

EL PASO FIELD SERVICES PRODUCTION PIT CLOSURE

OK

Federal Gas Unit 3 No. 1 Meter/Line ID – 72014

SITE DETAILS

Legals - Twn: 29N	Rng: 10W	Sec: 23	Unit: N
NMOCD Hazard Ranking: 20		Land Type: Fee	
Operator: Amoco		Pit Closure Date: 04/29/94	

RATIONALE FOR CLOSURE

The pit noted above was assessed and ranked according to the criteria in the New Mexico Oil Conservation Division's (NMOCD) Unlined Surface Impoundment Closure Guidelines.

A Phase I excavation was conducted on April 29, 1994, to 12 feet below ground surface and a soil sample was collected for field headspace analysis and laboratory analysis for benzene, total BTEX, and TPH. Groundwater was not encountered in the pit. Approximately 45 cubic yards of excavated material was removed for landfarming and sent to an OCD approved centralized site. The pit was backfilled and graded in a manner to direct surface runoff away from the pit area. Headspace analysis indicated an organic vapor content of 527 ppm; laboratory analysis indicated a benzene concentration of <0.5 mg/kg, a total BTEX concentration of 30.2 mg/kg, and a TPH concentration of 660 mg/kg. TPH was above required remediation levels for the Hazard Ranking Score.

On July 11, 1995, a Phase II borehole was drilled to 14 feet below ground surface. Auger refusal was encountered at 12.5 feet and the core barrel was driven to 14 feet without any recovery.

On November 30, 1995, a Phase III excavation was conducted to 17 feet below ground surface and a soil sample was collected for field headspace analysis and laboratory analysis of benzene, total BTEX, and TPH. Groundwater was not encountered in the pit. Approximately 280 cubic yards of excavated material was removed for landfarming and sent to an OCD approved centralized site. The pit was backfilled and graded in a manner to direct surface runoff away from the pit area. Headspace analysis indicated a concentration of 0 ppm; laboratory analysis indicated a benzene concentration of <0.5 mg/kg, a total BTEX concentration of <3.0, and a TPH concentration of 114 mg/kg.

El Paso Field Services Company (EPFS) requests closure of the above mentioned production pit location for the following reasons:

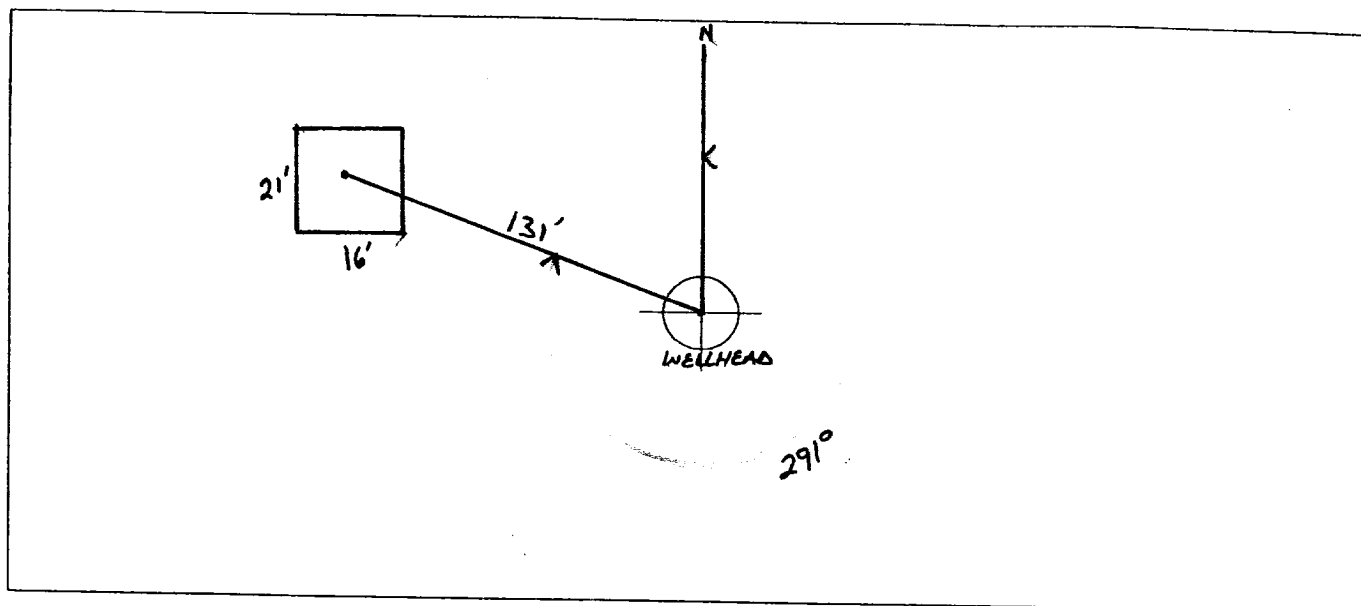
- The primary source, discharge to the pit, has been removed for almost six years.
- The test pit was backfilled and the former pit area graded to direct surface runoff away from the former pit.
- Groundwater was not encountered in the excavations or borehole.
- Residual hydrocarbons in the soil will degrade naturally with minimal risk to the environment.
- Based on the Hazard Ranking Score, benzene and total BTEX were below required remediation levels for the Hazard Ranking Score.

FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>72014</u> Location: <u>FEDERAL GAS UNIT 3 #1</u></p> <p>Operator #: <u>0203</u> Operator Name: <u>AMOCO</u> P/L District: <u>BLOOMFIELD</u></p> <p>Coordinates: Letter: <u>N</u> Section <u>23</u> Township: <u>29</u> Range: <u>10</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator _____ Location Drip: <input checked="" type="checkbox"/> Line Drip: _____ Other: _____</p> <p>Site Visit Date: <u>4.11.94</u> Run: <u>10</u> <u>42</u></p>
	<p>NMOCD Zone: Inside <input type="checkbox"/> Land Type: BLM <input type="checkbox"/> (From NMOCD Vulnerable <input type="checkbox"/> Maps) Zone <input checked="" type="checkbox"/> State <input type="checkbox"/> Outside <input type="checkbox"/> Fee <input checked="" type="checkbox"/> Indian _____</p> <p>Depth to Groundwater</p> <p>Less Than 50 Feet (20 points) <input type="checkbox"/></p> <p>50 Ft to 99 Ft (10 points) <input checked="" type="checkbox"/></p> <p>Greater Than 100 Ft (0 points) <input type="checkbox"/></p> <p>Wellhead Protection Area :</p> <p>Is it less than 1000 ft from wells, springs, or other sources of fresh water extraction? , or ; Is it less than 200 ft from a private domestic water source? <input type="checkbox"/> YES (20 points) <input checked="" type="checkbox"/> NO (0 points)</p> <p>Horizontal Distance to Surface Water Body</p> <p>Less Than 200 Ft (20 points) <input type="checkbox"/></p> <p>200 Ft to 1000 Ft (10 points) <input checked="" type="checkbox"/></p> <p>Greater Than 1000 Ft (0 points) <input type="checkbox"/></p> <p>Name of Surface Water Body <u>SAN JUAN RIVER</u></p> <p>(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)</p> <p>TOTAL HAZARD RANKING SCORE: <u>20</u> POINTS</p>
REMARKS	<p>Remarks : <u>TWO PITS ON LOCATION. WILL CLOSE ONLY ONE. PIT IS DRY. LOCATION IS SOUTH OF HWY. 64 TO BLANCO AND AT A HIGHER ELEVATION THAN THE SAN JUAN RIVER.</u></p>

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 291° Footage to Wellhead 131'
 b) Degrees from North _____ Footage to Dogleg _____
 Dogleg Name _____
 c) Length : 21' Width : 16' Depth : 2'



REMARKS :

STARTED TAKING PICTURES AT 2:10 P.M.
END DUMP

Completed By:

Paul Thompson
 Signature

4-11-94

Date

FIELD T REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>72014</u> Location: <u>Federal Gas unit 3 #1</u> Coordinates: Letter: <u>N</u> Section <u>23</u> Township: <u>29</u> Range: <u>10</u> Or Latitude _____ Longitude _____ Date Started : <u>4/29/94</u> Area: <u>10</u> Run: <u>42</u>
FIELD OBSERVATIONS	Sample Number(s): ⁹⁴⁵⁰⁴⁶ <u>4P9</u> Sample Depth: <u>12</u> Feet Final PID Reading <u>527 ppm</u> PID Reading Depth <u>12</u> Feet Yes No Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth ^{4-29-94 JSP} <u>12</u> Feet
CLOSURE	Remediation Method : Excavation <input checked="" type="checkbox"/> (1) Approx. Cubic Yards <u>45</u> Onsite Bioremediation <input type="checkbox"/> (2) Backfill Pit Without Excavation <input type="checkbox"/> (3) Soil Disposition: Envirotech <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (3) Tierra Other Facility <input type="checkbox"/> (2) Name: _____ Pit Closure Date: <u>4-29-94</u> Pit Closed By: <u>BEI</u>
REMARKS	Remarks : <u>Started Remediating pit to 12' East side wall has a black layer from approx 2' down extending approx. 3 ft, took VC Sample PID Reading is 527 ppm at 70° closed pit</u>
	Signature of Specialist: <u>James J. Puro</u>



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	509	945046
MTR CODE SITE NAME:	72014	N/A
SAMPLE DATE TIME (Hrs):	4/29/94	1645
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	5-2-94	5-2-94
DATE OF BTEX EXT. ANAL.:	5/5/94	5/8/94
TYPE DESCRIPTION:	VC	Brown Sand / clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	40.50	MG/KG		X10		
TOLUENE	40.50	MG/KG		X10		
ETHYL BENZENE	2.2	MG/KG		X10		
TOTAL XYLENES	27	MG/KG		X10		
TOTAL BTEX	30.2	MG/KG				
TPH (418.1)	659.660	MG/KG			2.06	28
HEADSPACE PID	527	PPM				
PERCENT SOLIDS	93.2	%				

— TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 —

The Surrogate Recovery was at 52 % for this sample All QA/QC was acceptable.

Negative:

ATI Results attached. Surrogate recovery was outside ATI QC limit due to matrix interference

DF = Dilution Factor Used

Approved By:

John Lardo

Date:

5/2/94

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX, MTBE (EPA 8020)
 CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 405313
 PROJECT # : 24324
 PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
31	945044	NON-AQ	04/29/94	05/05/94	05/06/94	2
32	945045	NON-AQ	04/29/94	05/05/94	05/06/94	10
33	945046	NON-AQ	04/29/94	05/05/94	05/08/94	20
PARAMETER			UNITS	31	32	33
BENZENE			MG/KG	<0.05	1.4	<0.50
TOLUENE			MG/KG	1.1	<0.25	<0.50
ETHYLBENZENE			MG/KG	1.2	7.9	2.2
TOTAL XYLENES			MG/KG	17	72	27
METHYL-t-BUTYL ETHER			MG/KG	<0.24	<1.2	<2.4

SURROGATE:

BROMOFLUOROBENZENE (%) 65 93 52*

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE



Analytical **Technologies**, Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. 405313

May 13, 1994

El Paso Natural Gas Company
P.O. Box 4990
Farmington, NM 87499

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 05/03/94, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

EPA Method 8015 analysis was added on 05/05/94 for sample 945008 per Stacy Sendler.

The matrix spike/spike duplicate data from the samples extracted on 05/05/94 is reported twice reflecting quantification using both the internal standard and external standard protocols. Both protocols were employed to quantify the samples submitted for this project.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jd

Enclosure





Analytical Technologies, Inc.

COPY

**ORIGINAL
INVOICE**

Albuquerque Office: 2709-D Pan American Fwy., NE
Albuquerque, NM 87107
(505) 344-3777

Remit To:
Analytical Technologies, Inc.
P. O. Box 840436
Dallas, Texas 75284-0436

AL 72053

Billed to: EL PASO NATURAL GAS COMPANY
P.O. BOX 4990
FARMINGTON, NM 87499
Accession No.: 9405-313
Date: 05/13/94
Client No.: 850-020
810

Attention: ACCOUNTS PAYABLE

Telephone: 505-325-2841

Authorized by: JOHN LAMB DIN

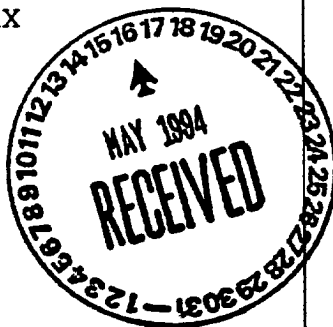
P.O. Number: 38822

Samples: 39 NON-AQ

Project: PIT CLOSURE
Project No.: 24324

*EPNG SAMPLE # 945008
to
945027
945032, 945033, 945035 to 945039, 945041
to 945050, 945034 and 945040
received 05/03/94*

TEST DESCRIPTION	QUANTITY	PRICE	TOTAL
EPA METHOD 8015M/8020	-10 % 1	125.00	112.50
BTEX/MTBE (8020)	-10 % 38	80.00	2736.00
NM GROSS RECEIPTS TAX	1	165.57	165.57
***** Amount due: 3014.07 *****			



JS 5/17/94
APPROVED FOR PAYMENT

DATE 5/17/94
CHARGE 50% 108-52452-24-0001-0012-SI-2010
SIGNATURE David Hall
541-3531

TERMS: Net 30 Days - 1½% Finance Charge on Balance Due over 30 days.



CHAIN OF CUSTODY RECORD

PROJECT NUMBER		PROJECT NAME		PROJECT # 24324		DATE: 4-29-94	
SAMPLERS: (Signature)		SAMPLERS: (Signature)		SAMPLERS: (Signature)		SAMPLERS: (Signature)	
LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER	DATE	TIME	MATRIX
5044	4-28-94	1130	Soil	4P07			
5045	4-28-94	1400	Soil	4P08			
5046	4-28-94	1645	Soil	4P09			
<div style="border: 1px solid black; width: 100%; height: 100%; transform: rotate(45deg);"></div>							
TOTAL NUMBERS OF CONTAINERS				SAMPLE TYPE			
TPH EPA 418.1				BTX EPA 8020			
REQUESTED ANALYSIS				REMARKS			
560 #				Ground water 10'			
5				Ground water 7'			
6							
7							

RECEIVED BY: (Signature) *James J. P...*

RECEIVED BY: (Signature) *James J. P...*

DATE/TIME 34° 4/29/94 1800

DATE/TIME 30° 5/2/94 1005

RELINQUISHED BY: (Signature) *Steve T. P...*

RELINQUISHED BY: (Signature) *Steve T. P...*

DATE/TIME 30°

DATE/TIME

REQUESTED TURNAROUND TIME:

☐ ROUTINE ☐ RUSH

RECEIVED OF LABORATORY BY: (Signature) *James J. P...*

CARRIER CO.

BILL NO.:

RESULTS & INVOICES TO:

FIELD SERVICES LABORATORY

EL PASO NATURAL GAS COMPANY

P.O. BOX 4990

FARMINGTON, NEW MEXICO 87499

CHARGE CODE

505-599-2141

FAX: 505-599-2261

RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.

4000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

Borehole #

BH-1

Well #

Page

of

Project Name

EPNG Pits

Project Number

14509

Phase

601-6000

Project Location

Federal Gas Unit 3#1, 72014

Well Logged By

S.Kelly

Personnel On-Site

K. Padilla, F. Rivera, D. Charley

Contractors On-Site

Client Personnel On-Site

Drilling Method

4 1/4" ID HSA

Air Monitoring Method

CGI, PID

Elevation

Borehole Location 129, R10, Z3, 11

GWL Depth

Logged By S.Kelly

Drilled By

K. Padilla

Date/Time Started 7/11/95 1015

Date/Time Completed 7/11/95 1115

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
							BZ	BH	S	
0				Backfill to 12'.						
5										
10										
12.5	1	12.5 14.0	0 1.5'	? No recovery						
14.0				BoH-14.0'						
15										
20										
25										
30										
35										
40										

Comments:

Augers refused at 12.5'. Sounds like cobble. Was able to drive spoon to 14'. but got no recovery. Stopped at 14'. BH grouted to surface.

Geologist Signature

Sarah Kelly

FIELD PIT REMEDIATION/CLOSURE FORM/PHASE II

GENERAL	<p>Meter: <u>72014</u> Location: <u>Federal Gas Unit 3#1</u></p> <p>Coordinates: Letter: <u>N</u> Section: <u>23</u> Township: <u>29</u> Range: <u>10</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started: <u>11-30-95</u> Area: <u>10</u> Run: <u>42</u></p>
FIELD OBSERVATIONS	<p>Sample Number(s): <u>4P95</u></p> <p>Sample Depth: <u>17</u> Feet</p> <p>Final PID Reading: <u>0.3 ppm</u> PID Reading Depth: <u>17</u> Feet</p> <p>Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth: _____ Feet</p> <p>Final Dimensions: Length <u>27</u> Width <u>21</u> Depth: <u>17</u></p>
CLOSURE	<p>Remediation Method:</p> <p>Excavation <input checked="" type="checkbox"/> (1) Approx. Cubic Yards <u>280</u> ^{12/4/95}</p> <p>Onsite Bioremediation <input type="checkbox"/> (2)</p> <p>Backfill Pit Without Excavation <input type="checkbox"/> (3)</p> <p>Overburden Cubic Yards <u>25</u> ^{12/4/95}</p> <p>Soil Disposition:</p> <p>Envirotech <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (3) Tierra</p> <p>Other Facility <input type="checkbox"/> (2) Name: _____</p> <p>Pit Closure Date: <u>11-30-95</u> Pit Closed By: <u>Philippe Enl</u></p> <p><u>Phase III</u></p>
REMARKS	<p>Remarks: <u>Due to 17 Ft Tank PID reading they were</u></p> <p><u>N wall 02 ppm S wall 01 ppm E wall 04 ppm W wall 02 ppm</u></p> <p><u>Bot 02 ppm Comp 03 ppm</u></p>
	<p>Signature of Specialist: <u>James L. Penner</u></p>



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JP 95	947819
MTR CODE SITE NAME:	72014	Federal Gas Unit 3 #1
SAMPLE DATE TIME (Hrs):	11-30-95	1100
PROJECT:	Phase III Exc.	
DATE OF TPH EXT. ANAL.:	12/1/95	
DATE OF BTEX EXT. ANAL.:	12/1/95	12/1/95
TYPE DESCRIPTION:	VC	Brown sand & clay

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 0.5	MG/KG				
TOLUENE	< 0.5	MG/KG				
ETHYL BENZENE	< 0.5	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	114	MG/KG			2.05	28
HEADSPACE PID	-	PPM				
PERCENT SOLIDS	91.6	%				

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 93% for this sample All QA/QC was acceptable.
Narrative:

DF = Dilution Factor Used

Approved By: JP

Date: 12/4/95

BTEX SOIL SAMPLE WORKSHEET

File	:	947819	Date Printed	:	12/2/95
Soil Mass (g)	:	5.06	Multiplier (L/g)	:	0.00099
Extraction vol. (mL)	:	10	CAL FACTOR (Analytical):		200
Shot Volume (uL)	:	50	CAL FACTOR (Report):		0.19763

			DILUTION FACTOR:	1	Det. Limit
Benzene (ug/L)	:	0.00	Benzene (mg/Kg):	0.000	0.494
Toluene (ug/L)	:	0.23	Toluene (mg/Kg):	0.045	0.494
Ethylbenzene (ug/L)	:	0.00	Ethylbenzene (mg/Kg):	0.000	0.494
p & m-xylene (ug/L)	:	0.00	p & m-xylene (mg/Kg):	0.000	0.988
o-xylene (ug/L)	:	0.00	o-xylene (mg/Kg):	0.000	0.494
			Total xylenes (mg/Kg):	0.000	1.482
			Total BTEX (mg/Kg):	0.045	



Phase II Ex.

CHAIN OF CUSTODY RECORD

Page _____ of _____

PROJECT NUMBER		PROJECT NAME		TOTAL NUMBERS OF CONTAINERS		SAMPLE TYPE		REQUESTED ANALYSIS			CONTACT LABORATORY P. O. NUMBER	
SAMPLERS: (Signature)		DATE		SAMPLE NUMBER				TPH	BTEX	EPA 8020		
LAB ID	DATE	TIME	MATRIX								REMARKS	
7819	11-30-95	11:00	50" V	1	VC	X	X	X	X	X	Federal Gas Unit 3 #1 72014	
[Large diagonal line across the table]												
RECEIVED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME		
James J. Louder		11-30-95		Kelly Small		12-1-95		Kelly Small		12-1-95		
RECEIVED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME		
James J. Louder		11-30-95		Kelly Small		12-1-95		Kelly Small		12-1-95		
REQUESTED TURNAROUND TIME: <input type="checkbox"/> ROUTINE <input type="checkbox"/> RUSH												
CARRIER CO.												
BILL NO.:												
SAMPLE RECEIPT REMARKS												
RESULTS & INVOICES TO:												
FIELD SERVICES LABORATORY EL PASO NATURAL GAS COMPANY P. O. BOX 4990 FARMINGTON, NEW MEXICO 87499												
505-599-2144 FAX: 505-599-2261												