BERLIMM STER GAS INSPECTOR

JAN 2 9 1999

State of New Mexico Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

PIT REMEDIA	TION ANI	D CLOS	SURE R	EPORT		W Z 3 1999	N 7
Approved					(6)[[[]	GON. DU	Ŭo □
Operator: Apache Corporation \ MW Pet	roleum		Telephone:		505-325-0		
Address: 2855 Southside River Road, S		igton, NM	87401		and the second		
Facility or Well Name:	Jic Apache			#1			
Location: Unit or Qtr/Qtr Sec	Р 9	Sec 25	T 26 N	R 3W	County	Rio Arriba	
Pit Type: Separator:	Dehydrator_		Other	Blow Pit			
Land Type: Jicarilla Tribal							
Beginning Pit Dimensions:	Length	35'	Width	30	<u> </u>	th 4'	
Pit Location: Ending Pit Dimensions:	Length_	45'	- Width	35	<u>'</u> Dep	th10'	
(Attach diagram) Reference:	Wellhead	XX	Other				
Footage from reference:	-	100		_			
Direction from reference:		84	Degrees	XX	_East	North	X
					West	South _	
Depth To Groundwater:			Less than	50 feet		(20 points)	
(vertical distance from			50 feet to		_	(10 points)	
contaminants to seasonal			Greater t	han 100 fee	et	(0 points) _	
high water elevation of							
groundwater)							
Wellhead Protection Area:					Yes	(20 points) _	
(Less than 200 feet from a private					No	(0 points) _	0
domestic water source, or; less than							
1000 feet from all other water sources)							
			Less tha	ın 200 feet		(20 points) _	
Distance To Surface Water: (Horizontal distance to perennial			200 feet	to 1000 fee		(10 points)	
lakes, ponds, rivers, streams, creeks,			Greater	than 1000 f	eet	(0 points) _	0
irrigation canals and ditches)			RANKIN	IG SCORE	(TOTAL P	OINTS)	0

te Remediation Start	ed:	7/16/97	D	ate Complet	ed:	7/17/97
emediation Method:		Excavation _	 A	pprox. cubic	yards	350
heck all appropriate ctions)	Landfarmed	i _	XX Ir	nsitu Bioreme	ediation	
		Other				
emediation Location: e. landfarmed onsite,		Onsite	XX(Offsite		
ame and location of fsite facility)				:44- 40' too	J. DID roading	e Spread soil on
eneral Description of	Remedial Action:		Excavate p	it to 10 , toc	K PID reading	s. Spread soil on
location for	remediation. Too	k soil sampl	es.			
						Double
Groundwater Encount	tered:	No	XX	Yes_		Depth
						<u>-</u>
Final Pit:	Sample location		4 point comp	osite sample t	aken from pit sid	ewalls.
Closure Sampling:	Sample location				aken from pit sid	ewalls.
Closure Sampling: in multiple samples, attach sample results	·	10'	1 Grab samp	le taken from p	oit botton center	
Closure Sampling: in multiple samples,	·	10'	1 Grab samp	le taken from p	oit botton center	it bottom
Closure Sampling: in multiple samples, attach sample results and diagram of sample	Sample depth Sample Date	10'	1 Grab samp	le taken from p	oit botton center	
Closure Sampling: in multiple samples, attach sample results and diagram of sample	Sample depth	10'	1 Grab samp	le taken from p	oit botton center	it bottom
Closure Sampling: in multiple samples, attach sample results and diagram of sample	Sample depth Sample Date Sample results	10'	1 Grab samp 8 to 10" in 7/17/97	le taken from p	oit botton center	it bottom
Closure Sampling: in multiple samples, attach sample results and diagram of sample	Sample depth Sample Date Sample results Benzene	10'	1 Grab samp 8 to 10" in 7/17/97 (ppm)	le taken from p to pit sidew	oit botton center	it bottom
Closure Sampling: in multiple samples, attach sample results and diagram of sample	Sample depth Sample Date Sample results Benzene Total BTEX	10'	1 Grab samp 8 to 10" in 7/17/97 (ppm) (ppm)	to pit sidew ND ND 2.64 Side/ND	alls 10" into p	it bottom 11:30 AM
Closure Sampling: in multiple samples, attach sample results and diagram of sample	Sample depth Sample Date Sample results Benzene Total BTEX Field Headspace TPH		1 Grab samp 8 to 10" in 7/17/97 (ppm) (ppm)	to pit sidew ND ND 2.64	alls 10" into p	it bottom
Closure Sampling: in multiple samples, attach sample results and diagram of sample ocations and depths)	Sample depth Sample Date Sample results Benzene Total BTEX Field Headspace TPH e:	Ύ€	1 Grab samp 8 to 10" in 7/17/97 (ppm) (ppm) (ppm)	ND ND 2.64 Side/ND BTM/1400 NO	alls 10" into p Sample Time	it bottom 11:30 AM yes attach sample results)
Closure Sampling: in multiple samples, attach sample results and diagram of sample ocations and depths) Groundwater Sample	Sample depth Sample Date Sample results Benzene Total BTEX Field Headspace TPH e:	Ye MATION ABO	1 Grab samp 8 to 10" in 7/17/97 (ppm) (ppm) (ppm)	ND ND 2.64 Side/ND BTM/1400 NO E AND COM	alls 10" into p Sample Time	it bottom 11:30 AM yes attach sample results)

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:	Apac	he Cor	poration \ MW Petr	oleum		Т	elephone):	<u>. </u>	505-325-03	318	
Address:	2855	Souths	ide River Road, Su	ıite A, Farm	ington,	NM	87401				<u>.</u>	
Facility or	Well N	lame:		Jic Apach	e Tribal	A11	8 #2 Pit	#2				
Location:	Unit	or Qtr/Q	tr Sec	Р	Sec 25	5 7	26 N	R	3W_	County	Rio Arriba	
Pit Type:	Sepa	arator: _	XX	_Dehydrato	r		Other					
Land Typ∈	e:		Jicarilla Tribal				.					
	1	Beginnir	ng Pit Dimensions:	Length	1	10'	Width	n	10'	Depth	2'	
Pit Location:			g Pit Dimensions:	Length)	15'	Width	h	15'	Depth	5'	
(Attach dia	agram	ı) Referer	nce:	Wellhead	XX		Other					
		Footage	e from reference:			100'						
		Direction	on from reference:		166	3	Degrees		Х	East	North f	
									·	_West	South	XX
Depth To	Grou	ındwate	er:				Less than			<u> </u>	(20 points) (10 points)	
(vertical dist							50 feet to Greater t				(0 points)	0
high water e	elevatio											
Wellhead	d Prot	ection /	Area:							Yes	(20 points)	0
domestic	water	r source	m a private , or; less than r water sources)							No	(0 points)	
Distance	e To S	Surface	Water:				Less tha				(20 points)	
(Horizon	tal dis	tance to	perennial				200 feet Greater				(10 points) (0 points)	
irrigation	-		treams, creeks, itches)							TOTAL POI		0

ate Remediation Start	ted:	8/12/97		Date Complet	ted:		8/12/97
Remediation Method:		Excavation _	XXX_	Approx. cubic	yards		25
Check all appropriate ections)	Landfarmed	_	XX	nsitu Biorem	ediation		
		Other					
Remediation Location: i.e. landfarmed onsite, name and location of	:	Onsite	XX	Offsite			
offsite facility) General Description of	f Remedial Action:		Excavate p	it to 5' , too	k PID readin	gs. Spre	ad soil on
location for	remediation. Tool	soil sampl	es.				
Groundwater Encoun	tered:	No	XX	Yes_		Depth	
Final Pit:	Sample location		4 point com	oosite sample t	aken from pit s	idewalls.	
Closure Sampling: (in multiple samples,			1 Grab samp	ole taken from	pit botton cente	er	
attach sample results and diagram of sample	Sample depth	5'	8 to 10" in	ito pit sidew	alls 10" into	pit botto	m
locations and depths)	Sample Date Sample results		8/12/97		Sample Time)	1:00 PM
	Benzene		(ppm)	ND			
	Total BTEX		(ppm)	ND			
	Field Headspace		(ppm)	0.12			
	TPH			Side/ND BTM/ND			
Groundwater Sample	e:	Ye	es	_ No	XX(If yes atta	ch sample results)
I HEREBY CERTIFY KNOWLEDGE AND I		IATION ABO	OVE IS TRU	E AND COM	PLETE TO 1	HE BES	OF MY
DATE	January 8, 19	99	PRINTE	NAME	Jeff Cross		
SIGNATURE	7. 11 Cum		AND TIT	LE	Project Ma	nager	

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

PIT REMEDIATION AND CLOSURE REPORT

Operator: M V	V PETROLEUM			_Telephone	505-3	25-0318		
Address: 285	5 SOUTHSIDE R	VER ROAD	/ SUITE A	/ FARMING	M.N NOTE	. 87401-79)47	
Facility or Well Na	ame:	JAT A 118	# 2	PIT#1				
Location: Unit	t or Qtr/Qtr Sec	P	SEC 25	T 26 N	R 3 W	_County	RIO ARRIBA	
Pit Type: Sep	parator:	_Dehydrato	ſ	_Other	BLOW P	IT		
Land Type:	JIC. TRIB	AL						
Pit Location:	Pit Dimensions:	Length	45'	Width	n35'	Dep	oth <u>10'</u>	
(Attach diagram)	Reference:		XXX	Other				
	Footage from re		100'					
	Direction from r		84	Degrees	– XX	East	North	X
	Direction from t					West	of South	
Depth To Grour	ndwater:			Less than	50 feet		(20 points)	
(vertical distance from				50 feet to	99 feet		(10 points)	
contaminants to seaso				Greater tl	nan 100 fe	et	(0 points)	0
high water elevation of groundwater)								
	Enhamaral Strag			Less than	100 feet		(10 points)_	
	E phemeral Strea ry wash greater th				han 100 fe		(0 points) _	0
ten feet in width	ly wash greater to	idii						
Distance to Nos	arest Lake, Playa	or Waterin	a Pond:	I ess than	100 feet		(10 points)	
	akes, playas and		.g . 0		han 100 fe	et	(0 points)	0
	life watering pond							
Mr. III. and Dunda	otion Aroni				Y	es	(20 points)	
Wellhead Prote	eet from a private					No	(0 points)	
domestic water :	source, or less tha all other water sou	ın						
				Loop that	n 100 feet		(20 points)_	
Distance To Su					to 1000 fe		(10 points)	
	ince to perennial vers, streams, cre	ake			than 1000		(0 points)	0
irrigation canals		J.1.0,				(TOTAL F	POINTS)	0

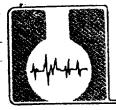
<u>j, </u>						
ate Remediation Started:	7/16/97		_Date Comple	ted:	7/17/9'	
Remediation Method: Check all appropriate ections)	Excavation Landfarmed	XXX	_Approx. cubio _Insitu Biorem		350	
	Other					
Remediation Location: i.e. landfarmed onsite, lame and location of offsite facility)	Onsite	xx	_Offsite			
General Description of Re	medial Action: Ex	cavate pit	to 10',took Pi	D readings. s	pread soil on	
location for	remidiation. Took	soil samp	les.			
Groundwater Encountere	d: No	XXX	_ Yes_		Depth	
Final Pit: S. Closure Sampling: (in multiple samples,	ample location	4 point co	omposite taker SAMPLE TAK	n from pit sidev EN FROM PIT	valls. BOTTOM CEI	NTER.
•	ample depth $10'$	8" to 10"	into pit side wa	alls ,10" into pi	t bottom.	
ocations and depths) Sample Date Sample resu		7/17/9	97	Sample Ti <u>me</u>	11:30/	AM
Soil: B	enzene	(ppm)	ND'	Water: Ber	zene (ppb)	NA
Т	otal BTEX	(ppm)	ND	Tol	uene (ppb)	<u>NA</u>
F	ield Headspace	(ppm)	2.64	Ethylbe	nzene (ppb)	NA
T	PH	(ppm)	BTM/1400	Total X		
Groundwater Sample:	Ye	es		XXX (If	yes attach sam	ple results)
I HEREBY CERTIFY THA KNOWLEDGE AND BELI		ION ABOV	E IS TRUE A	ND COMPLET	E TO THE BE	ST OF MY
DATE//	-25-98	PRINTE	D NAME	JE	FF CROSS	
DATE //	flon	AND TI	TLE	PR	OJECT MANA	GER
AFTER REVIEW OF THE THE JICARILLA APACH	PIT CLOSURE IN E TRIBE PIT CLOS	FORMATION ORD	ON, PIT CLOS	SURE IS APPR	OVED IN ACC	ORDANCE 1
APPROVED: YES_	<u>></u> N	10	(REASON))		
SIGNED: Kir	CMa-	90	DATE:	12.2	8 - 98	

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

PIT REMEDIATION AND CLOSURE REPORT

perator:	M W	PETROL	EUM			_Telephone	505-3	25-0318		<u>.</u>
ddress:	2855	SOUTH	SIDE RIV	VER ROAD) / SUITE A	/ FARMING	TON N.M	. 87401-79	47	
acility or We				JAT A 118		PIT#2				
		or Qtr/Qt		 Р		T 26 N	R3W	County	RIO ARRIBA	
								_		
Pit Type:	Sepa	arator:	<u> </u>	Denyaran	or	_0000				
and Type:		JI	C. TRIBA	AL						
Pit Location:		Pit Dime	ensions:	Lengt	h 15'	Width	15'	Dep	oth5'	
Attach diagra	am)	Referen			XXX	— Other				
							·			
		Footage	from re	ference:	100'	<u> </u>	-			
		Directio	n from re	eference:	166	Degrees	<u> </u>	East	North _	
								West	South _	XX
Depth To G	round	dwater:				Less than			(20 points)_	
(vertical distance						50 feet to Greater th		c t	(10 points) _ (0 points)	
contaminants to high water elevat		nal				Greater ti	iaii 100 ie	OI.	(o po)	
groundwater)	uon oi									
Distance to	an F	nhemera	al Stream	n:		Less than	100 feet		(10 points)_	
(Downgradie ten feet in w	ent dr					Greater th	nan 100 fe	et	(0 points) _	0
Distance to	Near	rest I ake	Plava.	or Wateri	na Pond:	Less than	100 feet		(10 points)_	
(Downgradie livestock or	ent la	kes, play	as and			Greater t	han 100 fe	eet	(0 points) _	0
Wellhead P	rotor	tion Are	a·				Y	'es	(20 points)_	
(Less than 2	200 fe	et from a	a private					No	(0 points)	0
domestic wa 1000 feet fr										
Distance T	o Sui	face Wa	ter:			Less thai	100 feet		(20 points)	
(Horizontal							to 1000 fe		(10 points)	
lakes, pond	s, rive	ers, strea	ms, cree	eks,		Greater t	han 1000	teet	(0 points)	
irrigation ca	inais	ana aitch	es)			RANKIN	G SCORE	(TOTAL F	POINTS)	0

Date Remedia	ation Start	ed: <u>8/1</u>	2/97		Date Comp	leted:	8-124	37	
Remediation		Excavat	ion	XXX	Approx. cul	oic yards		25	
(Check all app sections)	огорпате	Landfan	med _	хх	Insitu Biore	mediation			
		Other							
Remediation (i.e. landfarmoname and locoffsite facility)	ed onsite, ation of	0	nsite	XX	Offsite				2000
General Desc	cription of	Remedial Action	ı: Exc <u>a</u>	vate pit t	o 5',took P	ID reading	s. spread s	oil on	
	location fo	or remidiation. T	ook so	il sample	es.				
Groundwate	r Encounte	ered:	No	xxx	Yes		_ Depth		
Final Pit: Closure Sam (in multiple sa	•	Sample location	4	point cor GRAB S	nposite take AMPLE TAI	en from pit KEN FROM	sidewalls. I PIT BOTT	OM CENTE	R.
attach sample and diagram locations and	of sample	Sample depth 5	:/ <u>8</u>	" to 10" ir	nto pit side v	valls ,10" ir	nto pit bottor	m.	
	Sample Da Sample re			8/12/97		Sample T	i <u>me</u>	1:00PM	
	Soil:	Benzene	(1	ppm)	ND	.Water:	Benzene	(ppb)	NA
		Total BTEX	(1	ppm)	ND	_	Toluene	(ppb)	NA
		Field Headspace	; (ppm)	0.12	. Ett	nylbenzene	(ppb)	NA
		TPH	(1	ppm)	SIDE/ND BTM/ND	То	tal Xylenes	(ppb)	NA
Groundwate	r Sample:		Yes_			XXX	_(If yes atta	ach sample r	esults)
KNOWLEDG	E AND BE								OF MY
DATE		-25-98	F	PRINTED	NAME		JEFF CR	oss	
SIGNATURE		25-98 Leff (wo		AND TITL	.E		PROJEC1	MANAGE	₹
AFTER REV	IEW OF TH	IE PIT CLOSURE HE TRIBE PIT CI	INFOI OSUR	RMATION E ORDIN	N, PIT CLOS IANCE.	SURE IS A	PPROVED	IN ACCORE	DANCE TO
APPROVED	: YES	s_ <u>×</u>	NO_		_(REASON)			
SIGNED:	Ke	=C M	am	JQ_	DATE:	12-	28-9	78	



ASSAIGAI ANALYTICAL LABORATORIES, INC.

4 1997 AUG

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 11:13

CERTIFICATE OF ANALYSIS RESULTS BY SAMPLE

SENT APACHE CORPORATION

TO: 304 N. BEHREND

FARMINGTON, NM 87401

Sample ID: JAT A 118 #2 PIT SIDES

: 9707175

WORK ID

: JICARILLA PIT CLOSURES

CLIENT CODE

WORKORDER #

: APA01

DATE RECEIVED : 07/18/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9707175-01A

Collected: 07/17/97 11:30:00

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	07/21/97	SBTXME179
	ND	mg/kg	0.0050	100	07/21/97	SBTXME179
	ND	mg/kg	0.0050	100	07/21/97	SBTXME179
	ND	mg/kg	0.010	100	07/21/97	SBTXME179
	ND	mg/kg	0.0050	100	07/21/97	SBTXME179

ab ID: 9707175-01B

P.+ #1

Collected: 07/17/97 11:30:00

sample ID: JAT A 118 #2 PIT SIDES

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: 9707175-02A

Collected: 07/17/97 11:30:00

Sample ID: JAT A 118 #2 PIT BOTTOM

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	100 100 100 100 100	07/21/97 07/21/97 07/21/97 07/21/97 07/21/97	SBTXME179 SBTXME179 SBTXME179 SBTXME179 SBTXME179



Page: 2

Collected: 07/17/97 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	1400	mg/Kg	25	25	07/21/97	SDRO43	

William P. Biava
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"

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

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

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

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

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

REPORT COMMENTS



Chain of Cu ody Record

Project Manager / Contact <u>Jeff Cross</u>-

Client Apache Corporation

7300 JEFFERSON, N.F. ALBUQUERQUE, NEW MEXI (505) 345-8964

60

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

1910 N. BIG SPRING MIDLAND, TEXAS 79705 (915) 570-1116 MELQUIADES ALANIS 6411 LOCAL UNO CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

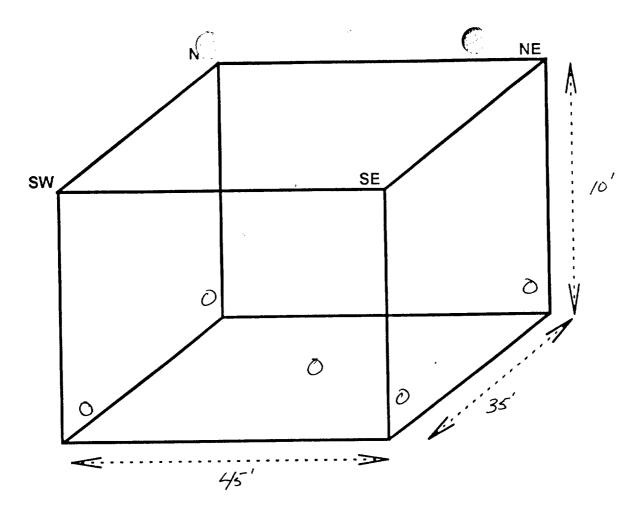
STATE OF THE PARTY	Same of the			A CANADA CANA
Bonnette				Cash Ru 610 AAL 1011(10)
Analysis Required				Date Date Received by: Care Signature Care Care Care Company Care C
Telephone No. (505) 774-664 Fax No. (505) 774-6624 Samplers: (Signature)	1/:30 (2)//			Signature Signature Signature Printed Company Reason Comments: Comments:
304 N. Behrend e/ZipEarmington, NM 8741 me/NumberJICARILLA PIT (Purchase Order/Quote	1 A 17-97 (A 118 #2 pt 310£3 7-17-97	2D TAT A118#5pitButton.		Signatured by: Signatured Mickes ALARCNS Time Company AS 4-C4C COAP Resson Method of Shipment:

Special Instructions:

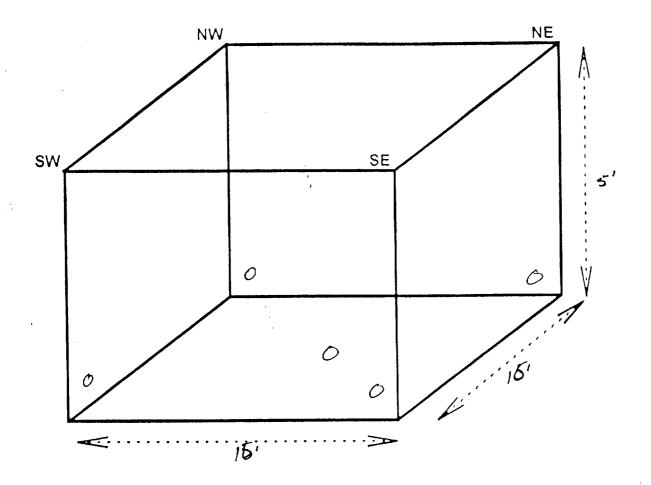
Shipment No.

Stored over 30 days (additional fee)

Returned to customer



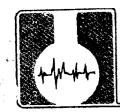
					_ =	SAMPLE AREA
WELL NAN	•	JAT A118 7-17-97	1 2	P.+#1		
NOTES -	SIDEW	T COMPOSITE				CENTER



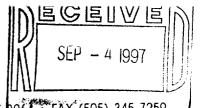
			= SAMPLE AREA
WELL NAME	A118 #2 P.+#2		
SAMPLE DATE	8-12-97		
NOTES 4 POINT	COMPOSITE SAMPLE TA	KEN 8" TO 10" IN	NTO PIT
SIDEW	'ALL		
1 POIN	T GRAB SAMPLE TAKEN 1	0" TO 12" INTO I	BOTTOM CENTER
			
\$100 market (100 market)			
			
warran and the state of the sta	· · · · · · · · · · · · · · · · · · ·	***************************************	

M W PETROLEUM/FARMINGTON DISTRICT PIT EXCAVATION AND CLOSURE REPORT

, , , , , , , , , , , , , , , , , , ,	/(O/ (#/ () (),,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					he Tribal EPO/	OCD/BLM	
_OCA1	ΓΙΟΝ	JAT A118#2		_		Review and A	pproval		Ì
	•					OCD-BLM EPO Represe	ntativo		3
PIT CO	TNUC	2				Date of Revie			
					L	Date of freth			
	START:	PIT #1	7/16/97		FINISH:	PIT#1	7/17/97		
DIMENS		PIT#2	12-Aug-97			PIT #2	12-Aug-97		CHANDS
	W	L	D	hud is. Indikyly, k	gganja naga	W	L	D 10'	CU YDS 350
Pit 1	30'	35'	4'	Pit 1		35'	45'	10' 5'	25
Pit 2	10'	10'	2'	Pit 2		15'	15'	3	
Pit 3				Pit 3			D# 4 @ 10'	Pit 2 @ 5'	Pit 3 @
		Pit 1 @ 8'	Pit 2 @ 5'	Pit 3 @		0 1	Pit 1 @ 10'	0.3	1 1 0 0
	Center	195	0.3			Center	0.4	0.1	
ρ	NW Corner	115	0.1		P	NW Corner	0.4	0.1	
	NE Corner	157	0		1 1	NE Corner SW Corner	0.4	0.2	
D	SW Corner	138	0.2		q	SE Corner	0.1	0	
	SE Corner	185	0			SE Come	U.2		
NOTES	S:								
		T EVOAVATU	ON ON DIT #	1, EXCAVATE	PIT TO 8'	PID READIN	GS HIGH.		
	7/16/97 STAF	AVATE DIT # 4	UTO 10' NO	STAINING OR	ODOR P	ID READING	S GOOD.		
	//1//9/ EXC	AVAIE PII #	10 10 100	STAINING OR	ODOK, I	10 ((2 10 1.7 -			
	04007 EVC	AVATE DIT # C	2 TO 5' NO	STAINING AN	D NO OD	OR.			
	8/12/97 EAC	42 IS CLEAN	PID READI	NGS GOOD.NO	MORE E	XCAVATION	NEEDED.		
	8/12/9/ PIT #	72 13 CLEAN	, FID NEADI	100 0000					
 									
-	SAMP DATE	7/17/97	8/12/97						
		Pit 1 @ 10'	Pit 2 @ 5'	Pit 3 @	ANALYS	SIS RESULTS		PER LAB	Assaigai
	Center	12.1	0.3		PIT	TPH	BETEX	WITNESS	DATE
ρ	NW Corner	0.4	0.1		NO				- 10 t 10 T
	NE Corner	0.4	0		11	1400	ND_	J.C.	7/21/97
0	SW Corner	0.1	0.2		2	ND	ND_	J.C.	8/20/97
	SE Corner	0.2	0		3_	<u> </u>			
***************************************				RE-SAMPLE		L(S) SAMPLE			
DATE		Pit 1 @	Pit 2 @	Pit 3 @	ANALY	SIS RESULT		PER LAB	1 5475
	Center				PIT	TPH	BETEX	WITNESS	DATE
ρ	NW Corner				NO	_			1
1	NE Corner				1				
Đ	SW Corner				2				
	SE Corner				3	<u></u>			
						L(S) SAMPL		DEDLAR	
DATE		Pit 1 @	Pit 2 @	Pit 3 @		SIS RESULT		PER LAB	DATE
	Center				PIT	TPH	BETEX	WITNESS	DATE
Р	NW Corner				NO				
4	NE Corner				1 1				
D	SW Corner				2				
	SE Corner				3				l



ASSAIGAI ANALYTICAL LABORATORIES, INC.



Page: 1

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

Report Generated:

August 22, 1997 14:38

CERTIFICATE OF ANALYSIS RESULTS BY SAMPLE

SENT APACHE CORPORATION

TO: 304 N. BEHREND

FARMINGTON, NM 87401

WORK ID

: 9708166

WORKORDER #

: JICARILLA PIT CLOSURES

CLIENT CODE

: APA01

DATE RECEIVED : 08/15/97

Lab ID: 9708166-01A

ATTN: JEFF CROSS

Sample ID:

Collected: 138/12/97/13:00:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE	BATCH_ID
BTEX/SW846 8020A Benzene Toluene Ethylbenzene P-&m-Xylene O-Xylene	BE39	mg/kg mg/kg mg/kg mg/kg mg/kg	0.0050 0.0050 0.0050 0.010 0.0050	100 100 100 100 100	08/20/97 08/20/97 08/20/97 08/20/97 08/20/97	SBTXME185 SBTXME185 SBTXME185 SBTXME185 SBTXME185

Lab ID: 9708166-01B

Sample ID: A118 #2 PIT #2 SIDES

Collected: 08/12/97 13:00:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015 Diesel Range OG in Soil	ND %	mg/Kg	25 25	08/19/97	SDRO47

Lab ID: 9708166-02A

Sample ID: A118 #2 PIT #2 BOTTOM

Collected: 08/12/97 13:30:00

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	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



Page: 2

) ID: 9708166-02B Sample ID: 22 BOFFOM

Collected: 08 13:30:00 Matrix: SOIL

Dampie 12.						
TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015 Diesel Range OG in Soil	308	mg/Kg	25	25	08/19/97	SDRO47

William P. Biava

President

WORKORDER COMMENTS

DATE : 08/22/97

WORKORDER:

DEFINITIONS/DATA QUALIFIERS

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

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

D_F = Sample "dilution factor"

 $\overline{N}T$ = 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

Chain of Custod Hecord

Project Manager / Contact <u>J Cff C FOSS</u>

ient Apache Corporation

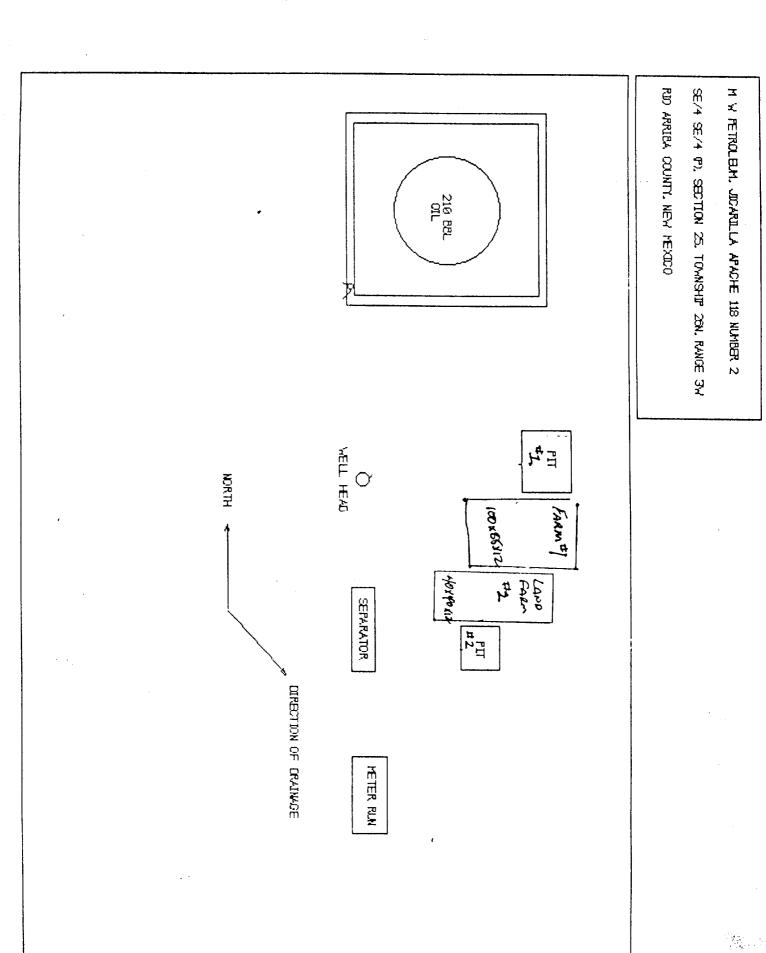
ALBUQUERQUE, NEW MEXICO 87109 (505) 345-8964

3332 WEDGEWOOD

1910 N. BIG SPRING TEXAS 79705

EL PASO, TEXAS 79925 MIDLAND, TEXAS 797 (915) 593-6000 (915) 570-1116	MELQUIADES ALANIS 6411 LOCAL UNO CIIIDAD IIIAREZ CHHIJAHIJA MEXICO 322200
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by/State/Z	ry/State/ZipEarmington, NM 87401	M 87401		ŭ. 	ax No. (5	Fax No. (505) 774-6624	524	_		5700	<i></i>		•	
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intract / Pur	Intract / Purchase Order / Quote	Anthony or a residence of						00 10 °0N) 200 23			1234		
AAL RACTION RUMBER	Field: Sample Number / Location	Oete	F.		Sample Type	Type / Size of Container	Preservation Temp. Chemical	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\						
(A	Allgra P. +#2 Sides	des 8-12-97	97 1:00		50.7	1102 Glass	271 70%	-						
8)	. // #		\ \						7					
40	4118#2 P. 1#2 Bollen	Them /	1:30	Q Q				\						
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										After analysis, s	After analysis, samples are to be:			
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										- 1				



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

ON-SITE SOIL REMEDIATION REPORT

Operator:		CORPORATIO	N .		_Telephon	e	505-325-0	318	
Address:		2855 SOUTH	ISIDE RI	VER ROAD	SUITE A	FARMING	TON N.M. 8	37401-7947	
Facility or W	ell Name:	J/	AT A 118	#2 CE	LL # 1				
Location:	Unit or Qtr	/Qtr Sec	Р	SEC 25	T 26 N	R3W	_County	RIO ARRI	ВА
Land Type		JIC. TRIBAL							
						<u></u>			
Date Remed	iation Starte	ed:	7/16/97		_Date Con	npleted:		11/11/98	
Remediation	Method:	Landfarmed		XXX	_Approx. c	cubic yards		315	
		Composted							
		Other			SOIL TO	BE PUT BA	CK IN PIT		
Depth to Gro	oundwater:		(pts)	0		Final Clo	sure Samp	oling	
Distance to a	an Ephemer	al Stream:	(pts)	0	Sampling	Date:	11/11/98	Time:	12:45PM
Distance to I or Watering		e, Playa,	(pts)	0	Sample F		•		
Wellhead Pr	rotection Are	ea:	(pts)	0	_	space (ppm) (ppm	0) ND	— Method	M8015
Distance To Surface Water:				00				Wethod 20A (NE	
RANKING S	CORE (TO	TAL POINTS)	•	0		or DILX TO	741040,00	20/1 (112	
I HEREBY C		IAT THE INFO LIEF	ORMATIC	ON ABOVE	IS TRUE	AND COMP	LETE TO 1	HE BEST (OF MY
DATE:		11/25/98		_PRINTED	NAME		JEFF CF	ROSS	
SIGNATURI	E_fr	floor		TITLE		PROJEC	T MANAG	ER	
		HE SOIL REM E JICARILLA						N IS APPRO	OVED IN
APPROVED	D: YES	\$_ <u>X</u>	NC)	_(REASO	N) hae	ar F	Backy	
SIGNED:	Ko	-CM		OATE:		- 28	-98		-

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

ON-SITE SOIL REMEDIATION REPORT

	TROLLEA CORPORATION			Telephone	e	505-325-0	318	
Address:	2855 SOUTHSIE	DE RIV	/ER ROAD	/SUITE A/	FARMING	TON N.M. 8	7401-7947	
Facility or Well Name:	JAT /	A 118	# 2 CEL	L#2				
Location: Unit or Qt	r/Qtr SecI	Р	SEC 25	T 26 N	R3W	_County	RIO ARRI	ВА
Land Type	JIC. TRIBAL	****						
Date Remediation Start	ed: 7/1	6/97		Date Com	npleted:		11/11/98	
Remediation Method:	Landfarmed		XXX	Approx. c	ubic yards		59	
	Composted							
	Other		,	SOIL TO	BE PUT BA	CK IN PIT	· · · · · · · · · · · · · · · · · · ·	
Depth to Groundwater:		(pts)	0		Final Clo	sure Samp	ling	
Distance to an Epheme	ral Stream:	(pts)	0	Sampling	Date:	11/11/98	_Time:	12:55PM
Distance to Nearest Lal or Watering Pond:	ke, Playa,	(pts)	0	Sample R		_		
Wellhead Protection Area: (pts) 0 TPH (ppm) ND Method M8015								
Distance To Surface W	ater:	(pts)	0			´ W846 , 802	-))
RANKING SCORE (TO	TAL POINTS)		0		JI DILK TO			
I HEREBY CERTIFY TO KNOWLEDGE AND BE		OITAN	N ABOVE	IS TRUE A	AND COMP	LETE TO T	HE BEST C	PF MY
DATE:	11/25/98		PRINTED	NAME		JEFF CR	oss	
SIGNATURE	floor		TITLE		PROJEC	T MANAGE	R	
AFTER REVIEW OF T ACCORDANCE TO TH							N IS APPRO	VED IN
APPROVED: YE	s_ <u>X</u>	NO		_(REASOI	V) use	as E	3ce K	full
SIGNED:	=CMc		DATE:		- 28 -	98		- -

M W PETROLEUM/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE	JAT A118 #2		_	
* AMOUNT OF SOIL UNDERG	OING REMEDIATION	375	Yds.	
CELL No. 1		SampDATE 6/10/98	TPH 5700	BTEX ND
		11/11/98	ND	ND
DIMENSIONS(LxWxH) 100	0' X 85' X 12"			
CELL LOCATION (dir. from well head	EAST			
* DATE BEGAN: 7/16/97				
DATE TERMINATED (TPH <5,000 pp	pm/BTEX< 50 ppm/Benzene < 10 p	pm)		-
		SampDATE	TPH	BTEX
CELL No. 2		6/10/98	2700	ND
		11/11/98	ND	ND
DIMENSIONS(LxWxH) 40	' X 40' X 12"			
CELL LOCATION (dir. from well head	d SOUTH			
* DATE BEGAN: 7/16/97			 	
BATE BEOMY				<u></u>
DATE TERMINATED (TPH <5,000 p	pm/BTEX< 50 ppm/Benzene < 10 p	pm)		-
		CompDATE	TPH	BTEX
		SampDATE	IFII	BILA
CELL No. 3				
				
DIMENSIONS(LxWxH)				
CELL LOCATION (dir. from well head	d			
CLEE EGG, (TIGH (GIII) HOIL HOIL				
* DATE BEGAN:				<u> </u>
DATE TERMINATED (TPH <5,000 p	pm/BTEX< 50 ppm/Benzene < 10 p	opm)		_
REMEDIATION RECORD: (Date, Tre	eatment, Tilling)			
7/21/97 TREAT CELLS WITH 46-0-0	FERTILIZER, WATER, PLOW AND			
7/30/97 PLOW AND TILL CELLS.		PLOW AND TILL SO		
8/4/97 PLOW AND TILL SOIL.	=	ND TILL SOIL CELLS		
8/21/97 PLOW AND TILL SOIL.		R PLOW AND TILL SO		
8/29/97 WATERPLOW AND TILL SO		AND TILL SOIL CELL		
9/23/97 PLOW AND TILL SOIL CELI		AND TILL SOIL CELL		
4/22/98 PLOW AND TILL SOIL CELI		PLOW AND TILL SO		
5/19/97 PLOW AND TILL SOIL CEL	LS 9/24/98 PLOW	AND TILL SOIL CELL	. 5.	

From excavation reports.

WELL NAME: SAMPLE DATE: DIMENSIONS:	JAT A118 # 2 CELL # 1 111/11/98 100' X 85' X 12"		0	= SAMPLE AREA
0	0	Ο		0
	0	0	Ο	
0	O	0		0
NOTES:	ALL SAMPLES TAKEN 10" TO 12" INTO CELL. 11 POINT COMPOSITE SAMPLE	TO CELL.		



ASSAIGAI ANALYTICAL LABORATORIES, INC.

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

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

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

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

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client:

APACHE CORPORATION

Project: 9811106

JICARILLA PIT CLOSURES

Client Sample ID	A118#2	CELL	1	Sampl M atrix					Sample Collected	11/11/98 12:45:00
						Dilution	Detection			Run
raction	QC Group	CAS#		Result	<u>Units</u>	Factor	Limit	* 5	Sequence	<u>Date</u>
			Test: SW846 8010B/8020A Purge	able VOCs by GC/PIL	D-ELCD					
9811106-01A	X98513	71-43-2	Benzene	ND	mg / Kg	250	0.005	,	XG.1998.996-6	11/12/98
011100 0111	X98513	100-41-4	Ethylbenzene	ND	mg / Kg	250	0.005	7	XG.1998.996-6	
	X98513	95-47-6	o-Xylene	ND	mg / Kg	250	0.005	;	XG.1998.996-6	
	X98513		P/M-Xylenes	ND	mg / Kg	250	0.01		XG.1998.996-6	
	X98513	108-88-3	Toluene	ND	mg / Kg	250	0.005		XG.1998.996-6	
Client Sample ID	A118#2	CELL	2	Samp Matrix		•			Sample Collected	11/11/98 12:55:00
						Dilution	Detection			Run
Fraction	QC Group	CAS#		Result	<u>Units</u>	<u>Factor</u>	<u>Limit</u>	*	Sequence	<u>Date</u>
			Test: SW846 8010B/8020A Purg	eable VOCs by GC/Pi	ID-ELCD					
9811106-02A	X98513	71-43-2	Benzene	ND	mg / Kg	250	0.005		XG.1998.996-7	11/12/98
	X98513	100-41-4	Ethylbenzene	ND	mg / Kg	250	0.005		XG.1998.996-7	
	X98513	95-47-6	o-Xylene	ND	mg/Kg	250	0.005		XG.1998.996-7	
	X98513		P/M-Xylenes	ND	mg / Kg	250	0.01	i	XG.1998.996-7	
	X98513	108-88-3	Toluene	ND	mg / Kg	250	0.005		XG.1998.996-7	
			Test: SW846 8015A Diesel Ran			_,			XG.1998.1006-8	11/13/98
			Diesel Range Organics	ND	mg/Kg	25	25	1		

Page 1 of 2

9811106-028

Client Reports

Diesel Range Organics

ND 2.0

Report Date

11/17/98 4:22:33 PM





Chain of Custody Record

Page _

9

7300 JEFFERSON, N.E.
ALBUQUERQUE, HEW MEXICO 87109
(505) 345-8564

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

Remarks

	Returned to customer					
tee)	Stored over 30 days (nd					Special Instructions:
	Stored (30 days max)					Shipment No.
	[] Disposed of (additional			Comments:		Method of Shipment:
	After analysis, samples are to be:	b	_			
			of the year	Rear Dalivion		Reason
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, Trans				Printed (Day	10/16	Printed DANA
27.24	11.17.613 Stonature Check		Signature Signature	Signature	mu hutta !!	Since Williams
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		\			11	28
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		188	it 4 oz glass	1111/18/8/218 Soil	4118 #2 FE	LA
		: Chemical	Type / Size of Container Tem	Date Time Type	Sample Number / Location	FRACTION
]				
) co./E			Contract / Purchase Order / Quote	Contract / Pur
Rema		1	Samplers: (Signature) Hany	Sa	/ Number	Project Name / Number
<u>, </u>			Fax No. (505) 774-6624	NM 87401-7947_ F	City/State/Zip Farmington, NM E	City / State / 2
	Analysis Required		Ste. ATelephone No. (505) 774-6643	River RD, Ste.An	2855 Southside Rive	Address 28
		Cross	Project Manager / Contact Jeff (ם	che Corporation	Client Apache

16 cm