AE Order Number Banner

Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.

App Number: pKJ1603942236

1RP - 4163

NMR ENERGY LLC

2/8/2016

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company **NMR ENERGY LLC**	Contact **Daniel Baker**
Address **800 Bering Dr. Suite 250 Houston, TX 77057**	Telephone No. **(432) 559-7520**
Facility Name Post 3	Facility Type **Well**

Surface Owner: Private	Mineral Owner: Private	API No. 30-025-28576

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	12	14S	37E	330	N	330	W	LEA

Latitude 33.1252837405026 N ° **Longitude** 103.161372887896 W °

NATURE OF RELEASE

Type of Release:	Volume of Release	Volume Recovered
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken.*

The Initial C-141 was requested by NMOCD personnel during a meeting on April 4th, 2012, in which it was revealed that there was a historical contamination by previous operators to the site in question beyond what was furnished to us in the operator record or public record.

Describe Area Affected and Cleanup Action Taken.*

Tetra Tech inspected site and collected samples to define spills extent. Soil that exceeded RRAL was removed and hauled away for proper disposal. Site was then brought up to surface grade with clean backfill material. Tetra Tech prepared closure report and submitted to NMOCD for review.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMC
should their operations have failed to adequately investigate and remediate conta
or the environment. In addition, NMOCD acceptance of a C-141 report does not
federal, state, or local laws and/or regulations.

APPROVED

Signature:	Approved by District Supervisor:
Printed Name: Ike Tavarez	
Title: Project Manager, P.G.	Approval Date: 02/8/16 Expiration Date:
E-mail Address: ike.tavarez@tetratech.com	Conditions of Approval: Attached ☐
Date: Phone: (432) 687-8110	

* Attach Additional Sheets If Necessary

IRP 4163

SITE INFORMATION

Report Type: Closure Report

General Site Information:						
Site:	**Post #3 Well**					
Company:	**NMR Energy LLC.**					
Section, Township and Range	**Sec. 12**	**T 14S**	**R 37E**			
Lease Number:	**API-30-025-28576**					
County:	**Eddy County**					
GPS:	**33.12528° N**			**103.16137 ° W**		
Surface Owner:	Private					
Mineral Owner:						
Directions:	In Lovington, NM at the intersection of Hwy 82 and 206, travel North on 206 for approximately 11 miles, turn East onto McDonald Rd (CR 130) and continue for 9.0 miles, turn South and continue for 1.0 mile, turn East to well location.					

Release Data:	
Date Released:	Unknown
Type Release:	Unknown
Source of Contamination:	Unknown
Fluid Released:	Unknown
Fluids Recovered:	Unknown

Official Communication:			
Name:	Daniel Baker		Ike Tavarez
Company:	NMR Energy LLC		Tetra Tech
Address:	800 Bering Dr. Suite 250		4000 N. Big Spring
			Ste 401
City:	Houston, TX 77057		Midland, Texas
Phone number:	(432)559-7520		(432) 687-8110
Fax:			
Email:	dbaker@tumbleweedllc.com		Ike.Tavarez@tetratech.com

Ranking Criteria		
Depth to Groundwater:	***Ranking Score***	***Site Data***
<50 ft	20	
50-99 ft	10	
>100 ft.	0	
WellHead Protection:	***Ranking Score***	***Site Data***
Water Source <1,000 ft., Private <200 ft.	*20*	
Water Source >1,000 ft., Private >200 ft.	***0***	*0*
Surface Body of Water:	***Ranking Score***	***Site Data***
<200 ft.	*20*	
200 ft - 1,000 ft.	10	
>1,000 ft.	**0**	0
Total Ranking Score:	**10**	

Acceptable Soil RRAL (mg/kg)		
Benzene	***Total BTEX***	***TPH***
10	50	1,000

HOBBS OCD

FEB 20 2014

RECEIVED

TETRA TECH

January 14, 2014

HOBBS OCD

FEB 20 2014

RECEIVED

Mr. Geoffrey Leking
Environmental Engineer Specialist
Oil Conservation Division, District 1
1625 North French Drive
Hobbs, New Mexico 88240

Re: Closure Report for the NMR Energy LLC., Post #3 Well Site, Unit D, Section 12, Township 14 South, Range 37 East, Lea County, New Mexico.

Mr. Leking:

Tetra Tech, Inc. (Tetra Tech) was contacted by NMR Energy, LLC. (NMR) to assess a spill from the Post #3 Well Site, Unit D, Section 12, Township 14 South, Range 37 East, Lea County, New Mexico (Site). The spill site coordinates are N 33.12546°, W 103.16134°. The site location is shown on Figures 1 and 2.

Background

The NMOCD requested NMR Energy to submit a State of New Mexico C-141 Initial Report for a historical spill that occurred under the previous operator of the facility. The initial C-141 form is enclosed in Appendix A.

Groundwater

The New Mexico State Engineer's Office Well Reports showed one well in Section 1, with a reported groundwater depth of 50' below surface. In addition, wells were also noted in Section 2, 11, and 14, near the site, with depths to groundwater ranging in depth from 46' to 100' below surface. The USGS data also showed groundwater depths ranging from 85' to 120' below surface. According to the NMOCD groundwater map and data, the depth to groundwater in this area is approximately 80' below surface.

Tetra Tech
4000 North Big Spring, Ste 401 Midland, TX 79705
Tel 432.682.4559 Fax 432.682.3946 www.tetratech.com

A private water well used by the landowner is located in the northwest corner of Section 12, approximately 0.5 miles south of the well location, was measured by Tetra Tech personnel and measured 86' below ground surface. The average depth to groundwater map is shown in Appendix B.

Regulatory

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the depth to groundwater, the proposed RRAL for TPH is 1,000 mg/kg.

Soil Assessment and Analytical Results

On July 17, 2012, representatives from Tetra Tech and Helms Oil and Gas met with Mr. Geoffrey Leking with the NMOCD onsite to inspect and confirm the sampling locations at the facility. Mr. Leking selected three (3) locations to assess the subsurface soils from historical impact at the well site. On October 9, 2012, Tetra Tech installed three (3) backhoe trenches (T-1, T-2, and T-3) to evaluate and vertically define extents of subsurface impact. Selected soil samples were analyzed for TPH, BTEX, and chloride contamination. The sampling results are summarized in Table 1. The trench locations are shown on Figure 3. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C.

Referring to Table 1, none of the samples showed a TPH concentration above RRAL at 1.0' below surface. Trench one (T-1) and trench three (T-3) did not show elevated chloride concentrations in any of the samples. Chloride concentrations were detected in the area of trench two (T-2) at a depth of 2.0' and 4.0' below surface of 1,220 mg/kg and 941 mg/kg, respectively. The chlorides significantly declined with depth to 297 mg/kg at 6.0' below surface. Deeper samples could not be collected due to dense caliche formation. The chloride impact was vertically defined.

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Remedial Activities

On December 17, 2013, Tetra Tech supervised the excavation of soil in the area of T-2 as highlighted (green) on Table 1 and shown on Figure 4. The excavation area measured approximately 30' x 50' at a depth of 6.0' below surface. Once excavated, confirmation samples were collected from the excavation bottom and sidewalls. The sampling results are summarized in Table 1. The excavation location is shown on Figure 4. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C.

Referring to Table 1, the confirmation samples collected from the Bottom Hole, East Sidewall, South Sidewall, and North Sidewall all showed chloride concentrations of 374 mg/kg, 277 mg/kg, 642 mg/kg, and 170 mg/kg, respectively. However, the West Sidewall showed a chloride concentration of 1,300 mg/kg. Due to an active underground flowline, we were unable to excavate the West Sidewall any further due to safety concerns. Tetra Tech contacted NMOCD during the excavation, at which point the NMOCD approved discontinuing further digging along the West Sidewall due to safety concerns.

Approximately 435 yards of excavated soil was transported offsite for proper disposal and the area was backfilled with clean material to surface grade.

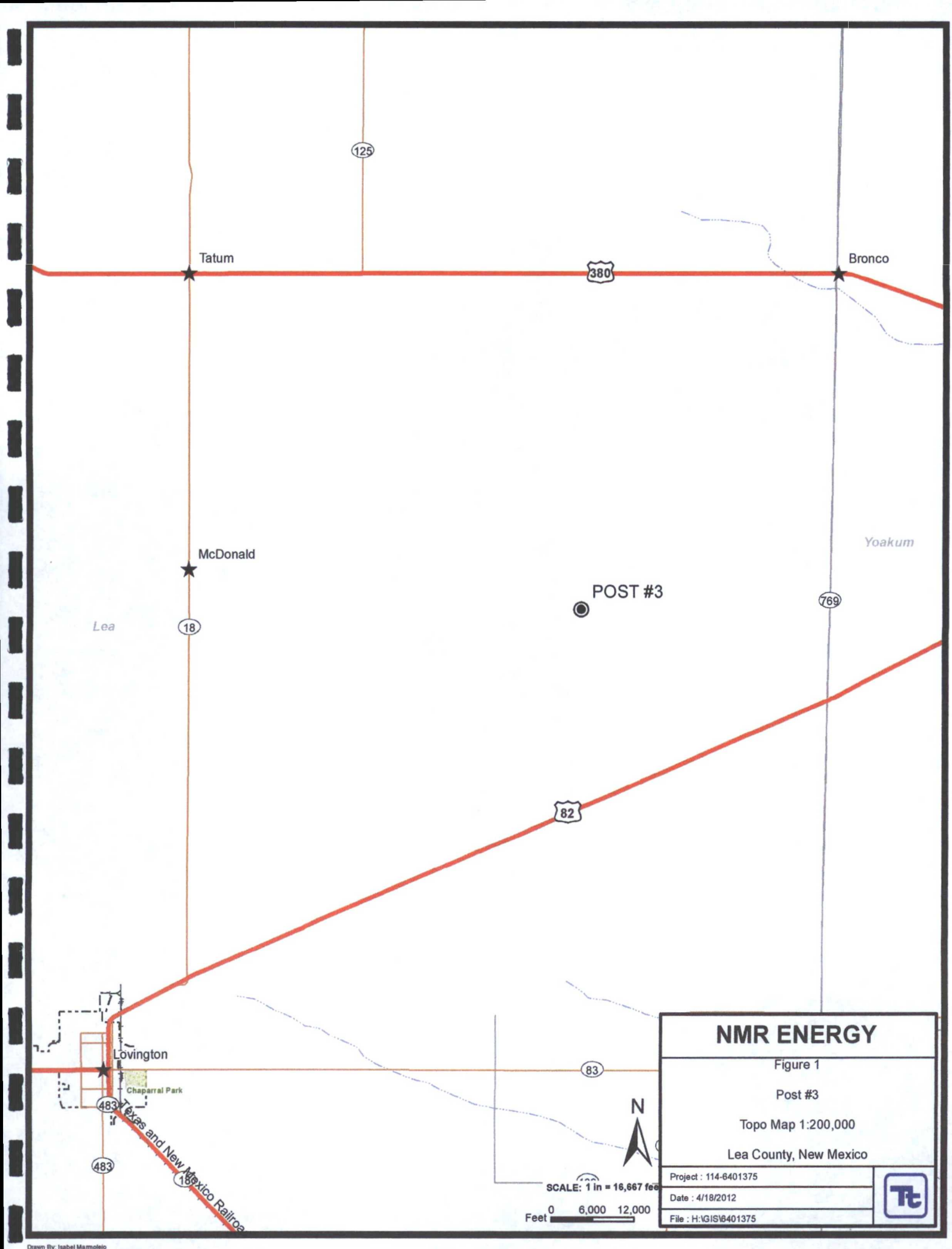
Conclusion

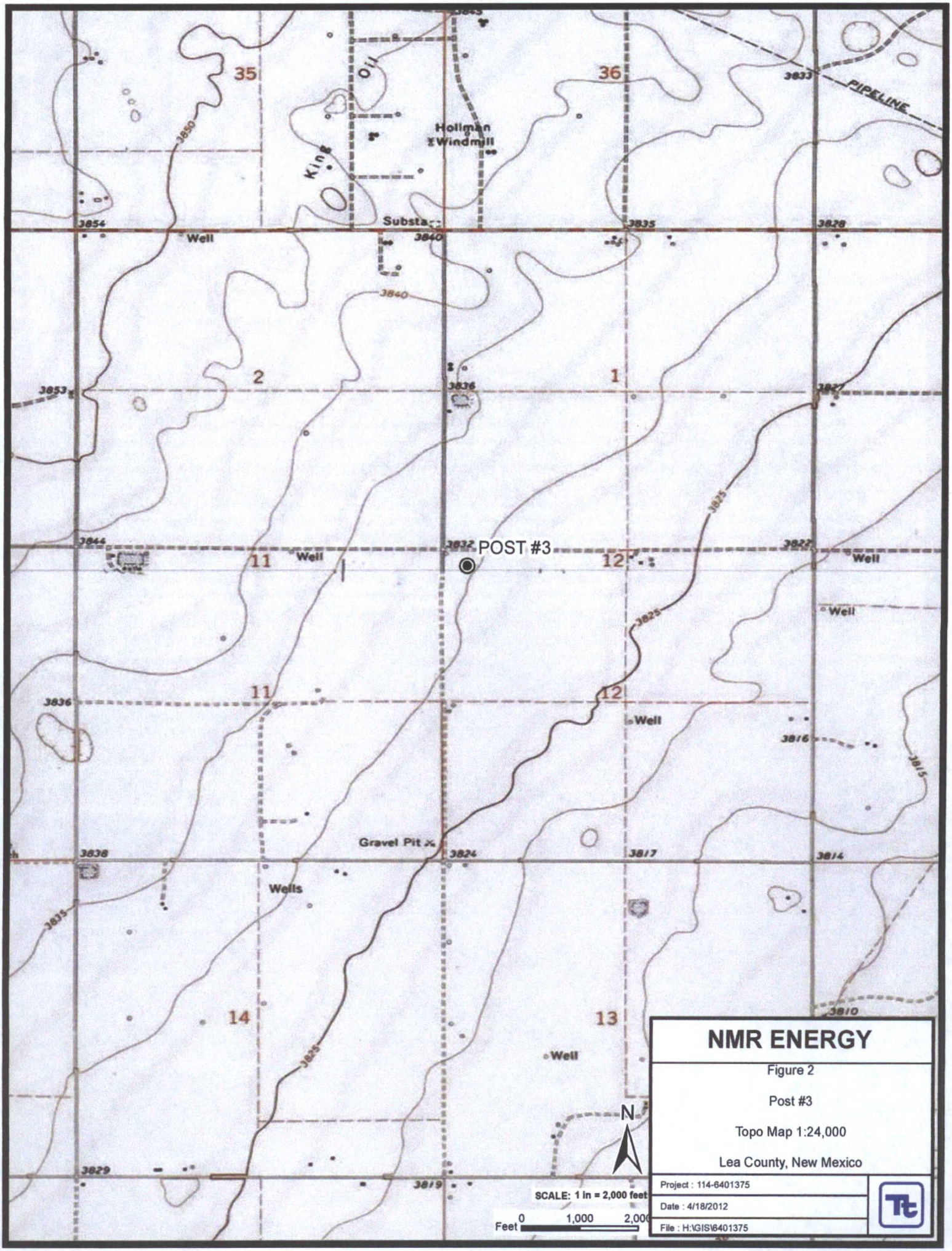
Based on the remedial actions taken, NMR requests closure of the site. The Final C-141 is enclosed in Appendix A. If you have any questions or comments concerning the assessment or the remediation activities for this site, please call me at (432) 682-4559.

Respectfully submitted,
TETRA TECH

Clair Gonzales,
Geologist

cc: Daniel Baker – Tumbleweed/NMR


125
Tatum
380
Bronco
McDonald
Yoakum
POST #3
769
Lea
18
82
Lovington
83
Chaparral Park
483
Texas and New Mexico Railroa
483
180
N
SCALE: 1 in = 16,667 fee
Feet 0 6,000 12,000
NMR ENERGY
Figure 1
Post #3
Topo Map 1:200,000
Lea County, New Mexico
Project : 114-6401375
Date : 4/18/2012
File : H:\GIS\6401375
Drawn By: Isabel Marmolejo



NMR ENERGY

Figure 2

Post #3

Topo Map 1:24,000

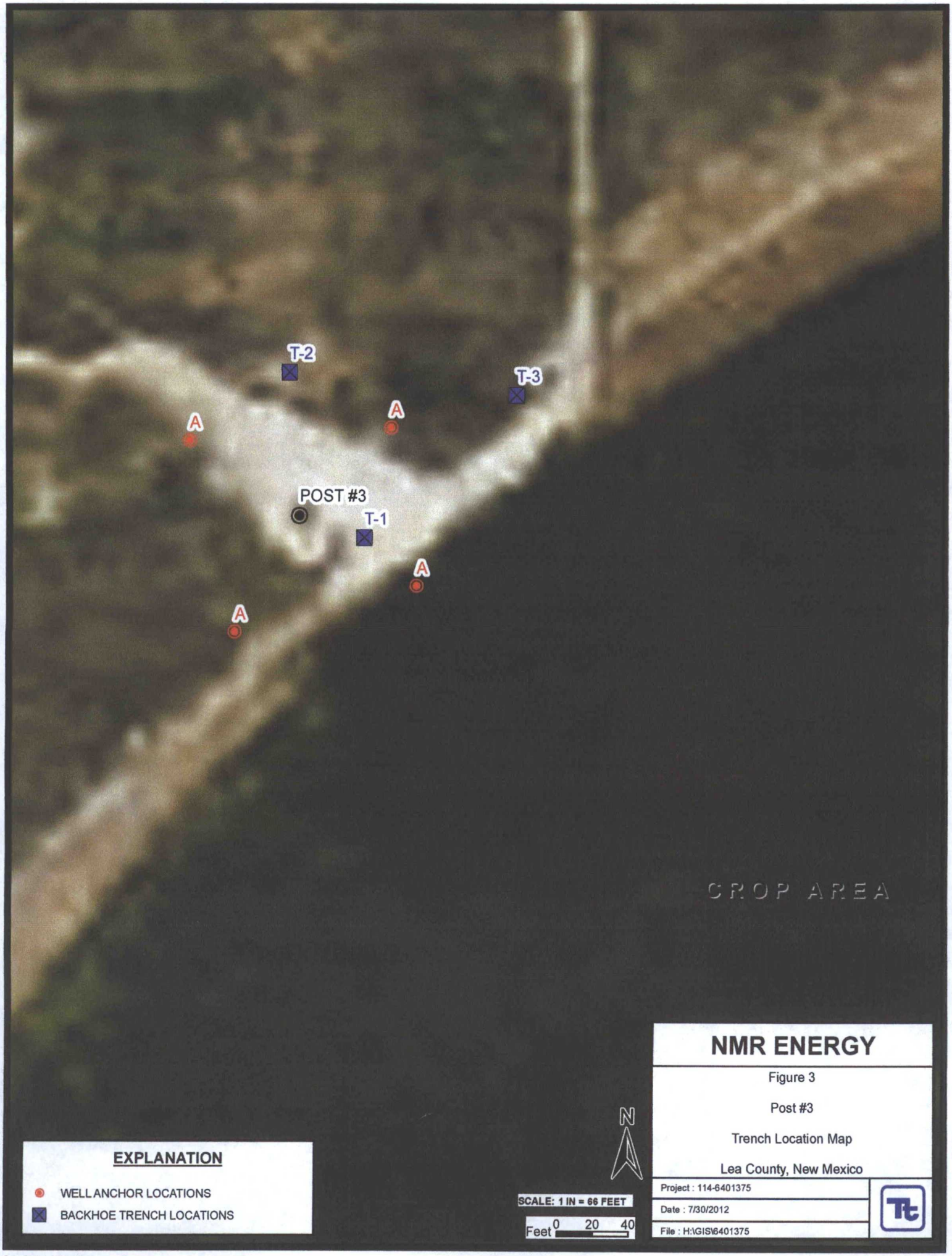
Lea County, New Mexico

Project : 114-6401375

Date : 4/18/2012

File : H:\GIS\6401375

Drawn By: Isabel Marmolejo



EXPLANATION

- WELL ANCHOR LOCATIONS
- BACKHOE TRENCH LOCATIONS

N

SCALE: 1 IN = 66 FEET

Feet 0 20 40

NMR ENERGY

Figure 3

Post #3

Trench Location Map

Lea County, New Mexico

Project : 114-6401375

Date : 7/30/2012

File : H:\GIS\6401375

Drawn By: Isabel Marmolejo

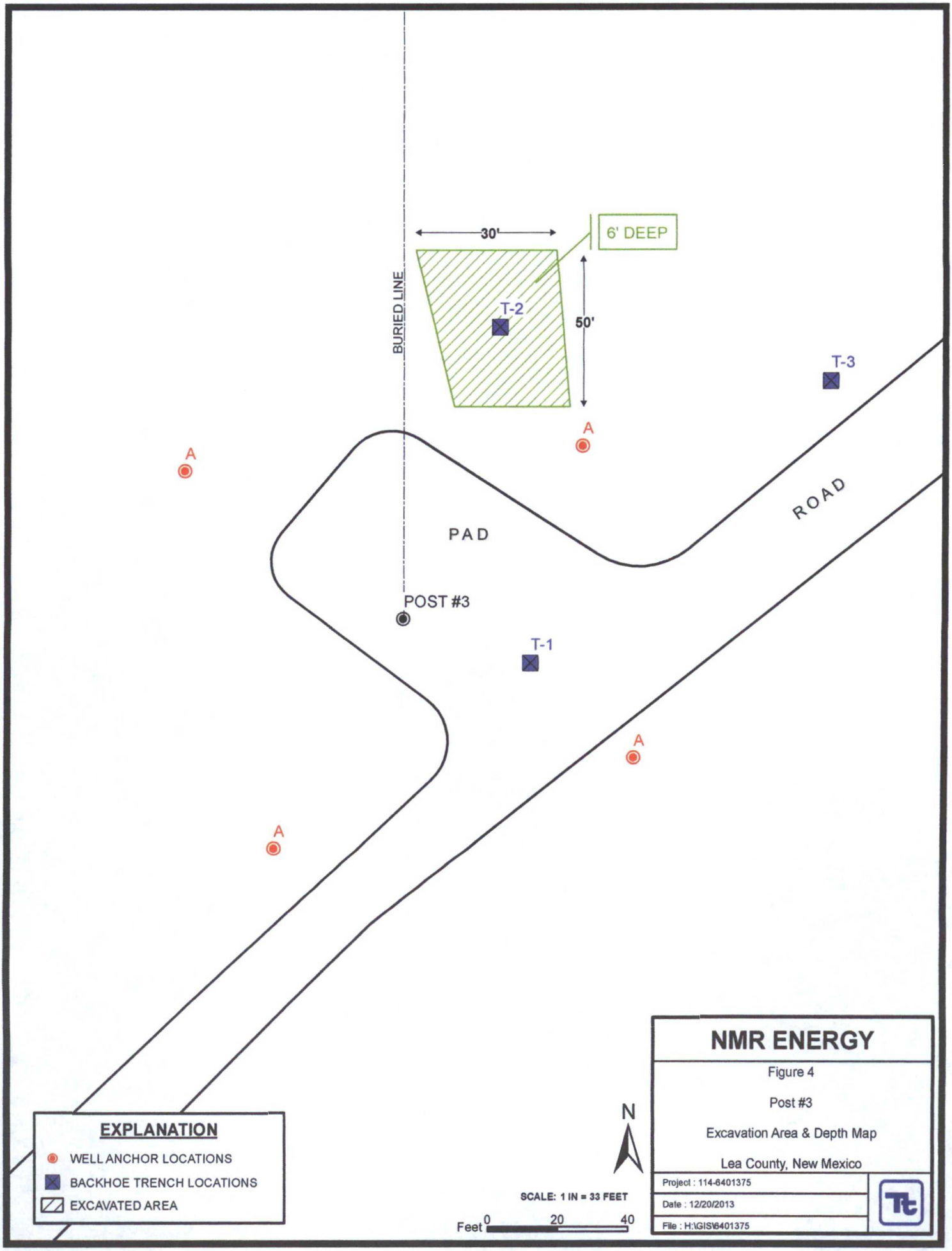

30'
6' DEEP
BURIED LINE
T-2
50'
T-3
A
A
A
A
A
ROAD
PAD
POST #3
T-1
EXPLANATION
WELL ANCHOR LOCATIONS
BACKHOE TRENCH LOCATIONS
EXCAVATED AREA
N
SCALE: 1 IN = 33 FEET
Feet 0 20 40
NMR ENERGY
Figure 4
Post #3
Excavation Area & Depth Map
Lea County, New Mexico
Project : 114-6401375
Date : 12/20/2013
File : H:\GIS\6401375
Drawn By: Isabel Marmolejo

Table 1
NMR Energy LLC
Post #3 Well
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Excavation Depth (ft)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total						
T-1	10/9/2012	0-1		X		<1.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	33.6
	"	2		X		-	-	-	-	-	-	-	-	33.6
	"	4		X		-	-	-	-	-	-	-	-	202
	"	6		X		-	-	-	-	-	-	-	-	106
T-2	10/9/2012	0-1			X	<1.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<20.0
	"	2			X	-	-	-	-	-	-	-	-	1,220
	"	4			X	-	-	-	-	-	-	-	-	941
	"	6		X		-	-	-	-	-	-	-	-	297
Bottom Hole	10/9/2012	-	6	X		-	-	-	-	-	-	-	-	374
W SW	10/9/2012	-	6	X		-	-	-	-	-	-	-	-	**1,300**
S SW	10/9/2012	-	6	X		-	-	-	-	-	-	-	-	642
E SW	10/9/2012	-	6	X		-	-	-	-	-	-	-	-	277
N SW	10/9/2012	-	6	X		-	-	-	-	-	-	-	-	170
T-3	10/9/2012	0-1		X		<1.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	33.5
	"	2		X		-	-	-	-	-	-	-	-	81.4
	"	4		X		-	-	-	-	-	-	-	-	<20.0

SW Side Wall

(--) Not Analyzed

Excavation Areas and Depths

NMR Energy, LLC.
Post #3 Well Location
Lea County, New Mexico

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View South – Area of T-1

View Northeast – Area of T-2

NMR Energy, LLC.
Post #3 Well Location
Lea County, New Mexico

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View West – Area of T-3

View North – Area of excavation

NMR Energy, LLC.
Post #3 Well Location
Lea County, New Mexico

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View Northwest – Backfilling excavated area

Water Well Data
Average Depth to Groundwater (ft)
NMR - Post #3 Well
Lea County, New Mexico

13 South 36 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Carlsbad

13 South 37 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27 75	26 55	25 40
31	32	33	34	35 65 80	36 78 40 65

13 South 38 East

6	5	4	3	2
7	8	9	10	11
18	17	16	15	14
19 53	20 40	21	22	23
30 85	29	28	27	26
31 87	32	33	34	35

14 South 36 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

14 South 37 East

6 85	5	4	3 32	2 55 46	1 85 50
7	8 42	9	10 62	11 85 60	12 SITE 85
18	17	16	15 50	14 100	13 120
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

14 South 38 East

6 77	5 45	4	3	2
7	8	9 45	10	11
18 115	17	16	15	14
19 40 65	20	21	22	23
30	29	28	27	26
31	32	33	34	35

15 South 36 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

15 South 37 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

15 South 38 East

6	5	4	3	2
7	8	9	10	11
18	17	16	15	14
19	20	21	22	23
30	29	28	27	26
31	32	33	34	35

- New Mexico State Engineers Well Reports
- USGS Well Reports
- Geology and Groundwater Conditions in Southern Eddy, County, NM
- NMOCD - Groundwater Data
- Field water level
- New Mexico Water and Infrastructure Data System

Summary Report

James Kennedy
Tetra Tech
1910 N. Big Spring Street
Midland, TX 79705

Report Date: January 10, 2014

Work Order: 13122305

Project Location: Lea Co., NM
Project Name: NMR Energy LLC/Post #3 Well
Project Number: 114-6401375

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
349727	W SW	soil	2013-12-17	00:00	2013-12-20
349728	Bottomhole	soil	2013-12-17	00:00	2013-12-20
349729	S SW	soil	2013-12-18	00:00	2013-12-20
349730	E SW	soil	2013-12-18	00:00	2013-12-20
349731	N SW	soil	2013-12-18	00:00	2013-12-20

Sample: 349727 - W SW

Param	Flag	Result	Units	RL
Chloride		**1300**	mg/Kg	4

Sample: 349728 - Bottomhole

Param	Flag	Result	Units	RL
Chloride		**374**	mg/Kg	4

Sample: 349729 - S SW

Param	Flag	Result	Units	RL
Chloride		**642**	mg/Kg	4

Sample: 349730 - E SW

Param	Flag	Result	Units	RL
Chloride		**277**	mg/Kg	4

Sample: 349731 - N SW

Param	Flag	Result	Units	RL
Chloride		**170**	mg/Kg	4