ND
	•	11/11/98	ND	ND
DIMENSIONS(LxWxH)	70' X 40' X 12"			
(,	No.			
CELL LOCATION (dir. from well I	head WEST			
* DATE BEGAN: 7/9/97			<u>.l</u>	<u> </u>
DATE TERMINATED (TPH <5,00	00 ppm/BTEX< 50 ppm/Benzene < 10 ppm)	(1-11-9)	8	-
· · · · · · · · · · · · · · · · · · ·		SampDATE	TPH	BTEX
2		11/11/98	NO	מעו
CELL No. 3	_	11/11/00	1// 1// 1// 1// 1// 1// 1// 1// 1// 1//	100
DIMENSIONS(LxWxH)	60' x60' x12"			
,				
CELL LOCATION (dir. from well	head <u>W25</u> †			
* DATE BEGAN: 7.9.	- 47			
	00 ppm/BTEX< 50 ppm/Benzene < 10 ppm)	11-11-98	<u> </u>	_
REMEDIATION RECORD: (Date	Treatment, Tilling)			
	H 46-0-0 FERTILIZER, WATER, PLOW AND	TILL SOIL.		
4/23/98 PLOW AND TILL SOIL.				
5/17/98 PLOW AND TILL SOIL.	9/4/98 WATER,PLC		IL.	
6/3/98 WATER,PLOW AND TILL				
6/9/98 PLOW AND TILL SOIL.	10/14/98 PLOW AN	ID TILL SOIL.		
7/13/98 WATER,PLOW AND TIL	L SOIL.			
7/28/98 PLOW AND TILL SOIL.				
8/12/98 PLOW AND TILL SOIL.				

From excavation reports.

M W PETROLEUM/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE	JAT A118 # 7			
* AMOUNT OF SOIL UNDERG	OING REMEDIATION	1010	Yds.	
		SampDATE	TPH	BTEX
CELL No. 4		11/11/98	ND	NO
DIMENSIONS(LxWxH) 13	5' X 40' X 12"			
CELL LOCATION (dir. from well head	NORTH			
* DATE BEGAN: 7/9/97	-			
DATE TERMINATED (TPH <5,000 p	pm/BTEX< 50 ppm/Benzene < 10 ppm	(1-11-98		-
		SampDATE	TPH	BTEX
CELL No 5		11/11/98	ND	ND
DIMENOIONIO(1 - 144/41 I) 14	0' Y 60' Y 12"			
DIMENSIONS(LxWxH) 14	0 X 00 X 12			
CELL LOCATION (dir. from well head	d <u>SOUTH</u>			·
* DATE BEGAN: 7/9/97				
,	ppm/BTEX< 50 ppm/Benzene < 10 ppm	11-11-98		-
		SampDATE	TPH	BTEX
CELL No.				
DIMENSIONS(LxWxH)				
CELL LOCATION (dir. from well hea	d			
* DATE BEGAN:				
DATE TERMINATED (TPH <5,000 p	ppm/BTEX< 50 ppm/Benzene < 10 ppn	n)		•
REMEDIATION RECORD: (Date, Tr	eatment, Tilling)			
				- · · · · · · · · · · · · · · · · · · ·

From excavation reports.

NOTES:	0		0	WELL NAME: SAMPLE DATE: DIMENSIONS:
ALL SAMPLES TAKEN 10" TO 12" INTO CELL. 11 POINT COMPOSITE SAMPLE	Ο	O	0	JAT A118 #7 CELL #1 11/11/98 150' X 45' X 12"
' TO 12" INTO CELL. AMPLE		0		
	0		0	
		0		= SAM
	0		0	= SAMPLE AREA

WELL NAME: SAMPLE DATE: DIMENSIONS:	JAT A118 #7 CELL #2 11/11/98 70' X 40' X 12"			0	= SAMPLE AREA
0	0		0		0
	0	0		0	
0	0		0		0
NOTES:	ALL SAMPLES TAKEN 10" TO 12" INTO CELL. 11 POINT COMPOSITE SAMPLE	10" TO 12" INTO CELL. SAMPLE			

NOTES:	0		0	WELL NAME: SAMPLE DATE: DIMENSIONS:
ALL SAMPLES TAKEN 10" TO 12" INTO CELL. 8 POINT COMPOSITE SAMPLE	0	0	O	JAT A118#7 CELL#3 11/11/98 60' X 60' X 12"
		0		0
	0		0	= SAMPLE AREA

1 1 1 1 1					σ ω <
	NOTES:	0		0	WELL NAME: SAMPLE DATE: DIMENSIONS:
	ALL SAMPLES TAKEN 10" TO 12" INTO CELL. 11 POINT COMPOSITE SAMPLE	Ο	0	0	JAT A118 # 7 CELL # 4 11/11/98 135' X 40' X 12"
	0" TO 12" INTO CELL. SAMPLE		0		
		0		0	_
			0		0
		0		0	= SAMPLE AREA

NOTES: ALL SAMPLES TAKEN 10" TO 12" INTO CELL. 11 POINT COMPOSITE SAMPLE	0	0	0	WELL NAME: JAT A118 # 7 CELL # 5 SAMPLE DATE: 11/11/98 DIMENSIONS: 140' X 60' X 12"
INTO CELL.	0	0	0	
	0		0	= SAMPLE AREA

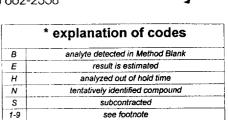


ASSAIGAI ANALYTICAL LABORATORIES, INC.

7300 Jefferson, NE • Albuquerque, New Mexico 87109 • (505) 345-896

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**



Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client:

APACHE CORPORATION

Project: **9811110**

JICARILLA PIT CLOSURES

M W ie Sl.
Riava: President of Assaigai Analytical Labo

A118 #7	CELL	#1		Sample Matrix	SOIL				Sample Collected	11/11/98 11:00:00
						Dilution	Detection			Run
QC Group	CAS#		Result		<u>Units</u>	<u>Factor</u>	<u>Limit</u>	*	Sequence	<u>Date</u>
		Test: SW846 8010B/8020A Purge	able VOCs by	GC/PID-	ELCD				_	
X98513	71-43-2	Benzene	ND		mg / Kg	250	0.005		XG.1998.996-20	11/13/98
X98513	100-41-4	Ethylbenzene	ND		mg / Kg	250	0.005		XG.1998,996-20	
X98513	95-47-6	o-Xylene	ND		mg / Kg	250	0.005		XG.1998.996-20	
X98513		P/M-Xylenes	ND		mg / Kg	250	0.01		XG.1998.996-20	
X98513	108-88-3	Toluene	ND		mg / Kg	250	0.005		XG.1998.996-20	
		Test: SW846 8015A Diesel Rand	e Organics by	GC/FID						
X98516		Diesel Range Organics	ND		mg / Kg	20	25		XG.1998.1009-6	11/16/98
	QC Group X98513 X98513 X98513 X98513 X98513	QC Group CAS # X98513 71-43-2 X98513 100-41-4 X98513 95-47-6 X98513 108-88-3	Test: SW846 8010B/8020A Purge X98513 71-43-2 Benzene X98513 100-41-4 Ethylbenzene X98513 95-47-6 o-Xylene X98513 P/M-Xylenes X98513 Toluene Test: SW846 8015A Diesel Rang	QC Group CAS # Result Test: SW846 8010B/8020A Purgeable VOCs by X98513 71-43-2 Benzene ND X98513 100-41-4 Ethylbenzene ND X98513 95-47-6 o-Xylene ND X98513 P/M-Xylenes ND X98513 Toluene ND X98513 Toluene ND Test: SW846 8015A Diesel Range Organics by	### CELL #1 Matrix QC Group CAS # Result	CAS # Result Units	CAS # Result Units Factor	CAS # Result Units Factor Limit	CAS # Result Units Factor Limit *	Collected Cas # Result Units Factor Limit Sequence

Client Sample ID	A118 #7	CELL	#2	Sample Matrix	SOIL				Sample Collected	11/11/98
Fraction	QC Group	CAS#		Result	<u>Units</u>	Dilution <u>Factor</u>	Detection <u>Limit</u>	*	Sequence	Run <u>Date</u>
			Test: SW846 8015A/8020A	GRO / Purgeable Aromatics	i				-	
9811110-02A	X98517	71-43-2	Benzene	ND	mg / Kg	250	0.005		XG.1998.1000-7	11/13/98
	X98517	100-41-4	Ethylbenzene	ND	mg / Kg	250	0.005		XG.1998.1000-7	
	X98517	95-47-6	o-Xylene	ND	mg / Kg	250	0.005		XG.1998.1000-7	
	X98517		p/m Xylenes	ND	mg / Kg	250	0.01		XG.1998.1000-7	
	X98517	108-88-3	Toluene	ND	mg / Kg	250	0.005		XG.1998.1000-7	

mg / Kg

20

Test: SW846 8015A Diesel Range Organics by GC/FID 9811110-02B X98516

ND Diesel Range Organics

Report Date

11/17/98 4:26:24 PM

11/16/98

XG.1998.1009-7

Sample

11/11/98



Client Reports



2.0

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client:

Page 2 of 3

APACHE CORPORATION

Project: 9811110 **JICARILLA PIT CLOSURES**

Client Sample ID	A118 #7	CELL	#3		Sample Matrix	SOIL			Sample Collected	11/11/98 11:20:00
							Dilution	Detection		Run
Fraction	QC Group	CAS#		Result		<u>Units</u>	<u>Factor</u>	Limit	* Sequence	Date
			Test: SW846 8015A/8020A GRO	Purgeable Ar	omatics					
9811110-03A	X98517	71-43-2	Benzene	ND		mg/Kg	250	0.005	XG.1998.1000-8	11/13/98
	X98517	100-41-4	Ethylbenzene	ND		mg / Kg	250	0.005	XG.1998.1000-8	
	X98517	95-47-6	o-Xylene	ND		mg / Kg	250	0.005	XG.1998.1000-8	
	X98517		p/m Xylenes	ND		mg / Kg	250	0.01	XG.1998.1000-8	
	X98517	108-88-3	Toluene	ND		mg / Kg	250	0.005	XG.1998.1000-8	
			Test: SW846 8015A Diesel Range	e Organics by	GC/FID					
9811110-03B	X98516	ſ	Diesel Range Organics	ND		mg / Kg	20	25	XG.1998.1009-8	11/16/98
Client Sample ID	A118 #7	CELL	. #4		Sample Matrix	SOIL			Sample Collected	11/11/98 11:30:00
							Dilution	Detection		Run
Fraction	QC Group	CAS#		Result		<u>Units</u>	<u>Factor</u>	<u>Limit</u>	* Sequence	<u>Date</u>
			Test: SW846 8015A/8020A GRO	/ Purgeable Ar	omatics					
9811110-04A	X98517	71-43-2	Benzene	ND ND	omaios	mg / Kg	250	0.005	XG.1998.1000-9	11/13/98
	X98517	100-41-4	Ethylbenzene	ND		mg / Kg	250	0.005	XG.1998.1000-9	
	X98517	95-47-6	o-Xylene	ND	<u>-</u>	mg / Kg	250	0.005	XG.1998.1000-9	
	X98517		p/m Xylenes	ND		mg / Kg	250	0.01	XG.1998.1000-9	
	X98517	108-88-3	Toluene	ND		mg / Kg	250	0.005	XG.1998.1000-9	
		I	Test: SW846 8015A Diesel Range	e Organics by	GC/FID					
9811110-04B	X98516	i	Diesel Range Organics	ND ND	1	mg / Kg	20	25	XG.1998.1009-9	11/16/98
		l			<u>_</u>		1			
Client Sample ID	A118 #7	CELL	. #5		Sample Matrix	SOIL			Sample Collected	11/11/9 11:40:00
							Dilution	Detection		Run
Fraction	QC Group	CAS#		Result		<u>Units</u>	Factor	<u>Limit</u>	* Sequence	Date
			Test: SW846 8015A/8020A GRO	/ Duranable A	ramatias					
9811110-05A	X98517	71-43-2	Benzene	ND ND	Omatics	mg/Kg	250	0.005	XG.1998.1000-10	11/13/98
9011110-03A	X98517	100-41-4		ND		mg / Kg	250	0.005	XG.1998,1000-10	
	X98517 X98517	95-47-6	Ethylbenzene o-Xylene	ND		mg / Kg	250	0.005	XG.1998.1000-10	
	X98517		p/m Xylenes	ND ND		mg / Kg	250	0.01	XG.1998.1000-10	
	X98517	108-88-3	Toluene	ND		mg / Kg	250	0.005	XG.1998.1000-10	
		L	Test: SW846 8015A Diesel Rang	o Organica bu	GC/EID		<u> </u>	_ · L		
9811110-05B	X98516	:	Diesel Range Organics	ND ND	GU/FID	mg / Kg	20	25	XG.1998.1012-2	11/17/98
3011110-030	V90210	ĺ	Diesei Natige Organics				1			

Chain of Custony Record ANALYTICAL LABORATORIES, INC.

Lab job no. [|] O . .

Page

Project Manager/Contact Jeff Cross

Cllent Apache Corporation

ALBUQUERQUE, REVIES (505) 345-8964

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

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LABORATORY