

**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 and Natural Resources CONSERVATION**

Form C-101  
Revised July 18, 2013

**Oil Conservation Division**  
**1220 South St. Francis Dr.**

ARTESIA DISTRICT

AMENDED Report

AUG 6 2015

Santa Fe, NM 87505

**RECEIVED**

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

<sup>1</sup> Operator Name and Address Lime Rock Resources II-A, L.P. 1111 Bagby Street, Suite 4600 Houston, Texas 77002		<sup>2</sup> OGRID Number 277558
		<sup>3</sup> API Number 30-015-43307
<sup>4</sup> Property Code 39342	<sup>5</sup> Property Name Terry 14 B	<sup>6</sup> Well No. #1

**7 Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
B	14	18S	26E		430	N	1650	E	Eddy

**8 Proposed Bottom Hole Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
B	14	18S	26E		430	N	1650	E	Eddy

**9 Pool Information**

Atoka; Glorieta-Yeso	3250
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**Additional Well Information**

<sup>9</sup> Work Type N	<sup>10</sup> Well Type O	<sup>11</sup> Cable/Rotary R	<sup>12</sup> Lease Type P	<sup>13</sup> Ground Level Elevation 3309.3
<sup>14</sup> Multiple N	<sup>15</sup> Proposed Depth 4200' MD / 4200' TVD	<sup>16</sup> Formation Yeso	<sup>17</sup> Contractor United Drilling, Inc.	<sup>18</sup> Spud Date After 8/1/2015
Depth to Ground Water: 100 Ft.		Distance from nearest fresh water well: 0.178 Miles		Distance from nearest surface water: 2.08 Miles

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

**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	12-1/4"	8-5/8"	24	425	350	Surface
Production	7-7/8"	5-1/2"	17	4200	840	Surface

**Casing/Cement Program: Additional Comments**

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**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) NMAC  and/or 19.15.14.9 (B) NMAC 0, if applicable.

Signature: *Spencer Cox*

Printed Name: Spencer Cox

Title: Operations Engineer

E-mail Address: scox@limerockresources.com

Date: 7/31/2015      Phone: 713-292-9528

**OIL CONSERVATION DIVISION**

Approved By: *J.D. Dade*

Title: *Dist #1 Supervisor*

Approved Date: *8/18/15*      Expiration Date: *8/18/17*

Conditions of Approval Attached

District I  
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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

<sup>1</sup> APN Number <b>30-015-43307</b>		<sup>2</sup> Pool Code <b>3250</b>		<sup>3</sup> Pool Name <b>Atoka-Glorita-Yeso</b>	
<sup>4</sup> Property Code <b>39342</b>		<sup>5</sup> Property Name <b>TERRY 14B</b>			<sup>6</sup> Well Number <b>1</b>
<sup>7</sup> OGRID No. <b>277558</b>		<sup>8</sup> Operator Name <b>LIME ROCK RESOURCES II-A, L.P.</b>			<sup>9</sup> Elevation <b>3309.4</b>

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>B</b>	<b>14</b>	<b>18 S</b>	<b>26 E</b>		<b>430</b>	<b>NORTH</b>	<b>1650</b>	<b>EAST</b>	<b>EDDY</b>

<sup>11</sup> 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

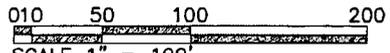
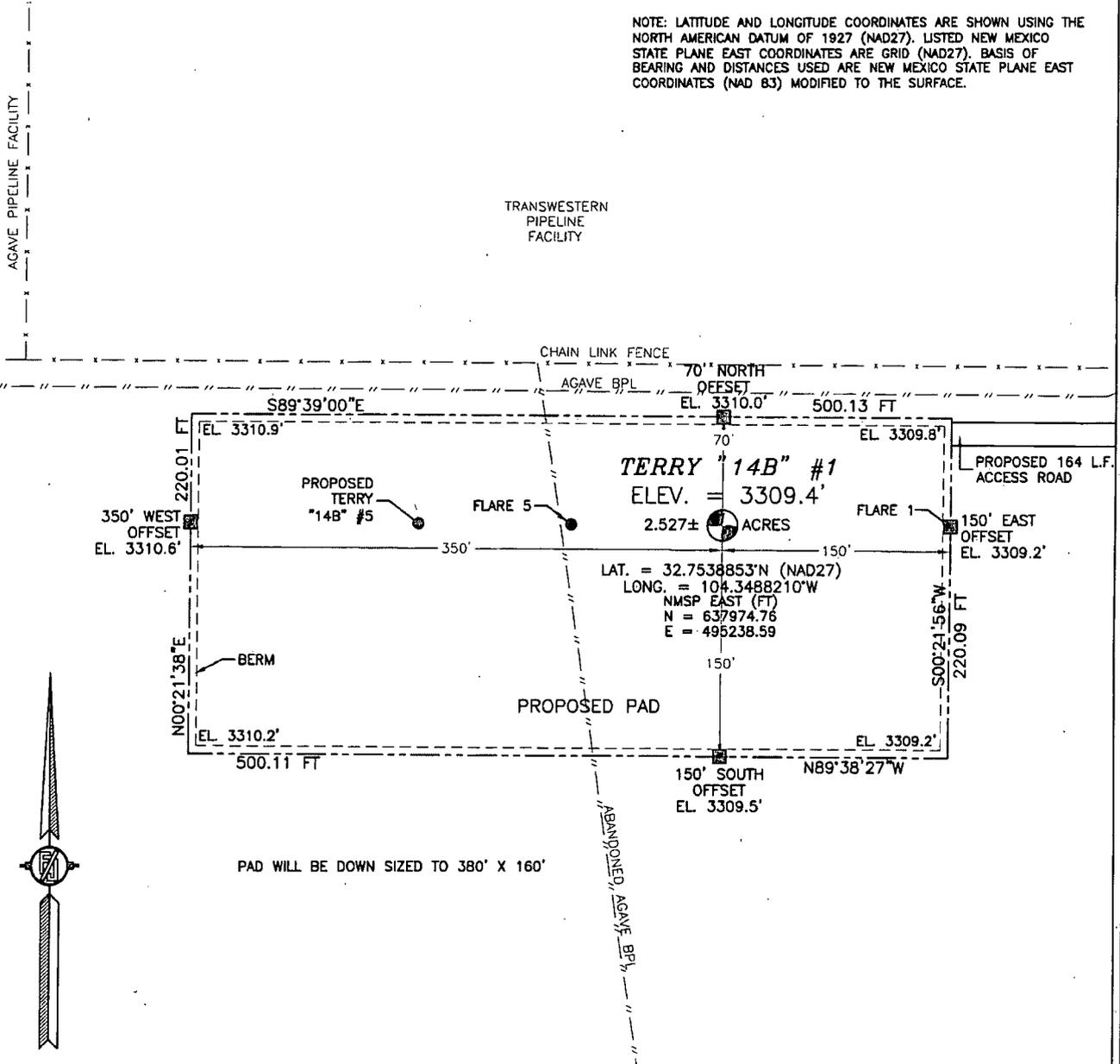
<sup>12</sup> Dedicated Acres <b>40</b>	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

<p>S89°39'50"E 2636.00 FT</p> <p>NW CORNER SEC. 14 LAT. = 32.7551234°N LONG. = 104.3606067°W NMSP EAST (FT) N = 638425.92 E = 491615.44</p> <p>N/4 CORNER SEC. 14 SCALED</p> <p>430'</p> <p>SURFACE LOCATION</p> <p>NE CORNER SEC. 14 LAT. = 32.7550409°N LONG. = 104.3434626°W NMSP EAST (FT) N = 638394.97 E = 496885.97</p> <p>1650'</p> <p>TERRY "14B" #1 ELEV. = 3309.4' LAT. = 32.7538853°N (NAD27) LONG. = 104.3488210°W NMSP EAST (FT) N = 637974.76 E = 495238.59</p> <p>W/4 CORNER SEC. 14 SCALED</p> <p>E/4 CORNER SEC. 14 SCALED</p> <p>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.</p> <p>SW CORNER SEC. 14 LAT. = 32.7405050°N LONG. = 104.3605383°W NMSP EAST (FT) N = 633107.74 E = 491635.08</p> <p>S/4 CORNER SEC. 14 LAT. = 32.7404702°N LONG. = 104.3433680°W NMSP EAST (FT) N = 633094.16 E = 496914.57</p> <p>SE CORNER SEC. 14 LAT. = 32.7551324°N LONG. = 104.3778141°W NMSP EAST (FT) N = 638430.97 E = 486325.39</p> <p>N89°39'07"W 2618.23 FT</p> <p>S89°56'57"W 2662.69 FT</p>	<p><sup>17</sup> OPERATOR CERTIFICATION</p> <p>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 unleased 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.</p> <p><i>Spencer Cox</i> 7-31-15 Signature Date</p> <p><i>Spencer Cox</i> Printed Name</p> <p><i>scor@limerockresources.com</i> E-mail Address</p>

**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.



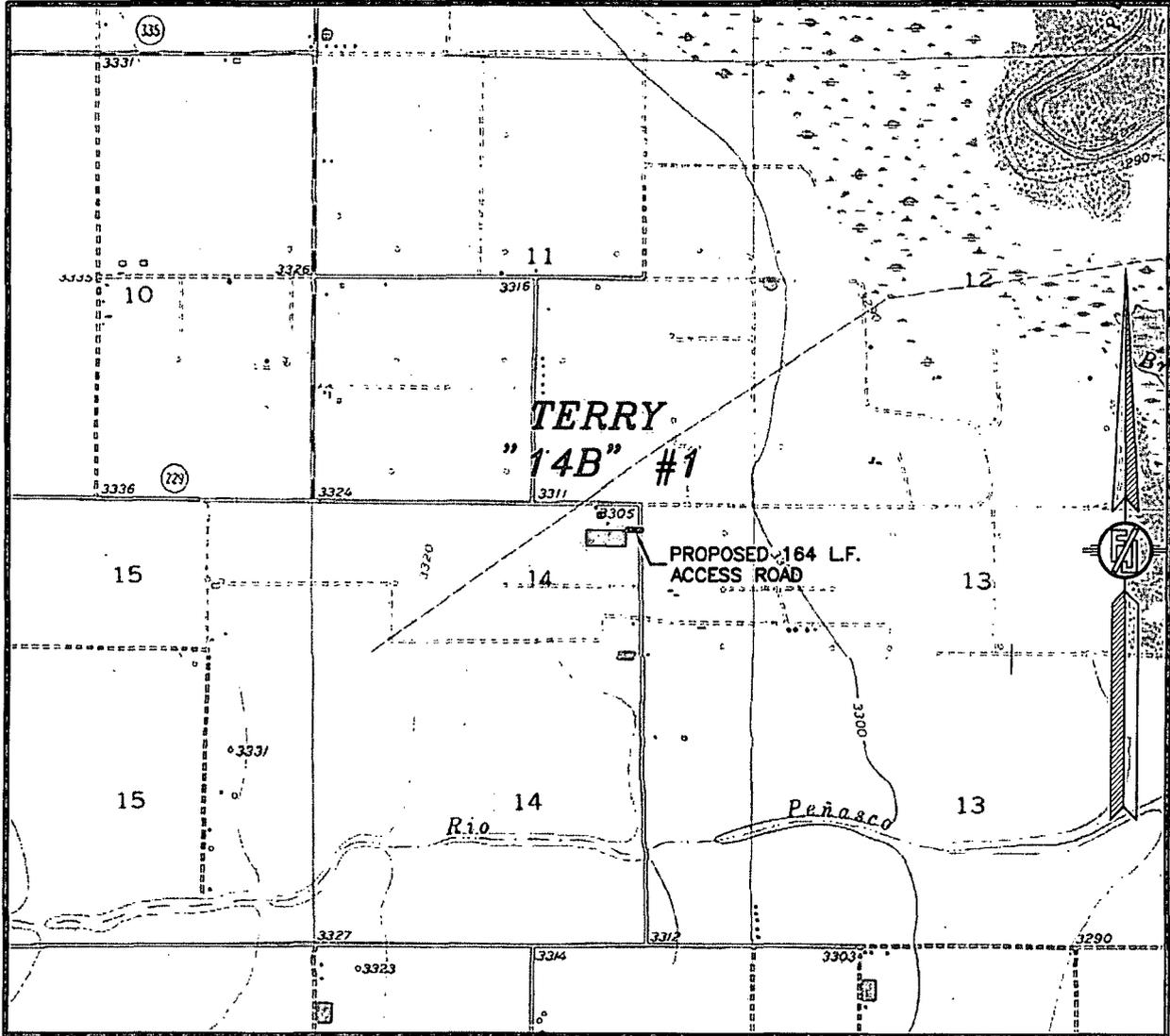
SCALE 1" = 100'  
DIRECTIONS TO LOCATION  
FROM CR. #39 (FOUR-DINKUS) AND CR. #44 (FANNING) GO SOUTH ON CR. #44 364' TO A PROPOSED ROAD SURVEY AND FOLLOW FLAGS WEST 164' TO THE PROPOSED NORTHEAST PAD CORNER FOR THIS LOCATION.

**LIME ROCK RESOURCES II-A, L.P.  
TERRY "14B" #1  
LOCATED 430 FT. FROM THE NORTH LINE  
AND 1650 FT. FROM THE EAST LINE OF  
SECTION 14, TOWNSHIP 18 SOUTH,  
RANGE 26 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO**

MAY 27, 2015

SURVEY NO. 1099B

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  
 LAKE McMILLAN NORTH

NOT TO SCALE

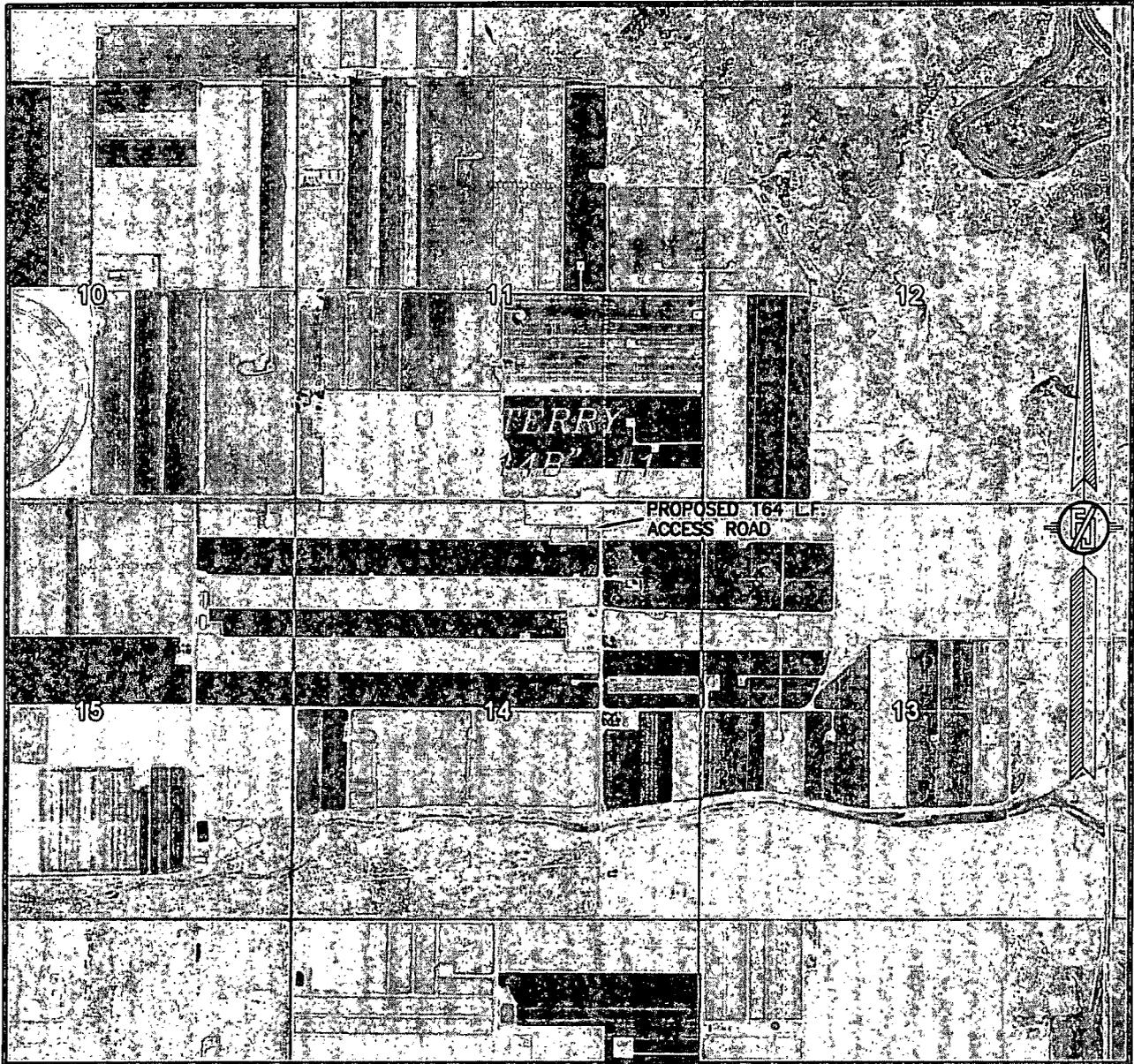
LIME ROCK RESOURCES II-A, L.P.  
 TERRY "14B" #1  
 LOCATED 430 FT. FROM THE NORTH LINE  
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 SECTION 14, TOWNSHIP 18 SOUTH,  
 RANGE 26 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO

MAY 27, 2015

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO SURVEY NO. 1099B



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 "14B" #1

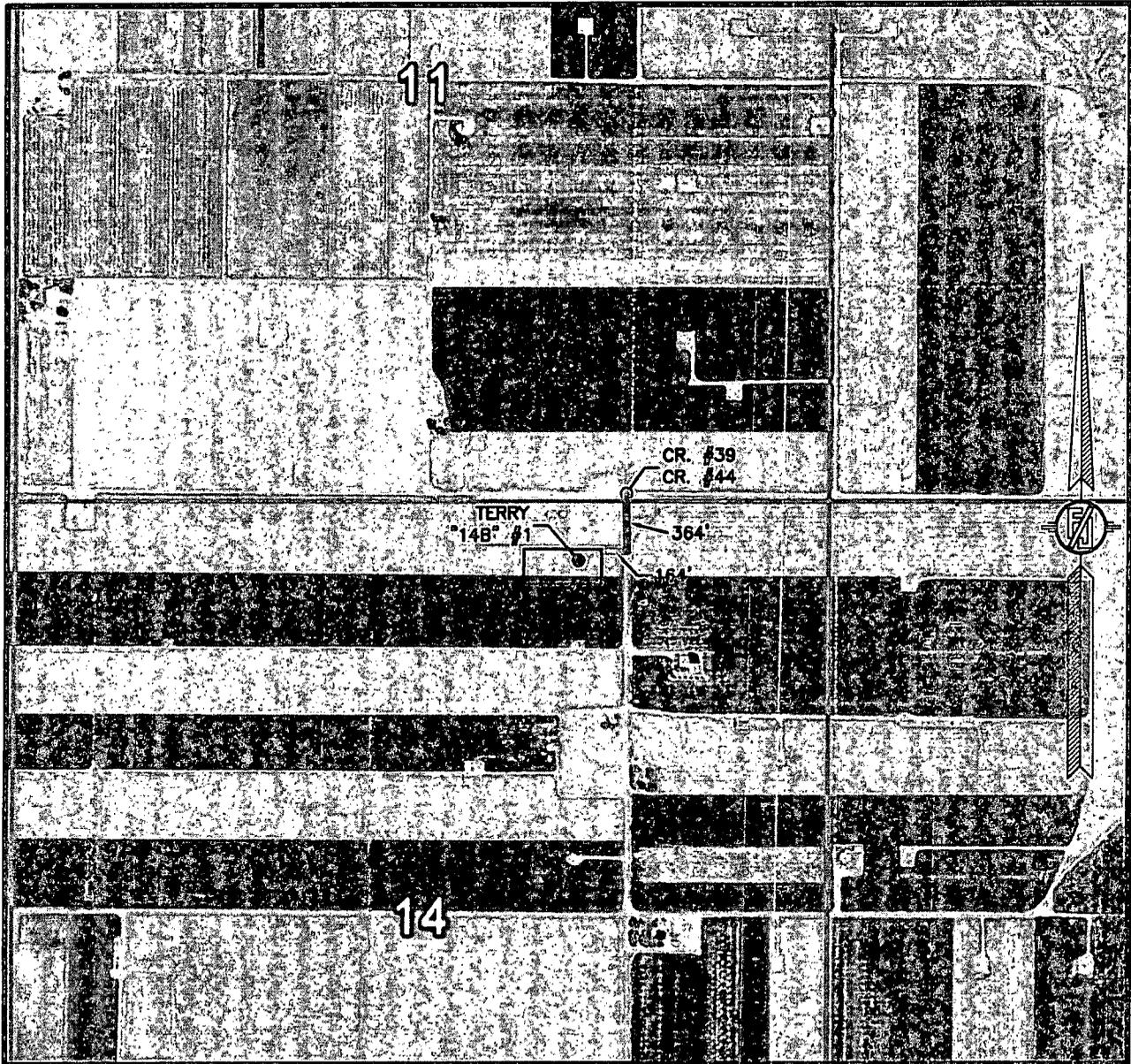
LOCATED 430 FT. FROM THE NORTH LINE  
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SECTION 14, TOWNSHIP 18 SOUTH,  
RANGE 26 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO

MAY 27, 2015

SURVEY NO. 1099B

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 "14B" #1

LOCATED 430 FT. FROM THE NORTH LINE  
AND 1650 FT. FROM THE EAST LINE OF  
SECTION 14, TOWNSHIP 18 SOUTH,  
RANGE 26 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO

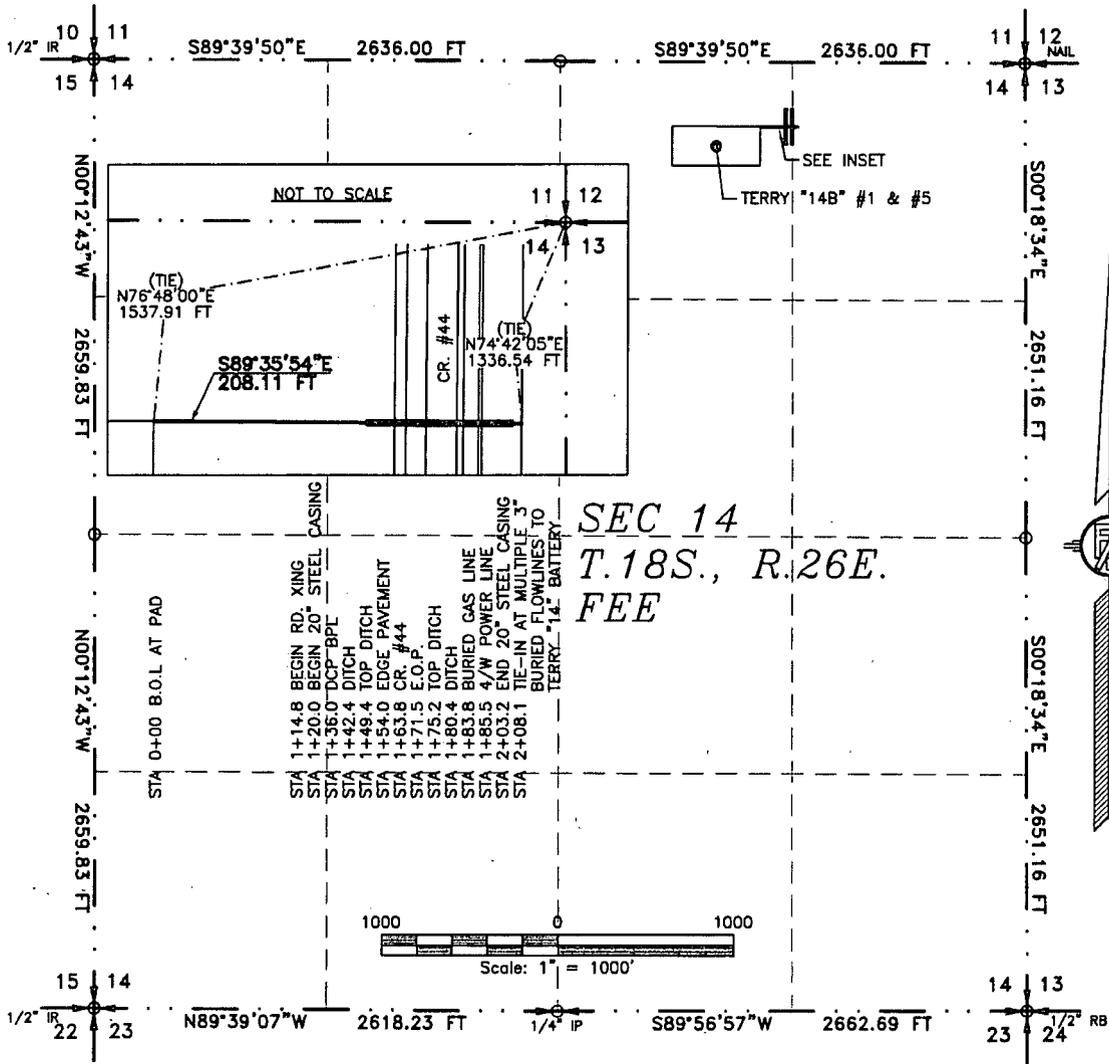
MAY 27, 2015

SURVEY NO. 1099B

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

**FLOWLINE PLAT**  
 R-0-W FOR FOUR-3" SDR 7 POLY BURIED FLOWLINES  
 FROM TERRY "14B" #1 & #5 TO MULTIPLE 3" SDR 7 POLY BURIED FLOWLINES TO TERRY "14" BATTERY

**LIME ROCK RESOURCES II-A, L.P.**  
**CENTERLINE SURVEY OF A PIPELINE CROSSING**  
 SECTION 14, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO  
 MAY 27, 2015



SEE NEXT SHEET (2-4) FOR DESCRIPTION

**SURVEY CERTIFICATE**

**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.

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 20<sup>th</sup> DAY OF JUNE 2015

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

FILMON F. JARAMILLO PLS 12797  
 SURVEY NO. 1099A  
 CARLSBAD, NEW MEXICO

SHEET: 1-4

MADRON SURVEYING, INC.

301 SOUTH CANAL  
(575) 234-3341

CARLSBAD, NEW MEXICO

**FLOWLINE PLAT**  
R-0-W FOR FOUR-3" SDR 7 POLY BURIED FLOWLINES  
FROM TERRY "14B" #1 & #5 TO MULTIPLE 3" SDR 7 POLY BURIED FLOWLINES TO TERRY "14" BATTERY

**LIME ROCK RESOURCES II-A, L.P.**  
**CENTERLINE SURVEY OF A PIPELINE CROSSING**  
**SECTION 14, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M.**  
**EDDY COUNTY, STATE OF NEW MEXICO**  
**MAY 27, 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:

BEGINNING AT A POINT WITHIN THE NW/4 NE/4 OF SAID SECTION 14, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M., WHENCE THE NORTHEAST CORNER OF SAID SECTION 14, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M. BEARS N76°48'00"E, A DISTANCE OF 1537.91 FEET;  
THENCE S89°35'54"E A DISTANCE OF 208.11 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE NORTHEAST CORNER OF SAID SECTION 14, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M. BEARS N74°42'05"E, A DISTANCE OF 1336.54 FEET;

SAID STRIP OF LAND BEING 208.11 FEET OR 12.61 RODS IN LENGTH, CONTAINING 0.143 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

NW/4 NE/4	180.34 L.F.	10.93 RODS	0.124 ACRES
NE/4 NE/4	27.77 L.F.	1.68 RODS	0.019 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 23 DAY OF JUNE 2015.

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: 2-4

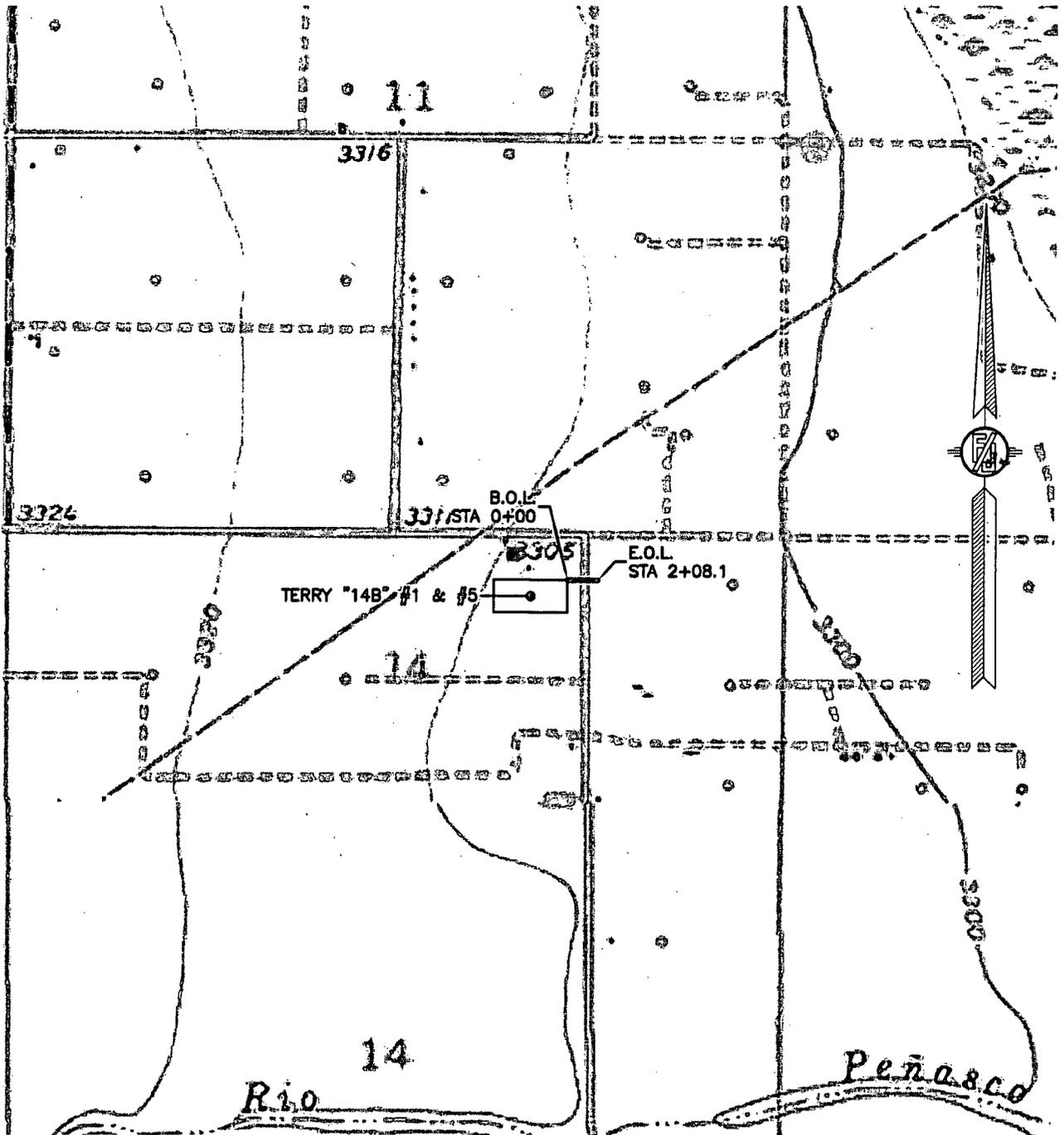
MADRON SURVEYING, INC.

301 SOUTH CANAL  
(575) 234-3341

SURVEY NO. 1099A  
CARLSBAD, NEW MEXICO

**FLOWLINE PLAT**  
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FROM TERRY "14B" #1 & #5 TO MULTIPLE 3" SDR 7 POLY BURIED FLOWLINES TO TERRY "14" BATTERY

LIME ROCK RESOURCES II-A, L.P.  
CENTERLINE SURVEY OF A PIPELINE CROSSING  
SECTION 14, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO  
MAY 27, 2015



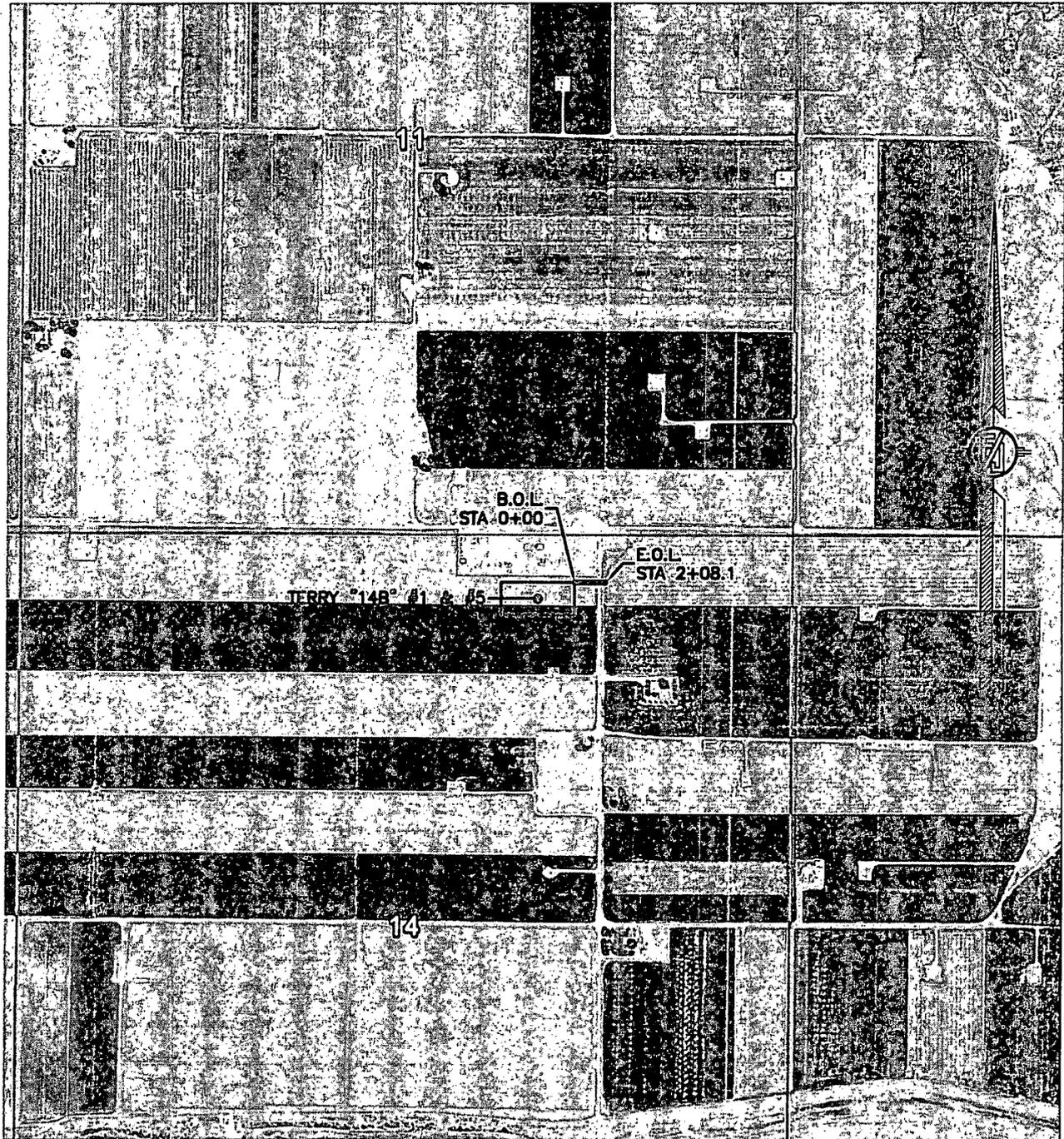
SHEET: 3-4

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

SURVEY NO. 1099A  
CARLSBAD, NEW MEXICO

**FLOWLINE PLAT**  
R-O-W FOR FOUR-3" SDR 7 POLY BURIED FLOWLINES  
FROM TERRY "14B" #1 & #5 TO MULTIPLE 3" SDR 7 POLY BURIED FLOWLINES TO TERRY "14" BATTERY

LIME ROCK RESOURCES II-A, L.P.  
CENTERLINE SURVEY OF A PIPELINE CROSSING  
SECTION 14, TOWNSHIP 18 SOUTH, RANGE 26 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO  
MAY 27, 2015



SHEET: 4-4

MADRON SURVEYING, INC. 361 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SURVEY NO. 1099A

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

**Terry 14 B #1  
430' FNL 1650' FEL  
(B) 14-18S-26E  
Eddy County, NM**

1. The elevation of the unprepared ground is 3309.3 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 4200' 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 4200' MD.

5. Estimated tops of geologic markers:

	MD	TVD
Quaternary – Alluvium	Surface	Surface
Yates	NA	NA
7 Rivers	NA	NA
Queen	287	287
Grayburg	708	708
Premier	NA	NA
San Andres	953	953
Glorieta	2319	2319
Yeso	2454	2454
Tubb	3900	3900
TD	4200	4200

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	287	287
Grayburg	708	708
Premier	NA	NA
San Andres	953	953
Glorieta	2319	2319
Yeso	2454	2454
Tubb	3900	3900
TD	4200	4200

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	12-1/4"	8-5/8"	24	J-55	ST&C	425	350	14.8	1.35	Cl C Cmt + 0.25 lbs/sk Cello Flake + 2% CaCl2
Intermediate										
Production	7-7/8"	5-1/2"	17	J-55	LT&C	4200	200	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
							340	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	0-425	425-4050	4050-4200
Mud Type	Fresh Water Mud	Brine	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 4200 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 H<sub>2</sub>S in this area. If H<sub>2</sub>S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 1848 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 complete the well and to construct surface facilities.

# Hydrogen Sulfide Drilling Plan Summary

A. All personnel shall receive proper H<sub>2</sub>S 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

■ H<sub>2</sub>S 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 H<sub>2</sub>S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H<sub>2</sub>S 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 H<sub>2</sub>S service.
- b. All elastomers used for packing and seals shall be H<sub>2</sub>S 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  
 Answering Service (After Hours)  
 Artesia, NM Office  
 Roswell, NM

713-292-9510  
 713-292-9555  
 575-748-9724  
 575-623-8424

### KEY PERSONNEL

Name	Title	Location	Office #	Cell #	Home #
Mike Loudermilk	Operations Manager	Houston	713-292-9526	832-331-7367	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	405-821-0534	832-491-3079
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 Commission ("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

## **Pressure Control Equipment**

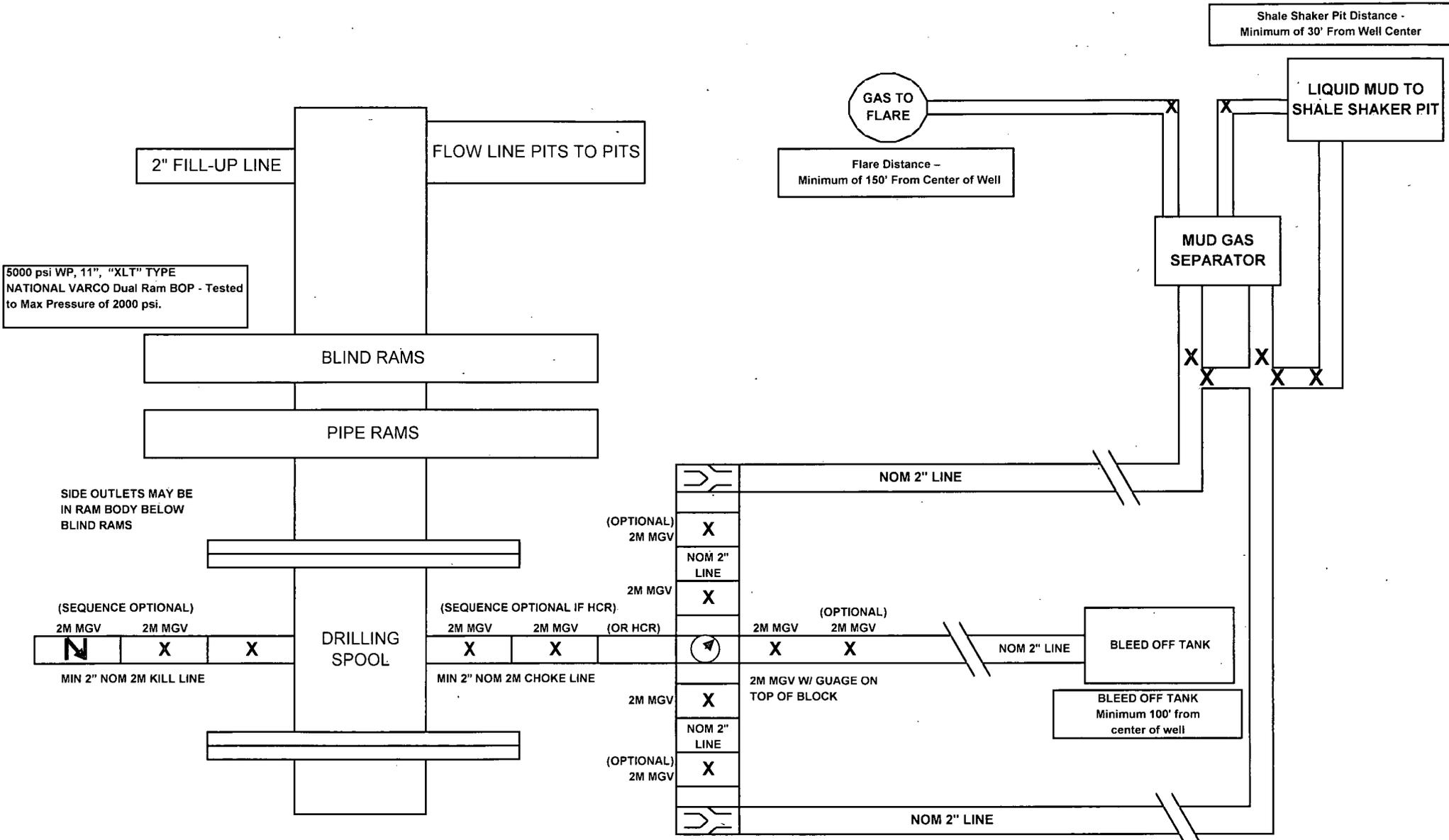
The blowout preventer equipment (BOP) will consist of a 5000 psi rated, "XLT" type, National VARCO double ram preventer that will be tested to a maximum pressure of 2000 psi. The unit will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and drill pipe rams 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 drilling logs.

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



MGV = Manual Gate Valve  
 CKV = Check Valve  
 HCR = Hydraulically Controlled Remote Valve

NOTE: All lines, valves and chokes are shown at the minimum size allowed, but may be larger

# Lime Rock Resources II-A, L.P.

## Terry 14 B #1

### Unit B, S14-T18S-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 attached.

Cuttings and associated liquids will be hauled to a State regulated third party disposal site (CRI or Controlled Recovery, Inc.). The disposal site permit is DFP = #R9166.

2- (250 bbl) tanks to hold fluid

2-CRI bins with track system

2-500 bbl frac tanks with fresh water

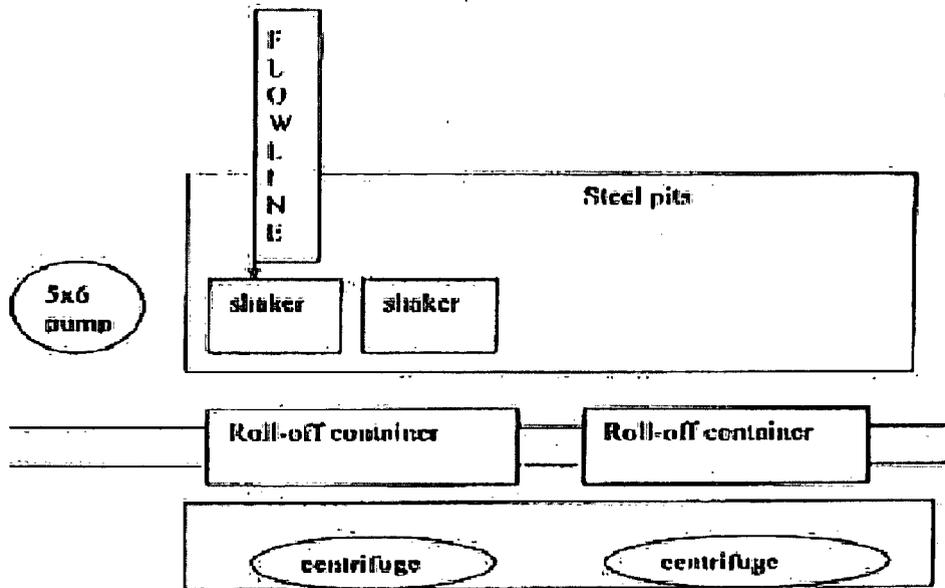
2-500 bbl frac tanks for brine water

#### **Operations:**

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

#### **Closure:**

During drilling operations all liquids, drilling fluids and cuttings will be hauled off via CRI equipment to DFP #R9166.



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

*TOMMY WILSON*



**CLOSED LOOP  
SPECIALTY**

Office: 919.746.1689

Cell: 919.748.6367

### Permit Conditions of Approval

API: 30-015-43307

*Gerry 14 B #1*

OCD Reviewer	Condition
<i>RD</i>	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