

State of New Mexico
Energy Minerals and Natural Resources

Form C-161
Revised July 18, 2013

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

☐ AMENDED Report

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address Lime Rock Resources II-A, L.P. 1111 Bagby Street, Suite 4600 Houston, Texas 77002		² OGRID Number 277558
		³ API Number 30-015- <i>44430</i>
⁴ Property Code 39343	⁵ Property Name Terry 14 C	⁶ Well No #6

⁷ Surface Location

UT - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	FAW Line	County
C	14	18S	26E		185	N	2010	W	Eddy

⁸ Proposed Bottom Hole Location

UT - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	FAW Line	County
C	14	18S	26E		330	N	1650	W	Eddy

⁹ Pool Information

Atoka: Glorieta-Yeso	3250
----------------------	------

Additional Well Information

⁹ Work Type N	¹⁰ Well Type O	¹¹ Cable-Tooling R	¹² Lease Type P	¹³ Ground Level Elevation 3315.9
¹⁴ Multiple N	¹⁵ Proposed Depth 4405' MD / 4350' TVD	¹⁶ Formation Yeso	¹⁷ Contractor United Drilling, Inc	¹⁸ Spud Date After 9/20/2017
Depth to Ground Water 100 Ft		Distance from nearest fresh water well 0.127 Miles		Distance from nearest surface water 1.84 Miles

☒ We will be using a closed-loop system in lieu of lined

¹⁹ Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Conductor	26"	20"	91.5	80	80	Surface
Surface	11"	8-5/8"	24	1230	450	Surface
Production	7-7/8"	5-1/2"	17	4405	900	Surface

Casing/Cement Program: Additional Comments

Artesian Aquifer Porosity 1160'-1170'

Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
XLT 11"	5000	2000	National Varco

I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

I further certify that I have complied with 19.15.14.9 (A) ☐ and/or 19.15.14.9 (B) NMAC 0, if ☒

Signature:

Eric P. McClusky

Printed Name: Eric McClusky

Title: Operations Engineer

E-mail Address: emcclusky@limerockresources.com

Date: 9/6/2017

Phone: 713-360-5714

OIL CONSERVATION DIVISION

Approved By:

Raymond W. Rodary

Title:

Geologist

Approved Date:

9/6/17

Expiration Date:

9/6/19

Conditions of Approval Attached

Circ CMT on CS9 R 1230' for RAB Compliance.

1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

811 S First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-44430		² Pool Code 3250	³ Pool Name Atoka; Glorieta - yeso	
⁴ Property Code 39347	⁵ Property Name TERRY 14C			⁶ Well Number 6
⁷ OGRID No. 277558	⁸ Operator Name LIME ROCK RESOURCES II-A, L.P.			⁹ Elevation 3315.9

10 Surface Location

UL or lot no. C	Section 14	Township 18 S	Range 26 E	Lot Idn	Feet from the 185	North/South line NORTH	Feet from the 2010	East/West line WEST	County EDDY
---------------------------	----------------------	-------------------------	----------------------	---------	-----------------------------	----------------------------------	------------------------------	-------------------------------	-----------------------

" Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County
C	14	18 S	26 E		330	NORTH	1650	WEST	EDDY

¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
-------------------------------------	-------------------------------	----------------------------------	-------------------------

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

S89°39'50"E 2636.00 FT

NW CORNER SEC. 14
LAT. = 32.7551234°N
LONG. = 104.3606067°W

NMSP EAST (FT)
N = 638425.92
E = 491615.44

W/4 CORNER SEC. 14
SCALED

SW CORNER SEC. 14
LAT. = 32.7405050°N
LONG. = 104.3605383°W

NMSP EAST (FT)
N = 633107.74
E = 491635.08

S89°39'50"E 2636.00 FT

N/4 CORNER SEC. 14
SCALED

NE CORNER SEC. 14
LAT. = 32.7550409°N
LONG. = 104.3434626°W

NMSP EAST (FT)
N = 638394.97
E = 496885.97

E/4 CORNER SEC. 14
SCALED

SE CORNER SEC. 14
LAT. = 32.7404702°N
LONG. = 104.3433680°W

NMSP EAST (FT)
N = 633094.16
E = 496914.57

2010' 1650' 185'

BOTTOM OF HOLE

TERRY "14C" #6
ELEV. = 3315.9'
LAT. = 32.7545838°N (NAD27)
LONG. = 104.3540677°W

NMSP EAST (FT)
N = 638229.15
E = 493625.64

BOTTOM OF HOLE
LAT. = 32.7541910°N
LONG. = 104.3552365°W

NMSP EAST (FT)
N = 638086.31
E = 493266.30

NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1927 (NAD27). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD27). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST (NAD83) COORDINATES MODIFIED TO THE SURFACE.

SURFACE LOCATION

Diagram showing well location and corner points.

589°39'07"W 2615.23 FT

589°56'57"W 2662.69 FT

"B" OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or is a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature 2/16/17
 Date

Printed Name
 emcluskyl@lineractresources.com
 E-mail Address

"B" SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

MAY 26, 2015
 Date of Survey

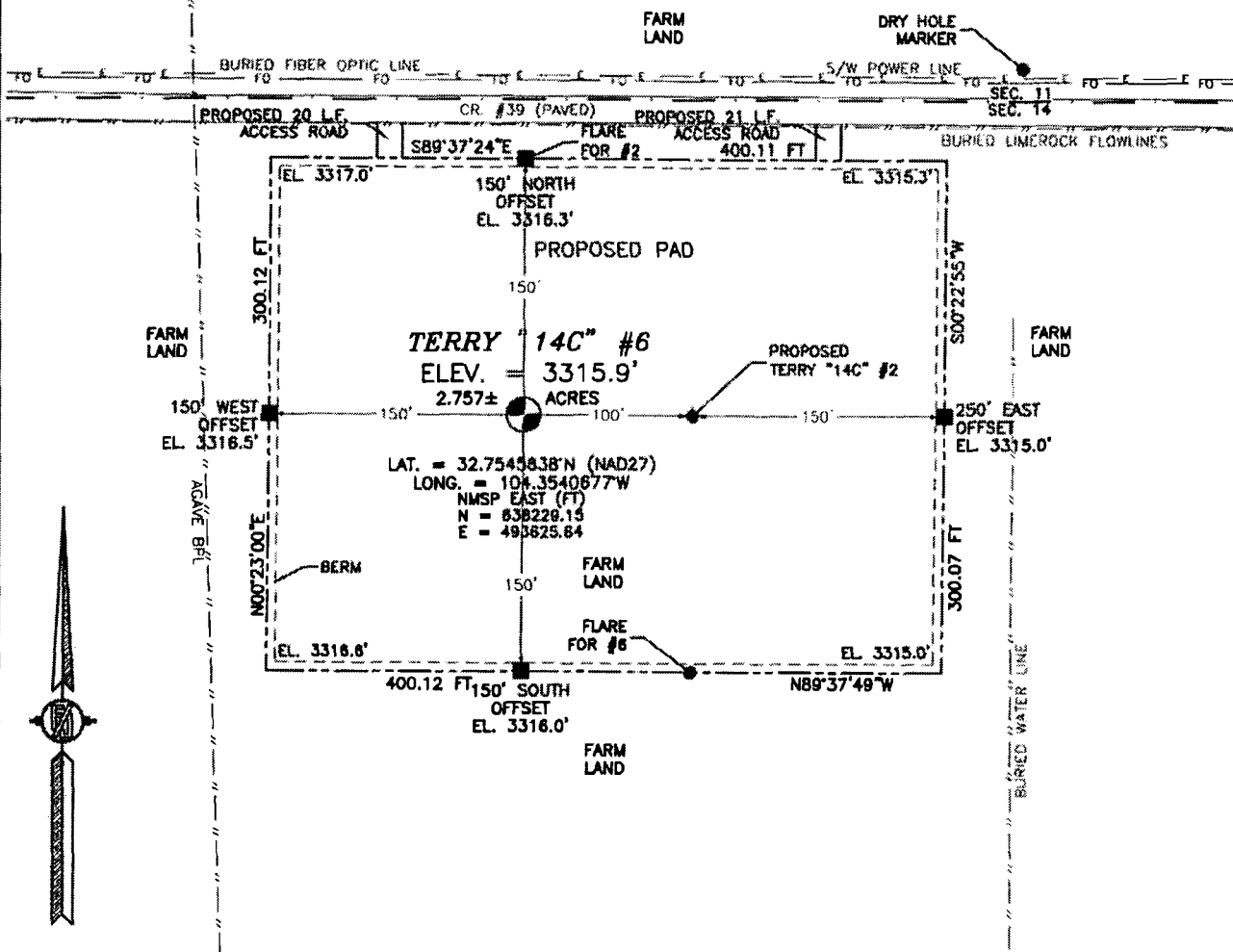
Signature and Seal of Licensed Surveyor

Certificate Number: FILIMON F. JARAMILLO, PLS 12797

SURVEY NO. 3904

**SECTION 14, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
SITE MAP**

NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1927 (NAD27). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD27). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES (NAD 83) MODIFIED TO THE SURFACE.



0 10 50 100 200

SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM STATE ROAD #228 (HALDEMAN ROAD) AND CR. #39 (FOUR-DINKUS) GO EAST ON CR. #39 0.4 MILE AND NORTH EDGE OF CENTER OF PAD IS 30' SOUTH FOR THIS LOCATION.

LIME ROCK RESOURCES II-A, L.P.

TERRY "14C" #6

**LOCATED 185 FT. FROM THE NORTH LINE
AND 2010 FT. FROM THE WEST LINE OF
SECTION 14, TOWNSHIP 18 SOUTH,
RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO**

MAY 26, 2015

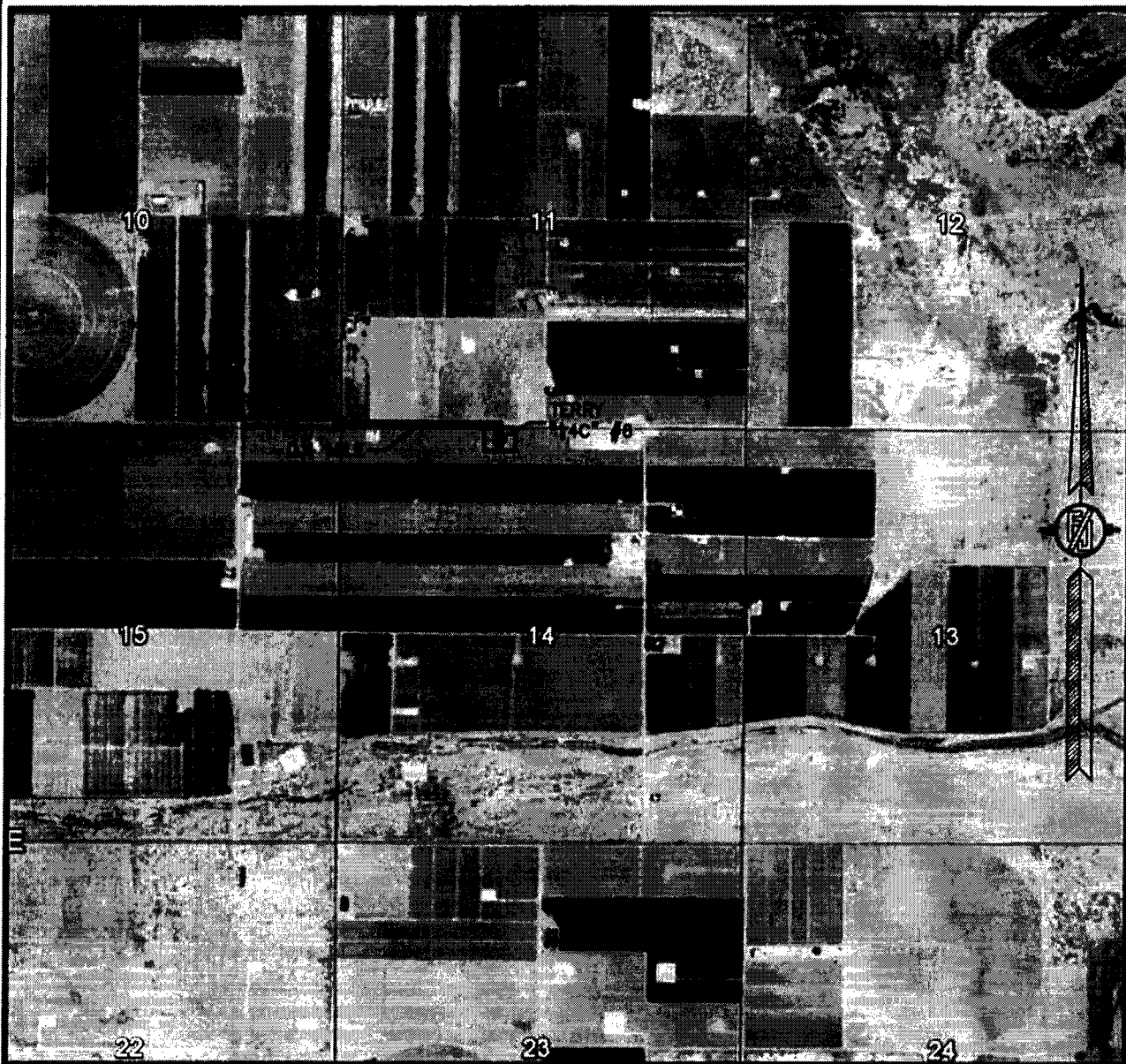
SURVEY NO. 3904

MADRON SURVEYING, INC.

301 SOUTH CANAL
(575) 234-3341

CARLSBAD, NEW MEXICO

SECTION 14, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
AERIAL ACCESS ROUTE MAP



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
MAY 2014

LIME ROCK RESOURCES II-A, L.P.
TERRY "14C" #6

LOCATED 185 FT. FROM THE NORTH LINE
AND 2010 FT. FROM THE WEST LINE OF
SECTION 14, TOWNSHIP 18 SOUTH,
RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

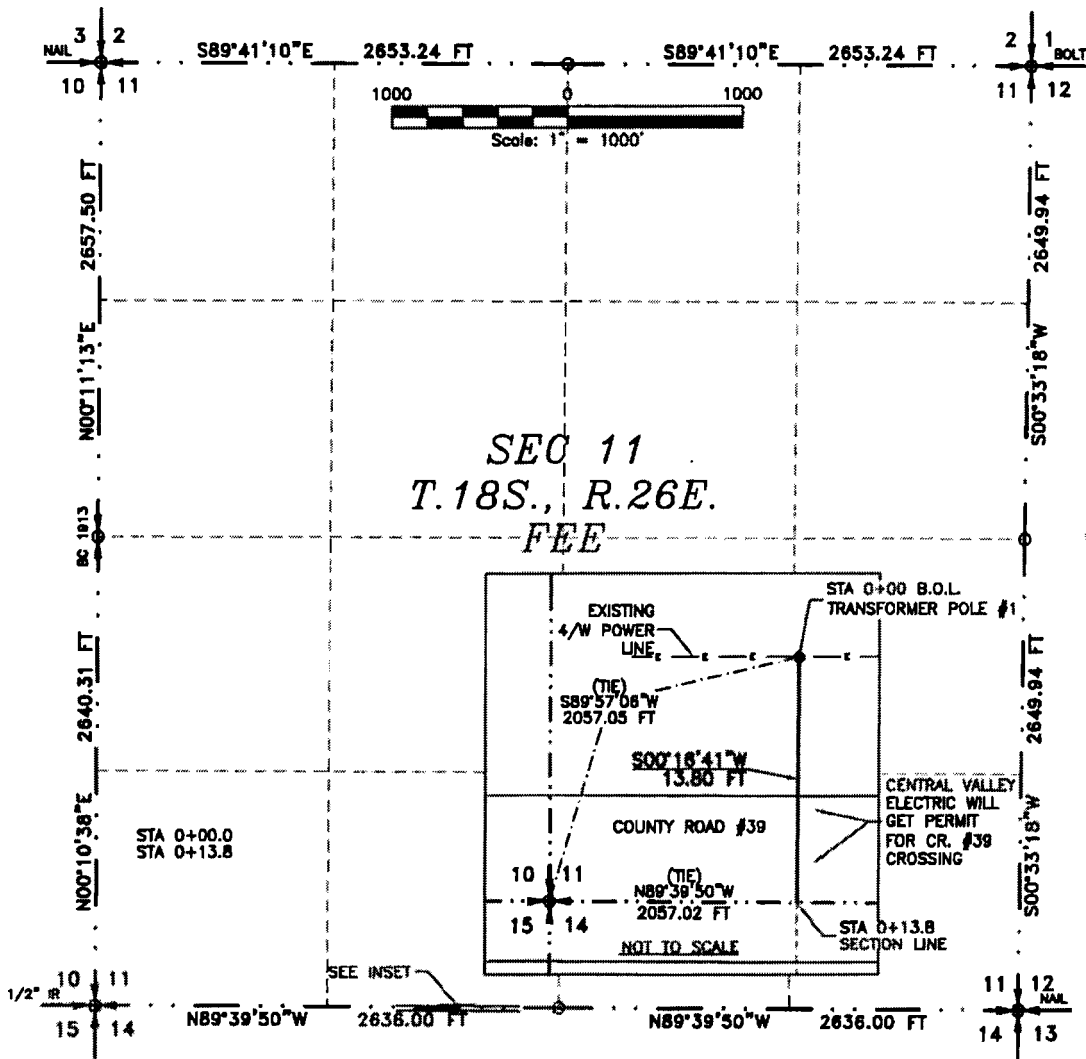
MAY 26, 2015

SURVEY NO. 3904

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO
(575) 724-3341

ELECTRIC LINE PLAT
ELECTRIC LINE TO CONNECT TERRY "14C" #6 & #2

CENTRAL VALLEY ELECTRIC
CENTERLINE SURVEY OF AN ELECTRIC LINE CROSSING
SECTION 11, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
JUNE 9 2015



SEE NEXT SHEET (2-6) FOR DESCRIPTION

SURVEYOR CERTIFICATE

I, FILMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 10 DAY OF JUNE 2015

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

GENERAL NOTES

- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2.) BASIS OF BEARING IS NMSP EAST MODIFIED TO SURFACE COORDINATES.

SHEET: 1-6

MADRON SURVEYING, INC. **CARLSBAD, NEW MEXICO**

SURVEY NO. 3904

ELECTRIC LINE PLAT
ELECTRIC LINE TO CONNECT TERRY "14C" #8 & #2

CENTRAL VALLEY ELECTRIC
CENTERLINE SURVEY OF AN ELECTRIC LINE CROSSING
SECTION 11, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
JUNE 9 2015

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING FEE LAND IN SECTION 11, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M., EDDY COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE SE/4 SW/4 OF SAID SECTION 11, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M., WHENCE THE SOUTHWEST CORNER OF SAID SECTION 11, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M. BEARS S89°57'06"W, A DISTANCE OF 2057.05 FEET;
THENCE S00°16'41"W A DISTANCE OF 13.80 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHWEST CORNER OF SAID SECTION 11, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M. BEARS N89°39'50"W, A DISTANCE OF 2057.02 FEET;

SAID STRIP OF LAND BEING 13.80 FEET OR 0.84 RODS IN LENGTH, CONTAINING 0.010 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SE/4 SW/4 13.80 L.F. 0.84 RODS 0.010 ACRES

SURVEYOR CERTIFICATE

I, FILMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD,

NEW MEXICO, THIS 22 DAY OF JUNE, 2015.

Filmon F. Jaramillo
FILMON F. JARAMILLO, PLS. 12797

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING IS NMSP EAST MODIFIED TO SURFACE COORDINATES.

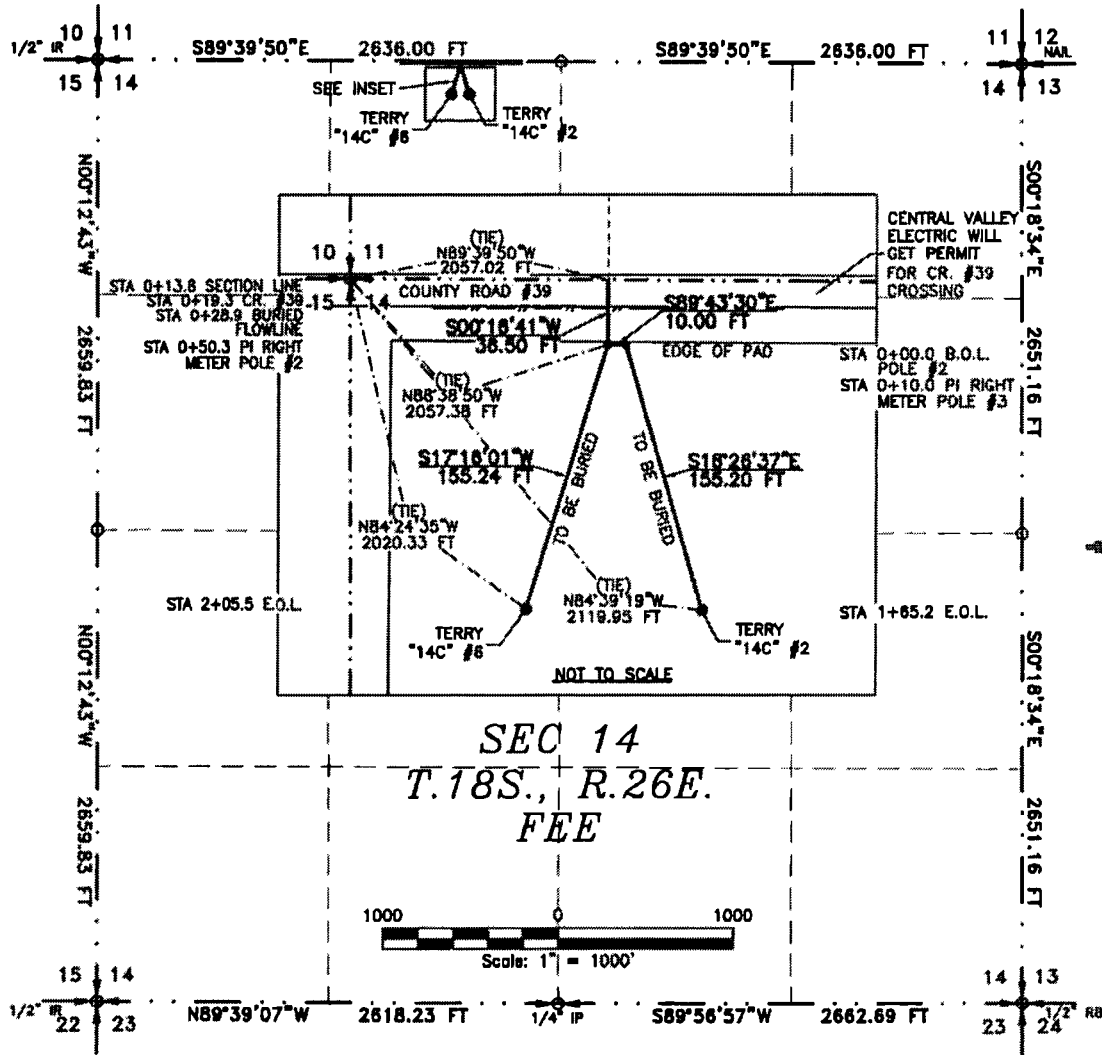
SHEET: 2-6

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 **CARLSBAD, NEW MEXICO**

SURVEY NO. 3904

ELECTRIC LINE PLAT
ELECTRIC LINE TO CONNECT TERRY "14C" #6 & #2

CENTRAL VALLEY ELECTRIC
CENTERLINE SURVEY OF AN ELECTRIC LINE CROSSING
SECTION 14, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
JUNE 9 2015



SEE NEXT SHEET (4-6) FOR DESCRIPTION

SURVEYOR CERTIFICATE

I, FILMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD,

NEW MEXICO, THIS 12 DAY OF JUNE 2015.

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING IS NMSP EAST MODIFIED TO SURFACE COORDINATES.

SHEET: 3-6

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO (575) 234-3341

MADRON SURVEYING, INC.
 301 SOUTH CANAL
 CARLSBAD, NEW MEXICO 88220
 Phone (575) 234-3341

SURVEY NO. 3904

ELECTRIC LINE PLAT
ELECTRIC LINE TO CONNECT TERRY "14C" #6 & #2

CENTRAL VALLEY ELECTRIC
CENTERLINE SURVEY OF AN ELECTRIC LINE CROSSING
SECTION 14, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
JUNE 9 2015

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING FEE LAND IN SECTION 14, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M., EDDY COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

MAIN LINE ENDING AT TERRY "14C" #6

BEGINNING AT A POINT WITHIN THE NE/4 NW/4 OF SAID SECTION 14, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M., WHENCE THE NORTHWEST CORNER OF SAID SECTION 14, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M. BEARS N89°39'50"W, A DISTANCE OF 2057.02 FEET;
THENCE S00°16'41"W A DISTANCE OF 36.50 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S17°16'01"W A DISTANCE OF 155.24 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE NORTHWEST CORNER OF SAID SECTION 14, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M. BEARS N84°24'35"W, A DISTANCE OF 2020.33 FEET;

SAID STRIP OF LAND BEING 191.74 FEET OR 11.62 RODS IN LENGTH, CONTAINING 0.132 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

NE/4 NW/4 191.74 L.F. 11.62 RODS 0.132 ACRES

LINE TO TERRY "14C" #2

BEGINNING AT A POINT WITHIN THE NE/4 NW/4 OF SAID SECTION 14, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M., WHENCE THE NORTHWEST CORNER OF SAID SECTION 14, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M. BEARS N88°38'50"W, A DISTANCE OF 2057.38 FEET;
THENCE S89°43'30"E A DISTANCE OF 10.00 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S16°26'37"E A DISTANCE OF 155.20 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE NORTHWEST CORNER OF SAID SECTION 14, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M. BEARS N84°39'19"W, A DISTANCE OF 2119.95 FEET;

SAID STRIP OF LAND BEING 165.20 FEET OR 10.01 RODS IN LENGTH, CONTAINING 0.114 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

NE/4 NW/4 165.20 L.F. 10.01 RODS 0.114 ACRES

SURVEYOR CERTIFICATE

I, FILMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD,
NEW MEXICO, THIS 12 DAY OF JUNE 2015


FILMON F. JARAMILLO, P.E. 12797

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SURVEY NO. 3904

GENERAL NOTES

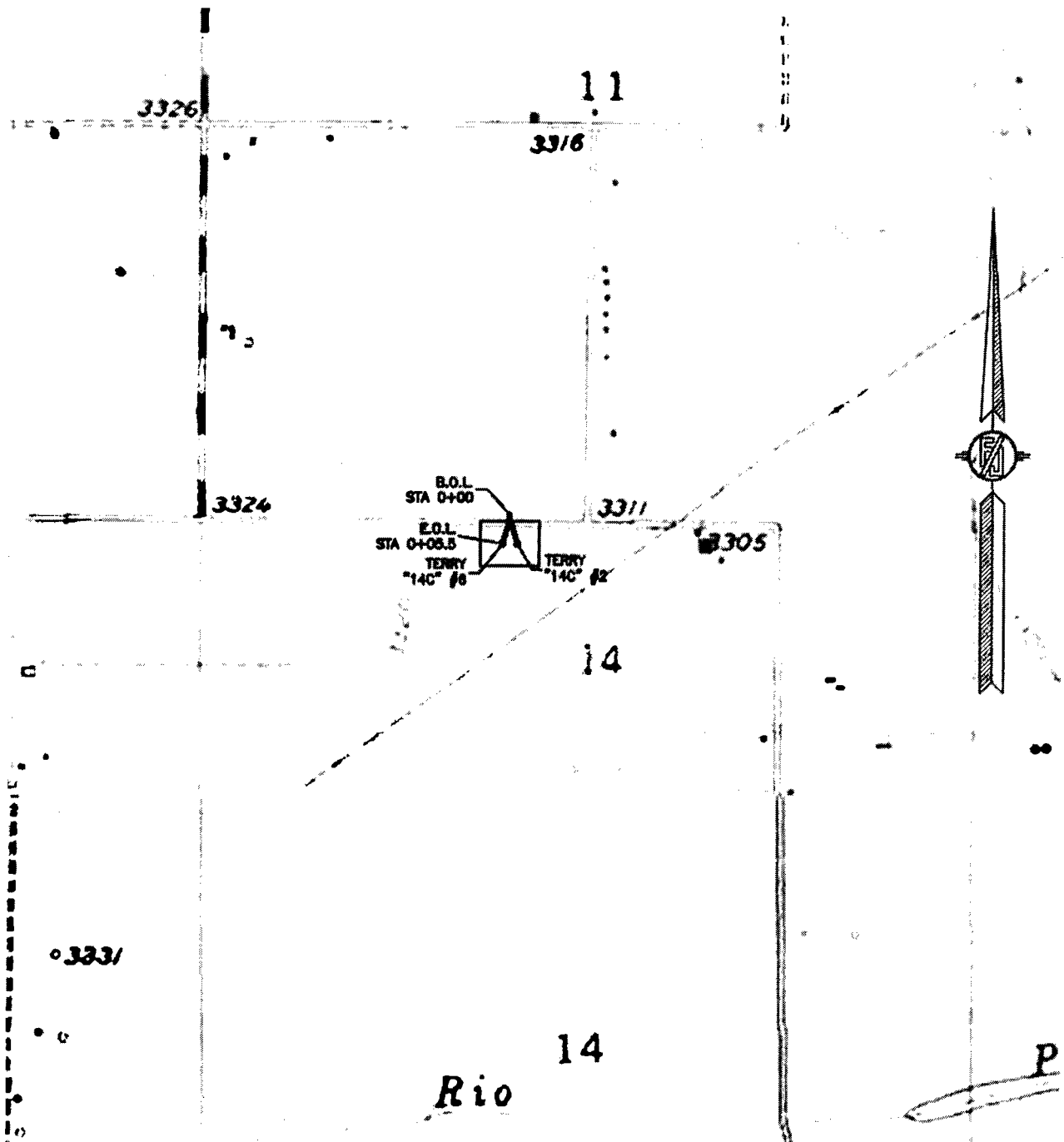
- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2.) BASIS OF BEARING IS NMSP EAST MODIFIED TO SURFACE COORDINATES.

SHEET: 4-6

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 **CARLSBAD, NEW MEXICO**

ELECTRIC LINE PLAT
ELECTRIC LINE TO CONNECT TERRY "14C" #6 & #2

CENTRAL VALLEY ELECTRIC
CENTERLINE SURVEY OF AN ELECTRIC LINE CROSSING
SECTIONS 11 & 14, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
JUNE 9 2015



SHEET: 5-6

MADRON SURVEYING, INC. 301 SOUTH CANAL
(575) 234-3341

SURVEY NO. 3904

CARLSBAD, NEW MEXICO

ELECTRIC LINE PLAT
ELECTRIC LINE TO CONNECT TERRY "14C" #6 & #2

CENTRAL VALLEY ELECTRIC
CENTERLINE SURVEY OF AN ELECTRIC LINE CROSSING
SECTIONS 11 & 14, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
JUNE 9 2015



SHEET: 6-6

MADRON SURVEYING, INC. 301 SOUTH CANAL
(575) 234-3341

SURVEY NO. 3904

CARLSBAD, NEW MEXICO

**Lime Rock Resources II-A, L.P.
Drilling Plan**

**Terry 14 C #6
185' FNL 2010' FWL
(C) 14-18S-26E
Eddy County, NM**

1. The elevation of the unprepared ground is feet above sea level.
2. The geologic name of the surface formation is Quaternary – Alluvium
3. A rotary rig will be utilized to drill the well to 4350' and run casing. This equipment will be rigged down and the well will be completed with a workover rig.
4. Well will be drilled to a total proposed depth of 4405' MD./ 4350' TVD. inside a 30' X 30' square tail inside of 40 acre spacing regulatory quarter-quarter setback distance. The KOP for directional drilling will be at 735'. See directional plan for details.
5. Estimated tops of geologic markers:

	MD	TVD
Quaternary – Alluvium	Surface	Surface
Yates	NA	NA
7 Rivers	NA	NA
Queen	244	244
Grayburg	686	686
Premier	905	905
San Andres	956	955
Glorieta	2383	2328
Yeso	2501	2446
Tubb	3930	3875
TD	4405	4350

6. Estimated depths at which anticipated oil, gas, or other mineral bearing formations are expected to be encountered:

	MD	TVD
Yates	NA	NA
7 Rivers	NA	NA
Queen	244	244
Grayburg	686	686
Premier	905	905
San Andres	956	955
Glorieta	2383	2328
Yeso	2501	2446
Tubb	3930	3875
TD	4405	4350

7. Proposed Casing and Cement program is as follows

Type	Hole	Casing	Wt	Grade	Thread	Depth	Sx	Density	Yield	Components
Conductor	26"	20"	91.5	B	Welded	80	80			Ready Mix
Surface	11"	8-5/8"	24	J-55	ST&C	1230	450	14.8	1.35	Cl C Cmt + 0.25 lbs/sk Cello Flake + 2% CaCl ₂
Intermediate										
Production	7-7/8"	5-1/2"	17	J-55	LT&C	4405	300	12.8	1.903	(25.65) Poz/Cl C Cmt + 5% NaCl + 0.25 lbs/sk Cello Flake + 5 lbs/sk LCM-1 + 0.2% R-3 + 6% Gel
							600	14.8	1.33	Cl H w/ 0.6% R-3, 0.125% Cello Flake, 2% Gel

8. Proposed Mud Program is as follows

Depth	0-1230	1230-4255	4255-4405
Mud Type	Fresh Water Mud	Brine, Salt Gel, & Starch	Brine, Salt Gel, & Starch
Properties			
MW	8.4-9.2	9.8-10.1	9.9-10.1
pH	9.0-10.5	10.0-12.0	10.0-12.0
WL	NC	NC	20-30
Vis	28-34	28-29	32-34
MC	NC	NC	<2
Solids	NC	<2%	<3%
Pump Rate	300-500 gpm	375-425 gpm	400-425 gpm
Special		Use Poymers sticks and MF-55 Hi-Vis Sweeps as necessary	Hi Vis Sweeps, add acid and starch as req. Raise Vis to 35 for log.

9. **Pressure Control Equipment:** See Attached Description and diagram of Pressure Control Equipment.

10. **Testing, Logging and Coring Program**

Testing Program No drill stem tests are anticipated

Electric Logging Program SGR-DLL-CDL-CNL Quad Combo from 4405 to surf. Csg. SGR-CNL to Surf.

Coring Program: No full or sidewall cores are anticipated.

11. **Potential Hazards:**

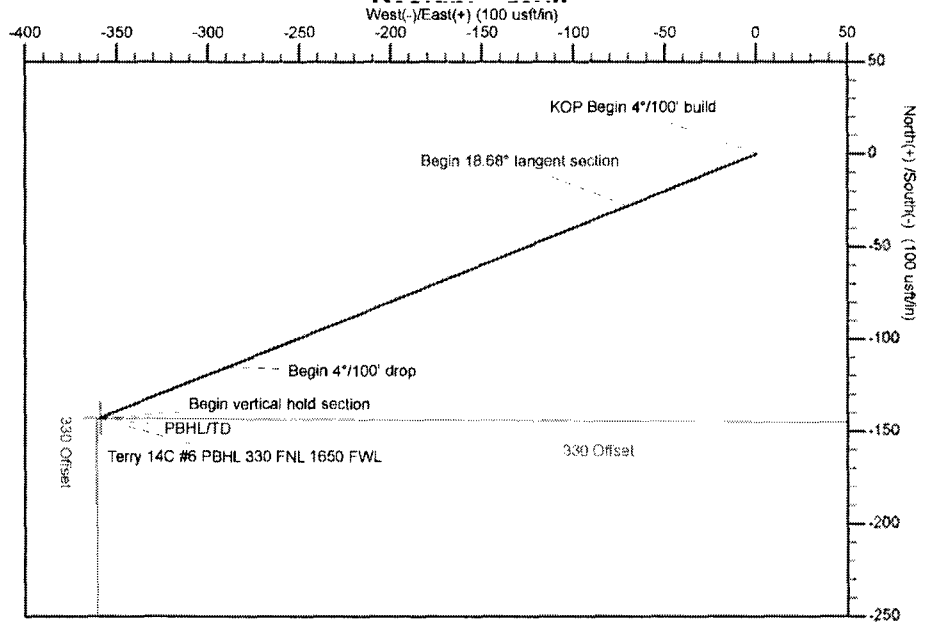
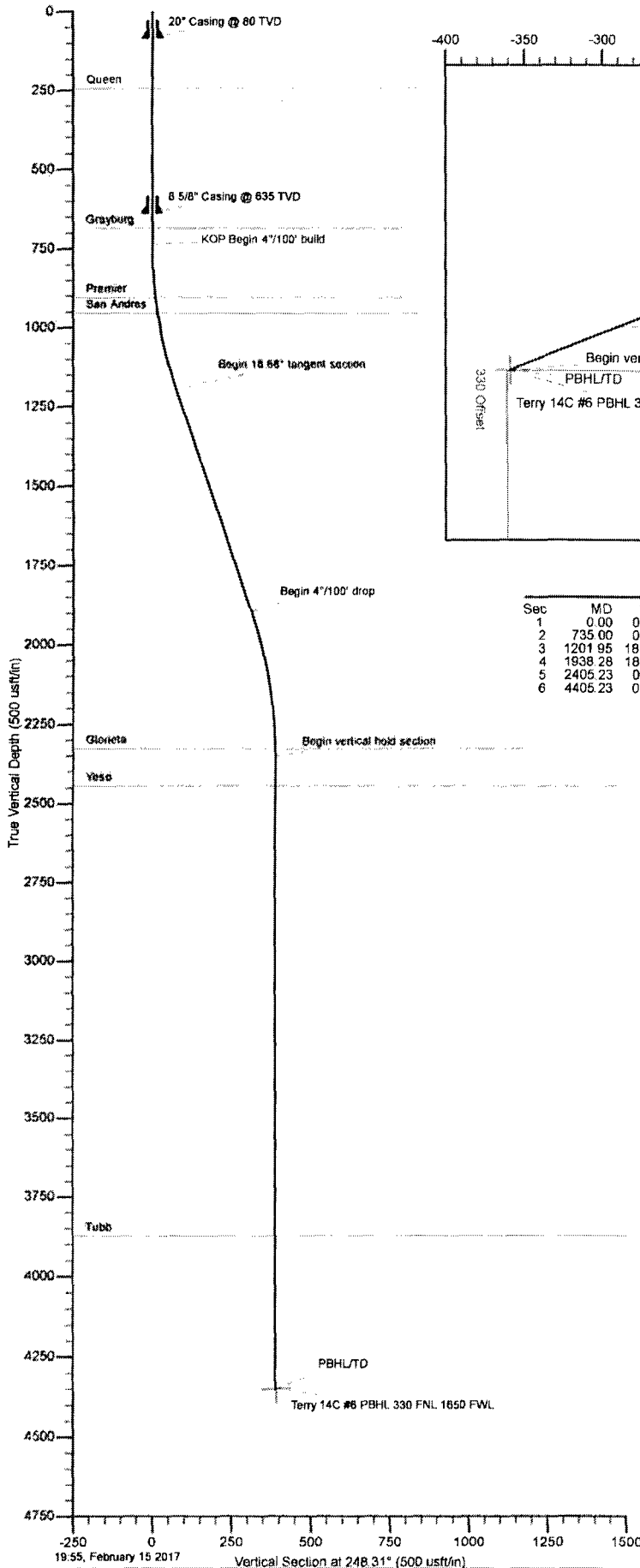
No abnormal temperatures or pressures are expected. There is no known presence of H₂S in this H₂S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. personnel will be familiar with all aspects of safe operation of equipment being used to drill this well Estimated BHP 1938.2 psi based on 0.44 x TD. The estimated BHT is 125 degrees F.

12. **Duration of Operations:**

Anticipated spud date will be soon after approval and as soon as a rig will be available. Move in operations and drilling is expected to take 10 days. An additional 14 days will be needed to complete well and to construct surface facilities.



Well: Terry 14C Well No. 6
Site: Terry 14C
Project: Eddy County, New Mexico NAD27



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	735.00	0.00	0.00	735.00	0.00	0.00	0.00	0.00	0.00	KOP Begin 4\"/>
3	1201.95	18.68	248.31	1163.72	-27.68	-70.10	4.00	248.31	75.44	Begin 18.68\"/>
4	1938.28	18.68	248.31	1891.28	-115.03	-289.21	0.00	0.00	311.25	Begin 4\"/>
5	2405.23	0.00	248.31	2350.00	-142.91	-359.31	4.00	180.00	386.69	Begin vertical hold section
6	4405.23	0.00	248.31	4350.00	-142.91	-359.31	0.00	0.00	386.69	PBHL/TD

FORMATION TOP DETAILS

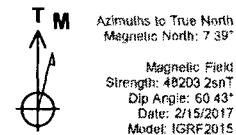
TVDPath	MDPath	Formation
244.00	244.00	Queen
686.00	686.00	Grayburg
905.00	905.40	Premier
955.00	955.67	San Andres
2328.00	2383.23	Glorieta
2446.00	2501.23	Yeso
3875.00	3930.23	Tubb

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001

System Datum: Mean Sea Level
RKB=3316.9+12.8 @ 3328.70usft

Surface Location:
Northing 638229.15 Easting 493625.64 Latitude 32.75458380 Longitude -104.35406773

Total Corr (M->T): To convert a Magnetic Direction to a True Direction, Add 7.39° East



ACCEL
Directional

Database: DB Jul2216dt
Company: Lime Rock Resources
Project: Eddy County, New Mexico NAD27
Site: Terry 14C
Well: Terry 14C Well No. 6
Wellbore: Original Hole
Design: rev0

Local Co-ordinate Reference: Well Terry 14C Well No. 6
TVD Reference: RKB=3315.9+12.8 @ 3328.70usft
MD Reference: RKB=3315.9+12.8 @ 3328.70usft
North Reference: True
Survey Calculation Method: Minimum Curvature

Project	Eddy County, New Mexico NAD27		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Terry 14C					
Site Position:		Northing:	638,228.49 usft	Latitude:	32.75458204	
From:	Map	Easting:	493,725.62 usft	Longitude:	-104.35374253	
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.01 °	
Well	Terry 14C Well No. 6, Surf Loc: 185 FNL 2010 FWL Sec14-T18S-26E					
Well Position	+N-S	0.64 usft	Northing:	638,229.15 usft	Latitude:	32.75458380
	+E-W	-99.98 usft	Easting:	493,625.64 usft	Longitude:	-104.35406774
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,315.90 usft	
Wellbore	Original Hole					

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/15/2017	7.39	60.43	48,203

Design rev0

Audit Notes:

Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N-S	+E-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.00	0.00	0.00	248.31

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
735.00	0.00	0.00	735.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,201.95	18.68	248.31	1,193.72	-27.88	-70.10	4.00	4.00	0.00	248.31	
1,938.28	18.68	248.31	1,891.28	-115.03	-289.21	0.00	0.00	0.00	0.00	
2,405.23	0.00	248.31	2,350.00	-142.91	-359.31	4.00	-4.00	0.00	180.00	
4,405.23	0.00	248.31	4,350.00	-142.91	-359.31	0.00	0.00	0.00	0.00	Terry 14C #6 PBHL 3:



Planning Report

Database: DB Jul2216dt
Company: Lime Rock Resources
Project: Eddy County, New Mexico NAD27
Site: Terry 14C
Well: Terry 14C Well No. 6
Wellbore: Original Hole
Design: rev0

Local Co-ordinate Reference: Well Terry 14C Well No. 6
TVD Reference: RKB=3315.9+12.8 @ 3328.70usft
MD Reference: RKB=3315.9+12.8 @ 3328.70usft
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
244.00	0.00	0.00	244.00	0.00	0.00	0.00	0.00	0.00	0.00
Queen									
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
686.00	0.00	0.00	686.00	0.00	0.00	0.00	0.00	0.00	0.00
Grayburg									
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
735.00	0.00	0.00	735.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP Begin 4°/100' build									
800.00	2.60	248.31	799.98	-0.54	-1.37	1.47	4.00	4.00	0.00
900.00	6.60	248.31	899.64	-3.51	-8.82	9.49	4.00	4.00	0.00
905.40	6.82	248.31	905.00	-3.74	-9.41	10.12	4.00	4.00	0.00
Premier									
955.87	8.83	248.31	955.00	-6.28	-15.79	17.00	4.00	4.00	0.00
San Andres									
1,000.00	10.60	248.31	998.49	-9.03	-22.71	24.44	4.00	4.00	0.00
1,100.00	14.60	248.31	1,096.06	-17.09	-42.98	46.25	4.00	4.00	0.00
1,200.00	18.60	248.31	1,191.88	-27.65	-69.52	74.82	4.00	4.00	0.00
1,201.95	18.68	248.31	1,193.72	-27.88	-70.10	75.44	4.00	4.00	0.00
Begin 18.68° tangent section									
1,300.00	18.68	248.31	1,286.61	-39.49	-99.28	106.84	0.00	0.00	0.00
1,400.00	18.68	248.31	1,381.34	-51.32	-129.03	138.66	0.00	0.00	0.00
1,500.00	18.68	248.31	1,476.08	-63.16	-158.79	170.89	0.00	0.00	0.00
1,600.00	18.68	248.31	1,570.81	-74.99	-188.55	202.91	0.00	0.00	0.00
1,700.00	18.68	248.31	1,665.54	-86.83	-218.31	234.94	0.00	0.00	0.00
1,800.00	18.68	248.31	1,760.28	-98.66	-248.06	266.96	0.00	0.00	0.00
1,900.00	18.68	248.31	1,855.01	-110.50	-277.82	298.99	0.00	0.00	0.00
1,938.28	18.68	248.31	1,891.27	-115.03	-289.21	311.25	0.00	0.00	0.00
Begin 4°/100' drop									
2,000.00	16.21	248.31	1,950.15	-121.87	-306.40	329.75	4.00	-4.00	0.00
2,100.00	12.21	248.31	2,047.07	-130.94	-328.21	354.29	4.00	-4.00	0.00
2,200.00	8.21	248.31	2,145.47	-137.49	-345.67	372.01	4.00	-4.00	0.00
2,300.00	4.21	248.31	2,244.86	-141.48	-355.72	382.83	4.00	-4.00	0.00
2,383.23	0.88	248.31	2,328.00	-142.85	-359.16	386.52	4.00	-4.00	0.00
Glorieta									
2,400.00	0.21	248.31	2,344.77	-142.91	-359.30	386.68	4.00	-4.00	0.00
2,405.23	0.00	248.31	2,350.00	-142.91	-359.31	386.69	4.00	-4.00	0.00
Begin vertical hold section									
2,500.00	0.00	0.00	2,444.77	-142.91	-359.31	386.69	0.00	0.00	0.00
2,501.23	0.00	0.00	2,446.00	-142.91	-359.31	386.69	0.00	0.00	0.00
Yeso									
2,600.00	0.00	0.00	2,544.77	-142.91	-359.31	386.69	0.00	0.00	0.00
2,700.00	0.00	0.00	2,644.77	-142.91	-359.31	386.69	0.00	0.00	0.00
2,800.00	0.00	0.00	2,744.77	-142.91	-359.31	386.69	0.00	0.00	0.00
2,900.00	0.00	0.00	2,844.77	-142.91	-359.31	386.69	0.00	0.00	0.00
3,000.00	0.00	0.00	2,944.77	-142.91	-359.31	386.69	0.00	0.00	0.00
3,100.00	0.00	0.00	3,044.77	-142.91	-359.31	386.69	0.00	0.00	0.00
3,200.00	0.00	0.00	3,144.77	-142.91	-359.31	386.69	0.00	0.00	0.00

Database: DB Jul2216dt
Company: Lime Rock Resources
Project: Eddy County, New Mexico NAD27
Site: Terry 14C
Well: Terry 14C Well No. 6
Wellbore: Original Hole
Design: rev0

Local Co-ordinate Reference: Well Terry 14C Well No. 6
TVD Reference: RKB=3315.9+12.8 @ 3328.70usft
MD Reference: RKB=3315.9+12.8 @ 3328.70usft
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,300.00	0.00	0.00	3,244.77	-142.91	-359.31	386.69	0.00	0.00	0.00
3,400.00	0.00	0.00	3,344.77	-142.91	-359.31	386.69	0.00	0.00	0.00
3,500.00	0.00	0.00	3,444.77	-142.91	-359.31	386.69	0.00	0.00	0.00
3,600.00	0.00	0.00	3,544.77	-142.91	-359.31	386.69	0.00	0.00	0.00
3,700.00	0.00	0.00	3,644.77	-142.91	-359.31	386.69	0.00	0.00	0.00
3,800.00	0.00	0.00	3,744.77	-142.91	-359.31	386.69	0.00	0.00	0.00
3,900.00	0.00	0.00	3,844.77	-142.91	-359.31	386.69	0.00	0.00	0.00
3,930.23	0.00	0.00	3,875.00	-142.91	-359.31	386.69	0.00	0.00	0.00
Tubb									
4,000.00	0.00	0.00	3,944.77	-142.91	-359.31	386.69	0.00	0.00	0.00
4,100.00	0.00	0.00	4,044.77	-142.91	-359.31	386.69	0.00	0.00	0.00
4,200.00	0.00	0.00	4,144.77	-142.91	-359.31	386.69	0.00	0.00	0.00
4,300.00	0.00	0.00	4,244.77	-142.91	-359.31	386.69	0.00	0.00	0.00
4,400.00	0.00	0.00	4,344.77	-142.91	-359.31	386.69	0.00	0.00	0.00
4,405.23	0.00	0.00	4,350.00	-142.91	-359.31	386.69	0.00	0.00	0.00
PBHLTD									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Terry 14C #6 PBHL 330	0.00	359.99	4,350.00	-142.91	-359.31	638,086.31	493,266.30	32.75419087	-104.35523650
- plan hits target center									
- Point									

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
80.00	80.00	20" Casing @ 80 TVD	20	26
635.00	635.00	8 5/8" Casing @ 635 TVD	8-5/8	12-1/4

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
244.00	244.00	Queen		0.00	
686.00	686.00	Grayburg		0.00	
905.40	905.00	Premier		0.00	
955.87	955.00	San Andres		0.00	
2,383.23	2,328.00	Glorieta		0.00	
2,501.23	2,446.00	Yeso		0.00	
3,930.23	3,875.00	Tubb		0.00	



Planning Report

Database: DB Jul2216dt
Company: Lime Rock Resources
Project: Eddy County, New Mexico NAD27
Site: Terry 14C
Well: Terry 14C Well No. 6
Wellbore: Original Hole
Design: rev0

Local Co-ordinate Reference: Well Terry 14C Well No. 6
TVD Reference: RKB=3315.9+12.8 @ 3328.70usft
MD Reference: RKB=3315.9+12.8 @ 3328.70usft
North Reference: True
Survey Calculation Method: Minimum Curvature

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
735.00	735.00	0.00	0.00	KOP Begin 4"/100' build
1,201.95	1,193.72	-27.88	-70.10	Begin 18.68° tangent section
1,938.28	1,891.27	-115.03	-289.21	Begin 4"/100' drop
2,405.23	2,350.00	-142.91	-359.31	Begin vertical hold section
4,405.23	4,350.00	-142.91	-359.31	PBHL/TD



Planning Report - Geographic

Database: DB Jul2216dt
Company: Lime Rock Resources
Project: Eddy County, New Mexico NAD27
Site: Terry 14C
Well: Terry 14C Well No. 6
Wellbore: Original Hole
Design: rev0

Local Co-ordinate Reference: Well Terry 14C Well No. 6
TVD Reference: RKB=3315.9+12.8 @ 3328.70usft
MD Reference: RKB=3315.9+12.8 @ 3328.70usft
North Reference: True
Survey Calculation Method: Minimum Curvature

Project	Eddy County, New Mexico NAD27		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Terry 14C		
Site Position:		Northing:	638,228.49 usft
From:	Map	Easting:	493,725.62 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.75458204
		Longitude:	-104.35374253
		Grid Convergence:	-0.01 °

Well	Terry 14C Well No. 6, Surf Loc: 185 FNL 2010 FWL Sec14-T18S-26E		
Well Position	+N/-S	0.00 usft	Northing: 638,229.15 usft
	+E/-W	0.00 usft	Easting: 493,625.64 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	32.75458380
		Longitude:	-104.35406774
		Ground Level:	3,315.90 usft

Wellbore	Original Hole		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2015	2/15/2017	7.39
			Dip Angle
			(°)
			60.43
			Field Strength
			(nT)
			48,203

Design	rev0		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction
			(°)
			248.31

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
735.00	0.00	0.00	735.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,201.95	18.68	248.31	1,193.72	-27.88	-70.10	4.00	4.00	0.00	248.31	
1,938.28	18.68	248.31	1,891.28	-115.03	-289.21	0.00	0.00	0.00	0.00	
2,405.23	0.00	248.31	2,350.00	-142.91	-359.31	4.00	-4.00	0.00	180.00	
4,405.23	0.00	248.31	4,350.00	-142.91	-359.31	0.00	0.00	0.00	0.00	Terry 14C #6 PBHL 3:

Database: DB Jul2216dt
Company: Lime Rock Resources
Project: Eddy County, New Mexico NAD27
Site: Terry 14C
Well: Terry 14C Well No. 6
Wellbore: Original Hole
Design: rev0

Local Co-ordinate Reference: Well Terry 14C Well No. 6
TVD Reference: RKB=3315.9+12.8 @ 3328.70usft
MD Reference: RKB=3315.9+12.8 @ 3328.70usft
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	638,229.15	493,625.64	32.75458380	-104.35406774
100.00	0.00	0.00	100.00	0.00	0.00	638,229.15	493,625.64	32.75458380	-104.35406774
200.00	0.00	0.00	200.00	0.00	0.00	638,229.15	493,625.64	32.75458380	-104.35406774
244.00	0.00	0.00	244.00	0.00	0.00	638,229.15	493,625.64	32.75458380	-104.35406774
Queen									
300.00	0.00	0.00	300.00	0.00	0.00	638,229.15	493,625.64	32.75458380	-104.35406774
400.00	0.00	0.00	400.00	0.00	0.00	638,229.15	493,625.64	32.75458380	-104.35406774
500.00	0.00	0.00	500.00	0.00	0.00	638,229.15	493,625.64	32.75458380	-104.35406774
600.00	0.00	0.00	600.00	0.00	0.00	638,229.15	493,625.64	32.75458380	-104.35406774
686.00	0.00	0.00	686.00	0.00	0.00	638,229.15	493,625.64	32.75458380	-104.35406774
Grayburg									
700.00	0.00	0.00	700.00	0.00	0.00	638,229.15	493,625.64	32.75458380	-104.35406774
735.00	0.00	0.00	735.00	0.00	0.00	638,229.15	493,625.64	32.75458380	-104.35406774
KOP Begin 4°/100' build									
800.00	2.60	248.31	799.98	-0.54	-1.37	638,228.61	493,624.27	32.75458230	-104.35407220
900.00	6.60	248.31	899.64	-3.51	-8.82	638,225.65	493,616.82	32.75457416	-104.35409643
905.40	6.82	248.31	905.00	-3.74	-9.41	638,225.41	493,616.23	32.75457352	-104.35409834
Premier									
955.87	8.83	248.31	955.00	-6.28	-15.79	638,222.88	493,609.85	32.75456654	-104.35411911
San Andres									
1,000.00	10.60	248.31	998.49	-9.03	-22.71	638,220.13	493,602.93	32.75455897	-104.35414162
1,100.00	14.60	248.31	1,098.06	-17.09	-42.98	638,212.07	493,582.66	32.75453681	-104.35420754
1,200.00	18.60	248.31	1,191.88	-27.65	-69.52	638,201.52	493,556.12	32.75450780	-104.35429387
1,201.95	18.68	248.31	1,193.72	-27.88	-70.10	638,201.29	493,555.54	32.75450716	-104.35429575
Begin 18.68° tangent section									
1,300.00	18.68	248.31	1,286.61	-39.49	-99.28	638,189.69	493,526.36	32.75447527	-104.35439066
1,400.00	18.68	248.31	1,381.34	-51.32	-129.03	638,177.86	493,496.60	32.75444273	-104.35448746
1,500.00	18.68	248.31	1,476.08	-63.16	-158.79	638,166.03	493,466.84	32.75441020	-104.35458425
1,600.00	18.68	248.31	1,570.81	-74.99	-188.55	638,154.20	493,437.08	32.75437767	-104.35468104
1,700.00	18.68	248.31	1,665.54	-86.83	-218.31	638,142.37	493,407.32	32.75434513	-104.35477784
1,800.00	18.68	248.31	1,760.28	-98.66	-248.06	638,130.54	493,377.56	32.75431260	-104.35487463
1,900.00	18.68	248.31	1,855.01	-110.50	-277.82	638,118.71	493,347.80	32.75428006	-104.35497143
1,938.28	18.68	248.31	1,891.27	-115.03	-289.21	638,114.18	493,336.41	32.75426761	-104.35500848
Begin 4°/100' drop									
2,000.00	16.21	248.31	1,950.15	-121.87	-306.40	638,107.35	493,319.21	32.75424882	-104.35506440
2,100.00	12.21	248.31	2,047.07	-130.94	-329.21	638,098.28	493,296.41	32.75422388	-104.35513857
2,200.00	8.21	248.31	2,145.47	-137.49	-345.67	638,091.74	493,279.94	32.75420588	-104.35519213
2,300.00	4.21	248.31	2,244.86	-141.48	-355.72	638,087.74	493,269.89	32.75419490	-104.35522482
2,383.23	0.88	248.31	2,328.00	-142.85	-359.16	638,086.38	493,266.46	32.75419114	-104.35523599
Glorieta									
2,400.00	0.21	248.31	2,344.77	-142.91	-359.30	638,086.32	493,266.31	32.75419098	-104.35523647
2,405.23	0.00	248.31	2,350.00	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
Begin vertical hold section									
2,500.00	0.00	0.00	2,444.77	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
2,501.23	0.00	0.00	2,446.00	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
Yeso									
2,600.00	0.00	0.00	2,544.77	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
2,700.00	0.00	0.00	2,644.77	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
2,800.00	0.00	0.00	2,744.77	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
2,900.00	0.00	0.00	2,844.77	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
3,000.00	0.00	0.00	2,944.77	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
3,100.00	0.00	0.00	3,044.77	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
3,200.00	0.00	0.00	3,144.77	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650

Database: DB Jul2216dt
Company: Lime Rock Resources
Project: Eddy County, New Mexico NAD27
Site: Terry 14C
Well: Terry 14C Well No. 6
Wellbore: Original Hole
Design: rev0

Local Co-ordinate Reference: Well Terry 14C Well No. 6
TVD Reference: RKB=3315.9+12.8 @ 3328.70usft
MD Reference: RKB=3315.9+12.8 @ 3328.70usft
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
3,300.00	0.00	0.00	3,244.77	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
3,400.00	0.00	0.00	3,344.77	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
3,500.00	0.00	0.00	3,444.77	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
3,600.00	0.00	0.00	3,544.77	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
3,700.00	0.00	0.00	3,644.77	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
3,800.00	0.00	0.00	3,744.77	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
3,900.00	0.00	0.00	3,844.77	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
3,930.23	0.00	0.00	3,875.00	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
Tubb									
4,000.00	0.00	0.00	3,944.77	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
4,100.00	0.00	0.00	4,044.77	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
4,200.00	0.00	0.00	4,144.77	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
4,300.00	0.00	0.00	4,244.77	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
4,400.00	0.00	0.00	4,344.77	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
4,405.23	0.00	0.00	4,350.00	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
PBHL/TD									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Terry 14C #6 PBHL 330	0.00	359.99	4,350.00	-142.91	-359.31	638,086.31	493,266.30	32.75419097	-104.35523650
- plan hits target center									
- Point									

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
80.00	80.00	20" Casing @ 80 TVD	20	26
635.00	635.00	8 5/8" Casing @ 635 TVD	8-5/8	12-1/4

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
244.00	244.00	Queen		0.00	
686.00	686.00	Grayburg		0.00	
905.40	905.00	Premier		0.00	
955.87	955.00	San Andres		0.00	
2,383.23	2,328.00	Glorieta		0.00	
2,501.23	2,446.00	Yeso		0.00	
3,930.23	3,875.00	Tubb		0.00	



Planning Report - Geographic

Database: DB Jul2216dt
Company: Lime Rock Resources
Project: Eddy County, New Mexico NAD27
Site: Terry 14C
Well: Terry 14C Well No. 6
Wellbore: Original Hole
Design: rev0

Local Co-ordinate Reference: Well Terry 14C Well No. 6
TVD Reference: RKB=3315.9+12.8 @ 3328.70usft
MD Reference: RKB=3315.9+12.8 @ 3328.70usft
North Reference: True
Survey Calculation Method: Minimum Curvature

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
735.00	735.00	0.00	0.00	KOP Begin 4°/100' build
1,201.95	1,193.72	-27.88	-70.10	Begin 18.68° tangent section
1,938.28	1,891.27	-115.03	-289.21	Begin 4°/100' drop
2,405.23	2,350.00	-142.91	-359.31	Begin vertical hold section
4,405.23	4,350.00	-142.91	-359.31	PBHL/TD

Pressure Control

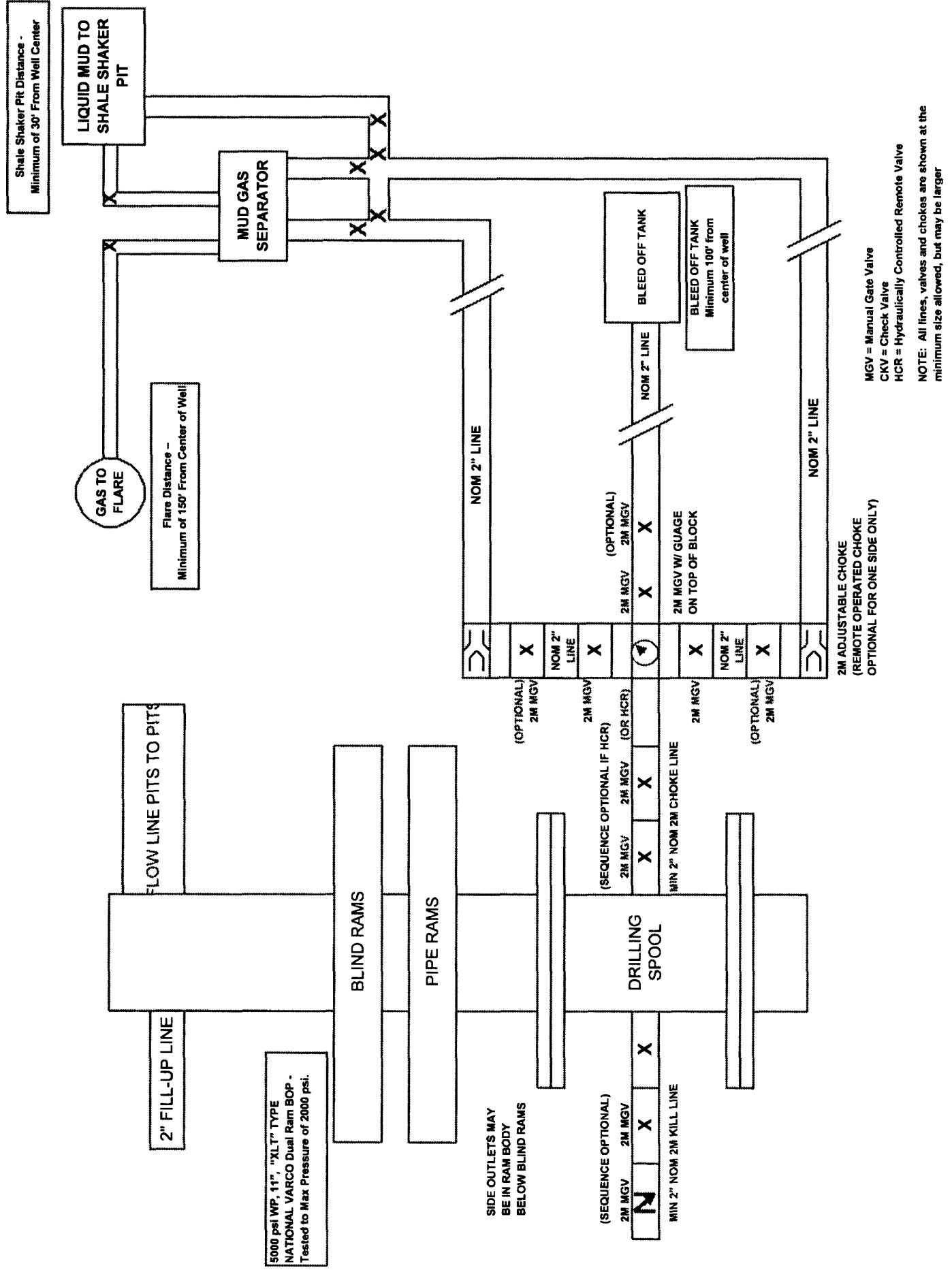
The blowout preventer equipment (BOP) will consist of a 5000 psi rated, "XLT" type, National VARCO double ram preventer that will be tested to a maximum pressure of 2000 psi. The unit will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and drill pipe rams on bottom. The 2M BOP will be installed on the 8 5/8" surface casing and utilized continuously until total depth is reached. All casing strings will be tested as per Onshore Order #2. This also includes a thirty day (30) test, should the rig still be operating on the same well in thirty days

Pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily

The BOP equipment will consist of the following:

- Double ram with blind rams (top) and pipe rams (bottom),
- Drilling spool, or blowout preventer with 2 side outlets (choke side shall be a 2" minimum diameter, kill side will be at least 2 inch diameter),
- Kill line (2 inch minimum),
- A minimum of 2 choke line valves (2 inch minimum),
- 2 inch diameter choke line,
- 2 kill valves, one of which will be a check valve (2 inch minimum),
- 2 chokes, one of which will be capable of remote operation,
- Pressure gauge on choke manifold,
- Upper Kelly cock valve with handle available,
- Safety valve and subs to fit all drill string connections in use,
- All BOPE connections subjected to well pressure will be flanged, welded, or clamped,
- A Fill-up line above the uppermost preventer.

2M BOP SCHEMATIC



Hydrogen Sulfide Drilling Plan Summary

A. All personnel shall receive proper H₂S training in accordance with Onshore Order 6 III.C.3.a.

B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.

C. Required Emergency Equipment:

■ Well control equipment

- a. Flare line 150' from wellhead to be ignited by flare gun.
- b. Choke manifold with a remotely operated choke.
- c. Mud/gas separator

■ Protective equipment for essential personnel.

Breathing apparatus:

- a. Rescue Packs (SCBA) — 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer.
- b. Work/Escape packs — 4 packs shall be stored on the rig floor and contain sufficiently long air hoses as to not to restrict work activity.
- c. Emergency Escape Packs — 4 packs shall be stored in the doghouse for emergency evacuation.

Auxiliary Rescue Equipment:

- a. Stretcher
- b. Two OSHA full body harness
- c. 100 ft 5/8 inch OSHA approved rope
- d. 1-20# class ABC fire extinguisher

■ H₂S detection and monitoring equipment:

The stationary detector with three sensors will be placed in the upper dog house if equipped, set to visually alarm @ 10 ppm and audible @ 14 ppm. Calibrate a minimum of every 30 days or as needed.

The sensors will be placed in the following places: Rig floor / Bell nipple / End of flow line or where well bore fluid is being discharged.

(Gas sample tubes will be stored in the safety trailer)

■ Visual warning systems:

- a. One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.
- b. A colored condition flag will be on display, reflecting the current condition at the site at the time.
- c. Two wind socks will be placed in strategic locations, visible from all angles.

■ Mud program:

The mud program has been designed to minimize the volume of H₂S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H₂S bearing zones.

■ **Metallurgy:**

- a. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.
- b. All elastomers used for packing and seals shall be H₂S trim.

■ **Communication:**

Communication will be via two way radio in emergency and company vehicles. Cell phones and land lines where available.

H2S CONTINGENCY DRILLING PLAN EMERGENCY CONTACTS

Company Offices	Lime Rock Houston Office	713-292-9510
	Answering Service (After Hours)	713-292-9555
	Artesia, NM Office	575-748-9724
	Roswell, NM	575-623-8424

KEY PERSONNEL

Name	Title	Location	Office #	Cell #	Home #
Steve Hunter	Production Manager	Houston	713-292-9516	832-330-7313	Same as Cell
Spencer Cox	Operations Engineer	Houston	713-292-9528	432-254-5140	Same as Cell
Eric McClusky	Operations Engineer	Houston	713-360-5714	832-491-3079	405-821-0534
Jerry Smith	Assistant Production Supervisor	Artesia	575-748-9724	505-918-0556	575-746-2478
Michael Barrett	Production Supervisor	Roswell	575-623-8424	505-353-2644	575-623-4707
Gary McClland	Well Site Supervisor	Rotates on Site	NA	903-503-8997	NA
Dave Williamson	Well Site Supervisor	Rotates on Site	NA	575-308-9980	NA

Agency Call List		
City	Agency or Office	Telephone #
Artesia	Ambulance	911
Artesia	State Police	575-746-2703
Artesia	Sherriff's Office	575-746-9888
Artesia	City Police	575-746-2703
Artesia	Fire Department	575-746-2701
Artesia	Local Emergency Planning Committee	575-746-2122
Artesia	New Mexico OCD District II	575-748-1283
Carlsbad	Ambulance	911
Carlsbad	State Police	575-885-3137
Carlsbad	Sherriff's Office	575-887-7551
Carlsbad	City Police	575-885-2111
Carlsbad	Fire Department	575-885-2111
Carlsbad	Local Emergency Planning Committee	575-887-3798
Carlsbad	US DOI Bureau of Land Management	575-887-6544
State Wide	New Mexico Emergency Response Commisssion ("NMERC")	505-476-9600
State Wide	NMERC 24 Hour Number	505-827-9126
State Wide	New Mexico State Emergency Operations Center	505-476-9635
National	National Emergency Response Center (Washington D.C.)	800-424-8802

Emergency Services

Name	Service	Location	Telephone Number	Alternate Number
Boots & Coots International Well Control	Well Control	Houston / Odessa	1-800-256-9688	281-931-8884
Cudd Pressure Control	Well Control/Pumping	Odessa	915-699-0139	915-563-3356
Baker Hughes Inc.	Pumping Services	Artesia, Hobbs & Odessa	575-746-2757	Same
Total Safety	Safety Equipment & Personnel	Artesia	575-746-2847	Same
Cutter Oilfield Services	Drilling Systems Equipment	Midland	432-488-6707	Same
Safety Dog	Safety Equipment & Personnel	Artesia	575-748-5847	575-441-1370
Fighting for Life	Emergency Helicopter Evacuation	Lubbock	806-743-9911	Same
Aerocare	Emergency Helicopter Evacuation	Lubbock	806-747-8923	Same
Med Flight Air Ambulance	Emergency Helicopter Evacuation	Albuquerque	505-842-4433	Same
Artesia General Hospital	Emergency Medical Care	Artesia	575-748-3333	702 North 13th Street

Lime Rock Resources II-A, L.P.

Terry 14C #6

Unit C, S14-T18-R26E, Eddy County, NM

Design: Closed Loop System with roll-off steel bins (pits)

CRI/HOBBS will supply (2) bins (100 bbl) volume, rails and transportation relating to the Close Loop System. Specification of the Closed Loop System is attached.

Contacts: Gary Wallace (432) 638-4076 Cell (575) 393-1079 Office

Scomi Oil Tool: Supervisor – Armando Soto (432) 553-7979 Hobbs, NM

Monitoring 24 Hour service

Equipment:

Centrifuges – Derrick Brand

Rig Shakers – Brandt Brand

D-watering Unit

Air pumps on location for immediate remediation process

Layout of Close Loop System with bins, centrifuges and shakers attache

Cuttings and associated liquids will be hauled to a State regulated third party disposal site (CRI or Controlled Recc Inc.). The disposal site permit is DFP = #R916

2- (250 bbl) tanks to hold fluid

2-CRI bins with track system

2-500 bbl frac tanks with fresh water

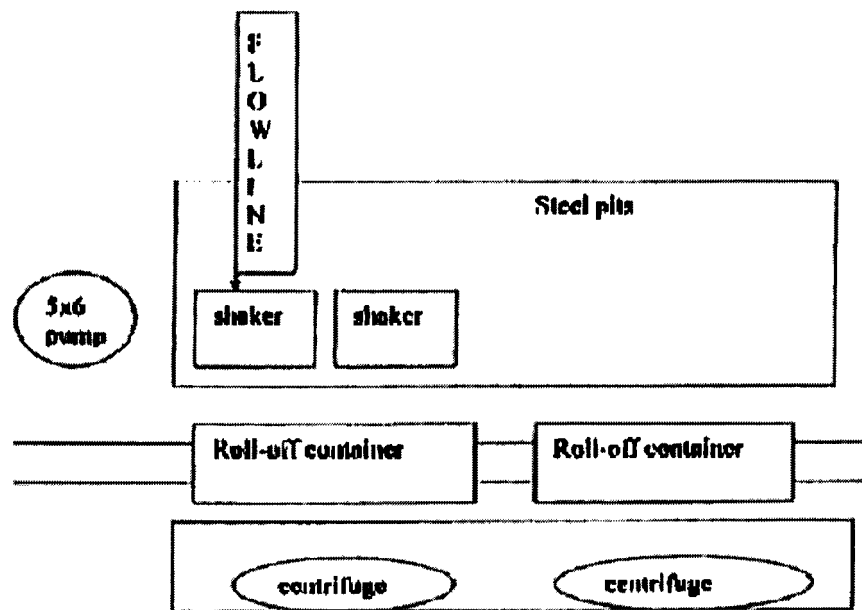
2-500 bbl frac tanks for brine water

Operations:

Closed Loop System equipment will be inspected daily by each tour and any necessary maintenance perfo leak in system will be repaired and/or contained immediately. OCD will be notified within 48 hours of ar Remediation process will start immediate!

Closure:

During drilling operations all liquids, drilling fluids and cuttings will be hauled off via CRI equipment to DFP #



This will be maintained by 24 hour solids control personnel that stay on location.

TOMMY WILSON



**CLOSED LOOP
SPECIALTY**

Office: 979.746.1689

Cell: 979.748.6367