

625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Artesia, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
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 30-015-43297
⁴ Property Code 315090	⁵ Property Name Terry 14E	⁶ Well No. #4

⁷ Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
E	14	18S	26E		2510	N	605	W	Eddy

⁸ Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
E	14	18S	26E		1980	N	345	W	Eddy

⁹ Pool Information

Atoka; Glorieta-Yeso	3250
----------------------	------

Additional Well Information

⁹ Work Type N	¹⁰ Well Type O	¹¹ Cable/ Rotary R	¹² Lease Type P	¹³ Ground Level Elevation 3323.5
¹⁴ Multiple N	¹⁵ Proposed Depth 4413' MD / 4300' TVD	¹⁶ Formation Yeso	¹⁷ Contractor United Drilling, Inc.	¹⁸ Spud Date After 3/1/2017
Depth to Ground Water: 500 Ft		Distance from nearest fresh water well 1.88255814 Miles		Distance from nearest surface water 1.53 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/lb	Setting Depth	Sacks of Cement	Estimated TOC
Conductor	26"	20"	91.5	80	80	Surface
Surface	11"	8-5/8"	24	620	350	Surface
Production	7-7/8"	5-1/2"	17	4413	900	Surface

Casing/Cement Program: Additional Comments

Surface Csg set 50' above first oil show. Cement will be circulated as required.

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 McClusky*

Printed Name: Eric McClusky

Title: Operations Engineer

E-mail Address: emcclusky@limerockresources.com

Date: 2/14/2017

Phone: 713-360-5714

OIL CONSERVATION DIVISION

Approved By:

Raymond W. Pedraza

Title: *Geologist*

Approved Date: *3-20-2017*

Expiration Date: *3-20-2019*

Conditions of Approval Attached

Prior to Spud, Operator will review and adhere to NMOCD order R-14164 for current changes or any amendments which may pertain to the drilling and completion of this well.

**NM OIL CONSERVATION
ARTESIA DISTRICT**

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
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

FEB 17 2017

RECEIVED

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 30-015-43297	² Pool Code 3250	³ Pool Name ATOKA, GLORIETA-YESO
⁴ Property Code 315090	⁵ Property Name TERRY 14E	⁶ Well Number 4
⁷ OGRID No. 277558	⁸ Operator Name LIME ROCK RESOURCES II-A, L.P.	⁹ Elevation 3323.5

" Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	14	18 S	26 E		2510	NORTH	605	WEST	EDDY

" Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	14	18 S	26 E		1980	NORTH	345	WEST	EDDY

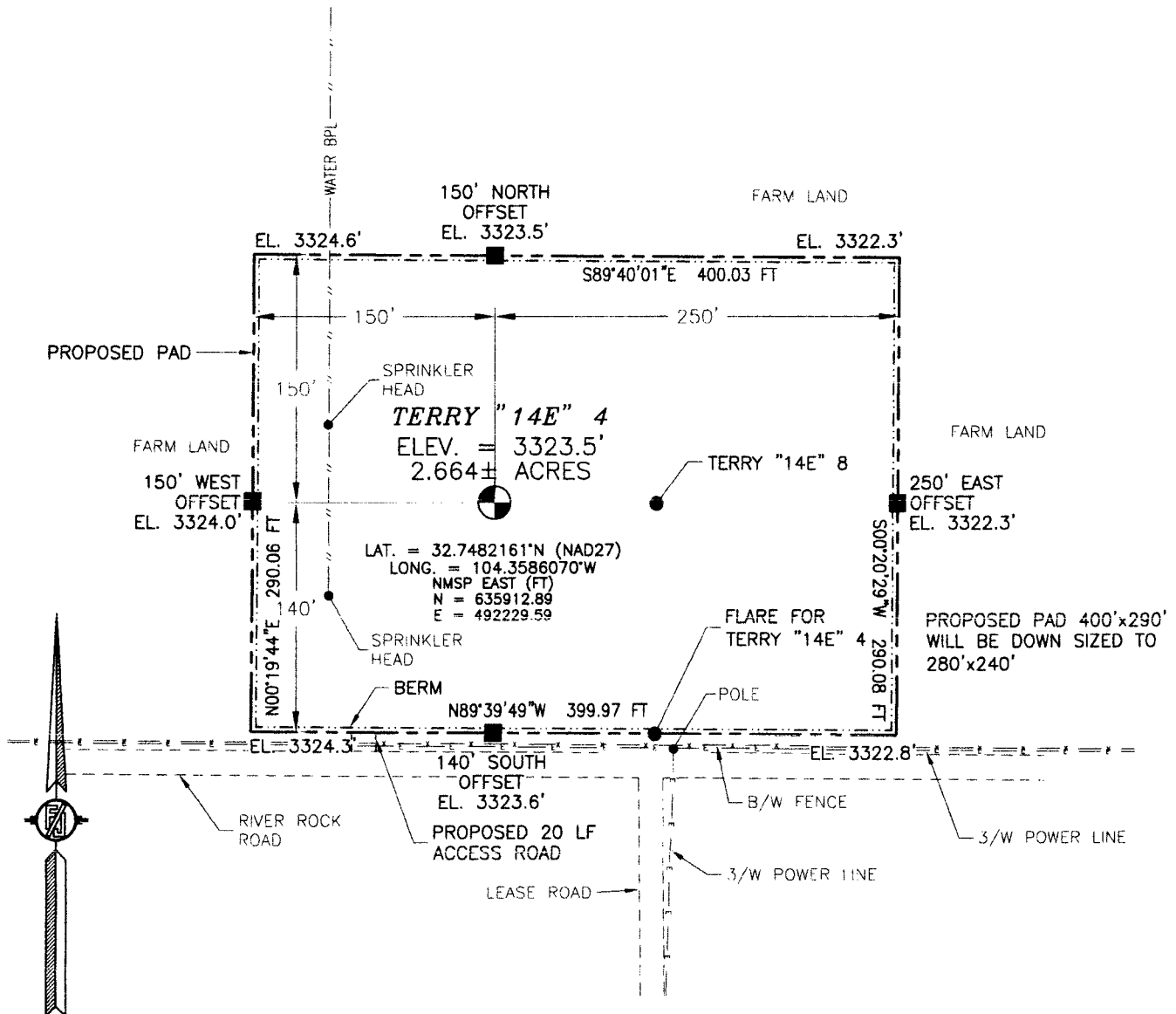
¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--	-------------------------------	----------------------------------	-------------------------

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 S89°39'50"E 2636.00 FT NE CORNER SEC. 14 LAT. = 32.7550409°N LONG. = 104.3434626°W NMSP EAST (FT) N = 638394.97 E = 496885.97		" 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 to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Mike Pippin</i> 2/16/17 Signature Date MIKE PIPPIN Printed Name MIKE@PIPPINLLC.COM E-mail Address	
N00°12'43"W 2659.83 FT 1980' 2510' 345' 605' DNF BOTTOM OF HOLE LAT. = 32.7496768°N LONG. = 104.3594593°W NMSP EAST (FT) N = 636444.34 E = 491967.68 BOTTOM OF HOLE TERRY "14E" 4 ELEV. = 3323.5 LAT. = 32.7482161°N (NAD27) LONG. = 104.3586070°W NMSP EAST (FT) N = 635912.89 E = 492229.59 SURFACE LOCATION 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 SW CORNER SEC. 14 LAT. = 32.7405050°N LONG. = 104.3605383°W NMSP EAST (FT) N = 633107.74 E = 491635.08 S/4 CORNER SEC. 14 LAT. = 32.7404628°N LONG. = 104.3520255°W NMSP EAST (FT) N = 633091.82 E = 494252.58 SE CORNER SEC. 14 LAT. = 32.7404702°N LONG. = 104.3433680°W NMSP EAST (FT) N = 633094.16 E = 496914.57		"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. FEBRUARY 15, 2017 Date of Survey <i>Frank Jaramillo</i> Signature and Seal of Professional Surveyor Certificate Number: FILIMON E. JARAMILLO, PLS 12797 SURVEY NO. 3170C	
N00°12'43"W 2659.83 FT N89°39'07"W 2618.23 FT		S00°18'34"E 2651.16 FT S00°18'34"E 2651.16 FT	

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.



010 50 100 200

SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CR 39 (4-DINKUS) AND CR 44 (FANNING) GO SOUTH ON CR 44 FOR APPROX. 0.5 OF A MILE, TURN RIGHT ON LEASE ROAD AND GO WEST 0.64 OF A MILE TO A PROPOSED ROAD SURVEY AND FOLLOW FLAGS NORTH 20' TO THE PROPOSED SOUTHWEST PAD CORNER FOR THIS LOCATION.

LIME ROCK RESOURCES II-A, L.P.

TERRY "14E" 4

LOCATED 2510 FT. FROM THE NORTH LINE
AND 605 FT. FROM THE WEST LINE OF
SECTION 14, TOWNSHIP 18 SOUTH,
RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

FEBRUARY 15, 2017

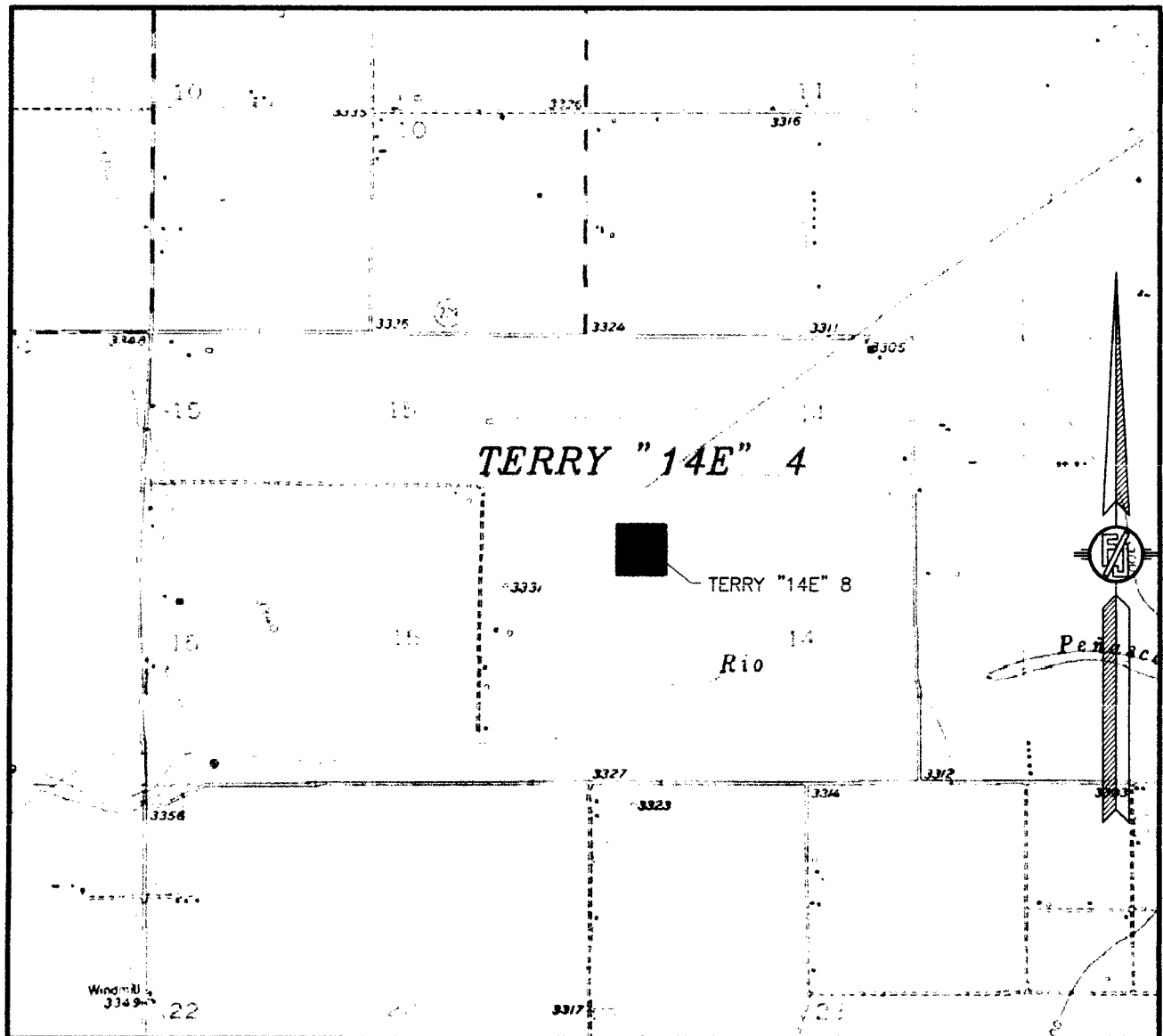
SURVEY NO. 3170C

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
LOCATION VERIFICATION MAP



USGS QUAD MAP:
SPRING LAKE

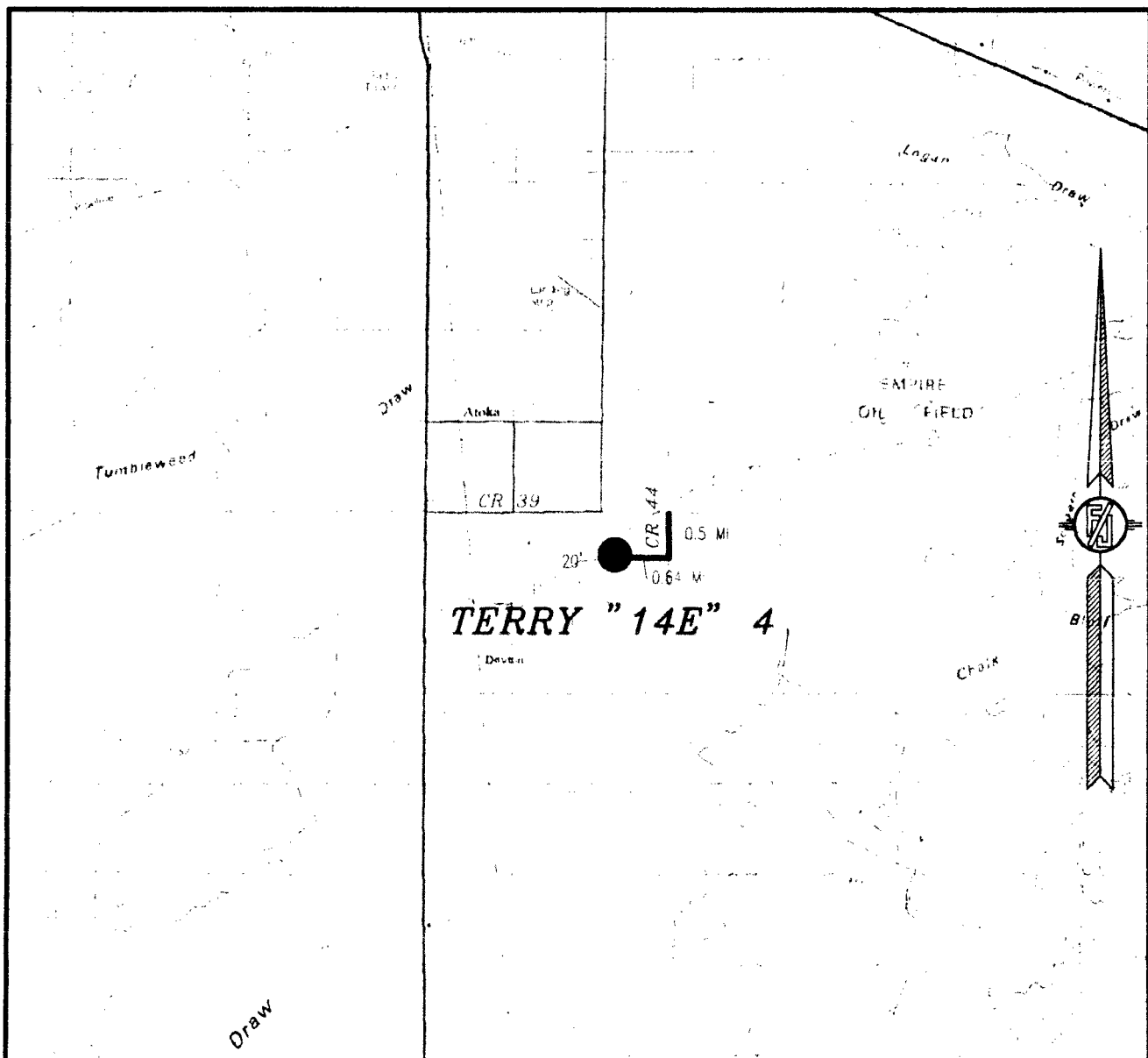
NOT TO SCALE

LIME ROCK RESOURCES II-A, L.P.
TERRY "14E" 4
LOCATED 2510 FT. FROM THE NORTH LINE
AND 605 FT. FROM THE WEST LINE OF
SECTION 14, TOWNSHIP 18 SOUTH,
RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

FEBRUARY 15, 2017

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO
SURVEY NO. 3170C

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



DISTANCES IN MILES

NOT TO SCALE

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CR 39 (4-DINKUS) AND CR 44 (FANNING) GO SOUTH ON CR 44 FOR APPROX. 0.5 OF A MILE. TURN RIGHT ON LEASE ROAD AND GO WEST 0.64 OF A MILE TO A PROPOSED ROAD SURVEY AND FOLLOW FLAGS NORTH 20° TO THE PROPOSED SOUTHWEST PAD CORNER FOR THIS LOCATION.

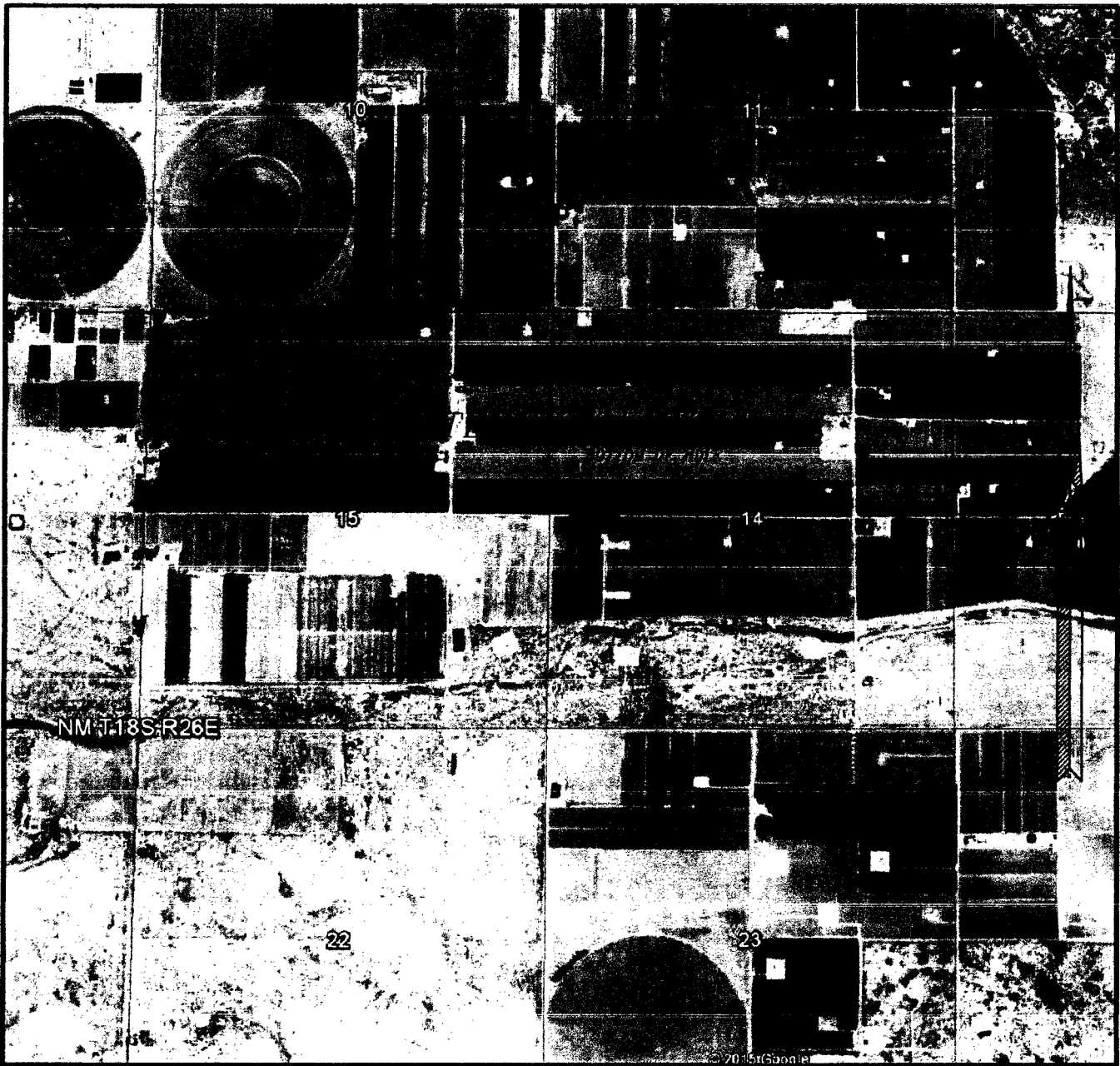
LIME ROCK RESOURCES II-A, L.P.
TERRY "14E" 4
LOCATED 2510 FT. FROM THE NORTH LINE
AND 605 FT. FROM THE WEST LINE OF
SECTION 14, TOWNSHIP 18 SOUTH,
RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

FEBRUARY 15, 2017

SURVEY NO. 3170C

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 PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
MAY 2014

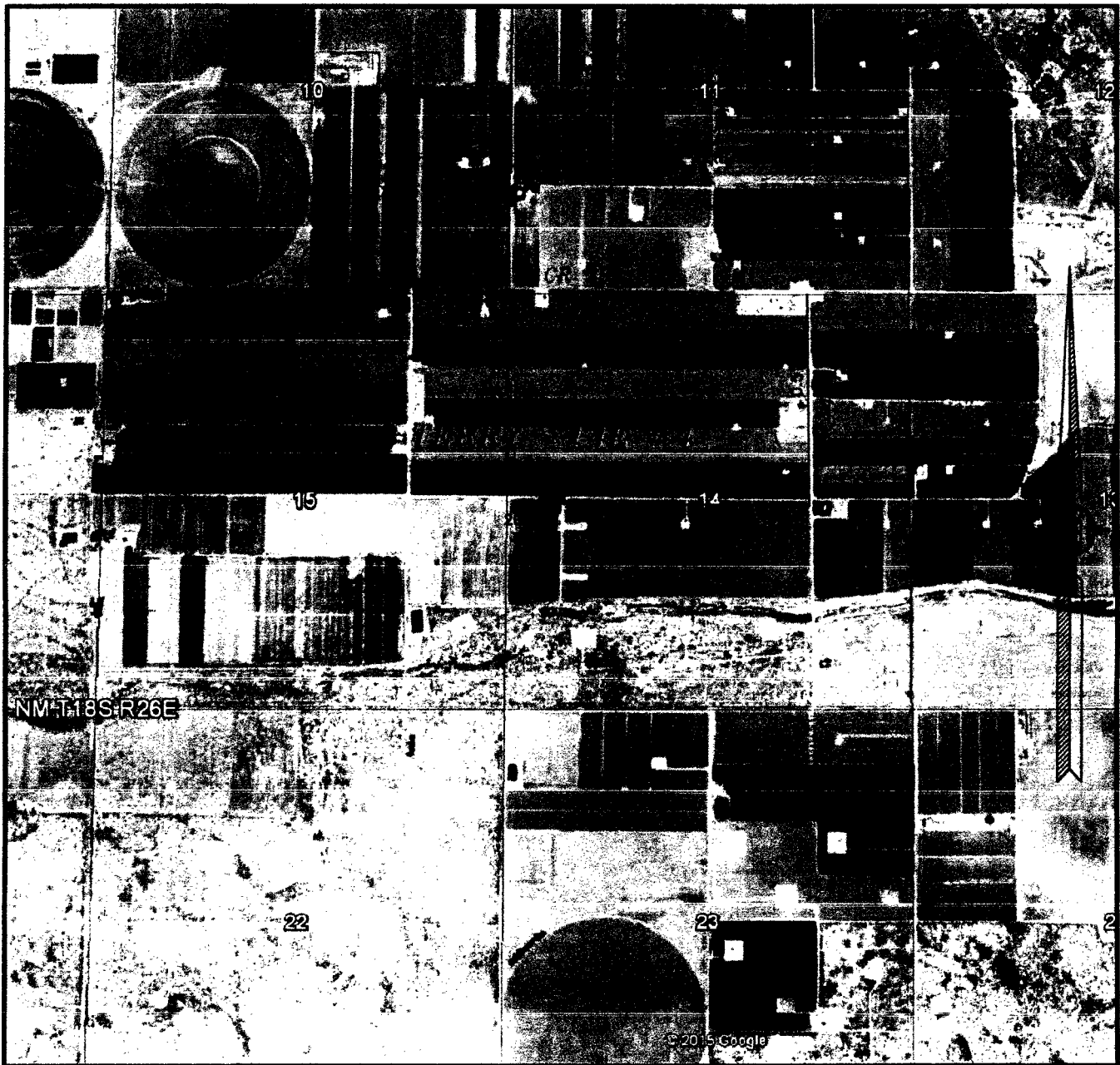
LIME ROCK RESOURCES II-A, L.P.
TERRY "14E" 4
LOCATED 2510 FT. FROM THE NORTH LINE
AND 605 FT. FROM THE WEST LINE OF
SECTION 14, TOWNSHIP 18 SOUTH,
RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

FEBRUARY 15, 2017

SURVEY NO. 3170C

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
ACCESS AERIAL ROUTE MAP



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
MAY 2014

LIME ROCK RESOURCES II-A, L.P.
TERRY "14E" 4
LOCATED 2510 FT. FROM THE NORTH LINE
AND 605 FT. FROM THE WEST LINE OF
SECTION 14, TOWNSHIP 18 SOUTH,
RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

FEBRUARY 15, 2017

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

SURVEY NO. 3170C

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

**Terry 14E #4
2510' FNL 605' FWL
(E) 14-18S-26E
Eddy County, NM**

1. The elevation of the unprepared ground is 3323.5 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 4300' 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 4413' MD./ 4300' TVD. inside a 30' X 30' square tract inside of 40 acre spacing regulatory quarter-quarter setback distance. The KOP for directional drilling will be at 670'. 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	290	290
Grayburg	670	670
Premier	980	970
San Andres	989	978
Glorieta	2440	2327
Yeso	2558	2445
Tubb	3980	3867
TD	4413	4300

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	290	290
Grayburg	670	670
Premier	980	970
San Andres	989	978
Glorieta	2440	2327
Yeso	2558	2445
Tubb	3980	3867
TD	4413	4300

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	620	350	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	4413	300	12.8	1.903	(35:65) 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	0-620	620-4250	4250-4413
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 4413 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 1941.72 psi based on 0.44 x TD. The estimated BHT is 125 degrees F.

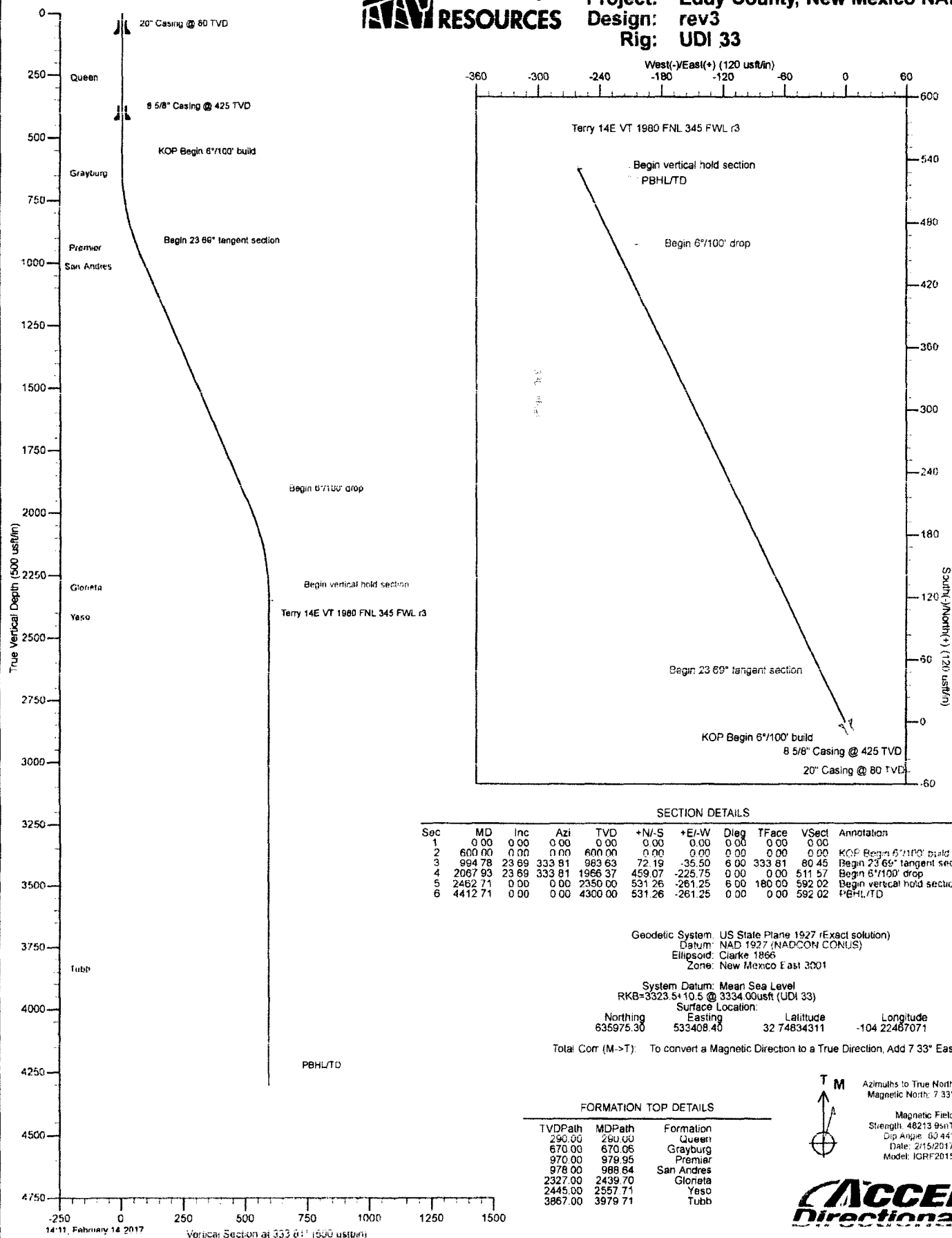
12. **Duration of Operations:**

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 it complet well and to construct surface facilities.



**LIME ROCK
RESOURCES**

Well: Terry 14E Well No. 4
Site: Terry 14E
Project: Eddy County, New Mexico NAD27
Design: rev3
Rig: UDI 33



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSecl	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	KOP Begin 6\"/>

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=3323.5+10.5 @ 3334.00usft (UDI 33)

Surface Location:
Northing: 635975.30 Easting: 533408.40 Latitude: 32 74834311 Longitude: -104 22467071

Total Corr (M->T): To convert a Magnetic Direction to a True Direction, Add 7.33° East

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
290.00	290.00	Queen
670.00	670.06	Grayburg
970.00	979.95	Premier
978.00	988.64	San Andres
2327.00	2439.70	Glorieta
2445.00	2557.71	Yaso
3867.00	3979.71	Tubb



Azimuths to True North
Magnetic North: 7.33°

Magnetic Field
Strength: 48213.95nT
Dip Angle: 60.44°
Date: 2/15/2017
Model: IGRF2015

ACCEL
Directional



Planning Report - Geographic

Database: DB Jul2216dt
Company: Lime Rock Resources
Project: Eddy County, New Mexico NAD27
Site: Terry 14E
Well: Terry 14E Well No. 4
Wellbore: Original Hole
Design: rev3

Local Co-ordinate Reference: Well Terry 14E Well No. 4
TVD Reference: RKB=3323.5+10.5 @ 3334.00usft (UDI 33)
MD Reference: RKB=3323.5+10.5 @ 3334.00usft (UDI 33)
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 14E

Site Position: **Northing:** 635,975.30 usft **Latitude:** 32.74834311
From: Map **Easting:** 533,408.40 usft **Longitude:** -104.22467071
Position Uncertainty: 0.00 usft **Slot Radius:** 13-3/16 " **Grid Convergence:** 0.06 °

Well Terry 14E Well No. 4

Well Position **+N/-S** 0.00 usft **Northing:** 635,975.30 usft **Latitude:** 32.74834311
+E/-W 0.00 usft **Easting:** 533,408.40 usft **Longitude:** -104.22467071
Position Uncertainty 0.00 usft **Wellhead Elevation:** **Ground Level:** 3,323.50 usft

Wellbore Original Hole

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/15/2017	7.33	60.44	48,214

Design rev3

Audit Notes:

Version: **Phase:** PLAN **Tie On Depth:** 0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	333.81

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	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
994.78	23.69	333.81	983.63	72.19	-35.50	6.00	6.00	0.00	333.81	
2,067.93	23.69	333.81	1,966.37	459.07	-225.75	0.00	0.00	0.00	0.00	
2,462.71	0.00	0.00	2,350.00	531.26	-261.25	6.00	-6.00	0.00	180.00	Terry 14E VT 1980 FT
4,412.71	0.00	0.00	4,300.00	531.26	-261.25	0.00	0.00	0.00	0.00	



Planning Report - Geographic

Database: DB Jul2216dt
Company: Lime Rock Resources
Project: Eddy County, New Mexico NAD27
Site: Terry 14E
Well: Terry 14E Well No. 4
Wellbore: Original Hole
Design: rev3

Local Co-ordinate Reference: Well Terry 14E Well No. 4
TVD Reference: RKB=3323.5+10.5 @ 3334.00usft (UDI 33)
MD Reference: RKB=3323.5+10.5 @ 3334.00usft (UDI 33)
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	635,975.30	533,408.40	32.74834311	-104.22467071
80.00	0.00	0.00	80.00	0.00	0.00	635,975.30	533,408.40	32.74834311	-104.22467071
20" Casing @ 80 TVD									
100.00	0.00	0.00	100.00	0.00	0.00	635,975.30	533,408.40	32.74834311	-104.22467071
200.00	0.00	0.00	200.00	0.00	0.00	635,975.30	533,408.40	32.74834311	-104.22467071
290.00	0.00	0.00	290.00	0.00	0.00	635,975.30	533,408.40	32.74834311	-104.22467071
Queen									
300.00	0.00	0.00	300.00	0.00	0.00	635,975.30	533,408.40	32.74834311	-104.22467071
400.00	0.00	0.00	400.00	0.00	0.00	635,975.30	533,408.40	32.74834311	-104.22467071
425.00	0.00	0.00	425.00	0.00	0.00	635,975.30	533,408.40	32.74834311	-104.22467071
8 5/8" Casing @ 425 TVD									
500.00	0.00	0.00	500.00	0.00	0.00	635,975.30	533,408.40	32.74834311	-104.22467071
600.00	0.00	0.00	600.00	0.00	0.00	635,975.30	533,408.40	32.74834311	-104.22467071
KOP Begin 6"/100' build									
670.06	4.20	333.81	670.00	2.31	-1.13	635,977.61	533,407.27	32.74834945	-104.22467440
Grayburg									
700.00	6.00	333.81	699.82	4.69	-2.31	635,980.00	533,406.09	32.74835602	-104.22467822
800.00	12.00	333.81	798.54	18.73	-9.21	635,994.02	533,399.17	32.74839459	-104.22470066
900.00	18.00	333.81	895.09	41.94	-20.62	636,017.22	533,387.73	32.74845840	-104.22473779
979.95	22.80	333.81	970.00	66.94	-32.92	636,042.21	533,375.42	32.74852711	-104.22477777
Premier									
988.64	23.32	333.81	978.00	69.99	-34.42	636,045.26	533,373.91	32.74853551	-104.22478266
San Andres									
994.78	23.69	333.81	983.63	72.19	-35.50	636,047.46	533,372.83	32.74854155	-104.22478618
Begin 23.69° tangent section									
1,000.00	23.69	333.81	988.41	74.07	-36.43	636,049.34	533,371.90	32.74854672	-104.22478919
1,100.00	23.69	333.81	1,079.99	110.12	-54.15	636,085.37	533,354.14	32.74864582	-104.22484685
1,200.00	23.69	333.81	1,171.56	146.17	-71.88	636,121.40	533,336.37	32.74874491	-104.22490451
1,300.00	23.69	333.81	1,263.14	182.23	-89.61	636,157.44	533,318.61	32.74884401	-104.22496217
1,400.00	23.69	333.81	1,354.71	218.28	-107.34	636,193.47	533,300.84	32.74894310	-104.22501983
1,500.00	23.69	333.81	1,446.29	254.33	-125.06	636,229.50	533,283.08	32.74904219	-104.22507749
1,600.00	23.69	333.81	1,537.86	290.38	-142.79	636,265.53	533,265.31	32.74914129	-104.22513515
1,700.00	23.69	333.81	1,629.44	326.43	-160.52	636,301.57	533,247.55	32.74924038	-104.22519281
1,800.00	23.69	333.81	1,721.02	362.48	-178.25	636,337.60	533,229.78	32.74933948	-104.22525048
1,900.00	23.69	333.81	1,812.59	398.53	-195.98	636,373.63	533,212.02	32.74943857	-104.22530814
2,000.00	23.69	333.81	1,904.17	434.58	-213.70	636,409.66	533,194.25	32.74953767	-104.22536580
2,067.93	23.69	333.81	1,966.37	459.07	-225.75	636,434.14	533,182.19	32.74960498	-104.22540497
Begin 6"/100' drop									
2,100.00	21.76	333.81	1,995.85	470.18	-231.21	636,445.25	533,176.71	32.74963554	-104.22542275
2,200.00	15.76	333.81	2,090.60	499.04	-245.40	636,474.09	533,162.49	32.74971484	-104.22546890
2,300.00	9.76	333.81	2,188.08	518.85	-255.14	636,493.89	533,152.73	32.74976930	-104.22550059
2,400.00	3.76	333.81	2,287.34	529.41	-260.34	636,504.45	533,147.52	32.74983934	-104.22551748
2,439.70	1.38	333.81	2,327.00	531.01	-261.12	636,506.05	533,146.73	32.74980273	-104.22552004
Glorieta									
2,462.71	0.00	0.00	2,350.00	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
Begin vertical hold section									
2,500.00	0.00	0.00	2,387.29	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
2,557.71	0.00	0.00	2,445.00	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
Yeso									
2,600.00	0.00	0.00	2,487.29	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
2,700.00	0.00	0.00	2,587.29	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
2,800.00	0.00	0.00	2,687.29	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
2,900.00	0.00	0.00	2,787.29	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044



Planning Report - Geographic

Database: DB Jul2216dt
Company: Lime Rock Resources
Project: Eddy County, New Mexico NAD27
Site: Terry 14E
Well: Terry 14E Well No 4
Wellbore: Original Hole
Design: rev3

Local Co-ordinate Reference: Well Terry 14E Well No. 4
TVD Reference: RKB=3323.5+10.5 @ 3334.00usft (UDI 33)
MD Reference: RKB=3323.5+10.5 @ 3334.00usft (UDI 33)
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
3,000.00	0.00	0.00	2,887.29	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
3,100.00	0.00	0.00	2,987.29	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
3,200.00	0.00	0.00	3,087.29	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
3,300.00	0.00	0.00	3,187.29	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
3,400.00	0.00	0.00	3,287.29	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
3,500.00	0.00	0.00	3,387.29	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
3,600.00	0.00	0.00	3,487.29	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
3,700.00	0.00	0.00	3,587.29	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
3,800.00	0.00	0.00	3,687.29	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
3,900.00	0.00	0.00	3,787.29	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
3,979.71	0.00	0.00	3,867.00	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
Tubb									
4,000.00	0.00	0.00	3,887.29	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
4,100.00	0.00	0.00	3,987.29	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
4,200.00	0.00	0.00	4,087.29	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
4,300.00	0.00	0.00	4,187.29	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
4,400.00	0.00	0.00	4,287.29	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
4,412.71	0.00	0.00	4,300.00	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
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 14E VT 1980 FNL	0.00	0.00	2,350.00	531.26	-261.25	636,506.29	533,146.61	32.74980341	-104.22552044
- 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
425.00	425.00	8 5/8" Casing @ 425 TVD	8-5/8	12-1/4

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
290.00	290.00	Queen		0.00	
670.06	670.00	Grayburg		0.00	
979.95	970.00	Premier		0.00	
988.64	978.00	San Andres		0.00	
2,439.70	2,327.00	Glorieta		0.00	
2,557.71	2,445.00	Yeso		0.00	
3,979.71	3,867.00	Tubb		0.00	



Planning Report - Geographic

Database: DB Jul2216dt
Company: Lime Rock Resources
Project: Eddy County, New Mexico NAD27
Site: Terry 14E
Well: Terry 14E Well No. 4
Wellbore: Original Hole
Design: rev3

Local Co-ordinate Reference: Well Terry 14E Well No. 4
TVD Reference: RKB=3323.5+10.5 @ 3334.00usft (UDI 33)
MD Reference: RKB=3323.5+10.5 @ 3334.00usft (UDI 33)
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)	
600.00	600.00	0.00	0.00	KOP Begin 6"/100' build
994.78	983.63	72.19	-35.50	Begin 23.69° tangent section
2,067.93	1,966.37	459.07	-225.75	Begin 6"/100' drop
2,462.71	2,350.00	531.26	-261.25	Begin vertical hold section
4,412.71	4,300.00	531.26	-261.25	PBHL/TD

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES
OIL CONSERVATION DIVISION**

PERMIT CONDITIONS OF APPROVAL

Operator Name Time Rock Resources
API Number 30-015-43297
Well Name and Number Jerry 14E #4

- ☐ Will require a Directional Survey and "As Drilled" C-102 with the C-104
- ☒ Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.
- ☒ If cement does not circulate to surface, must run temperature survey or other log to determine top of cement.
- ☐ NSL approval required prior to sale of product
- ☐ NSP approval required for requested acreage dedication
- ☐ Initial injection cannot commence until all regulatory requirements have been met and drilling and completion data conforms to approved SWD order
- ☒ Prior to Spud, Operator will review and adhere to NMOCD order R-14164 for current changes or any amendments which may pertain to the drilling and completion of this well.