

Carlsbad Field Office
OCD Artesia

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014


APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMLC-067981B
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator LIME ROCK RESOURCES II-A, L. P.		7. If Unit or CA Agreement, Name and No. N/A
3a. Address 1111 BAGBY ST., SUITE 4600 HOUSTON, TX 77002		8. Lease Name and Well No. KAISER 7 P FEDERAL 10 321299
3b. Phone No. (include area code) 713 292-9528		9. API Well No. 30-015- 44929
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 475' FSL & 540' FEL At proposed prod. zone 990' FSL & 990' FEL		10. Field and Pool, or Exploratory RED LAKE; GLORIETA-YESO
14. Distance in miles and direction from nearest town or post office* 7 AIR MILES SE OF ARTESIA, NM		11. Sec., T. R. M. or Blk. and Survey or Area SESE 7-18S-27E
15. Distance from proposed* location to nearest SHL: 475' property or lease line, ft. BHL: 330' (Also to nearest drig. unit line, if any)	16. No. of acres in lease 40	17. Spacing Unit dedicated to this well SESE
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. N/A	19. Proposed Depth TVD: 4900' & MD: 5006'	20. BLM/BIA Bond No. on file NMB-000797 & NMB-000817
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3,365.6' UNGRADED	22. Approximate date work will start* 09/01/2016	23. Estimated duration 1 MONTH

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

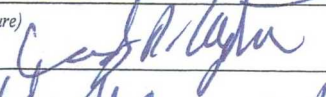
1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature 	Name (Printed/Typed) BRIAN WOOD (PHONE: 505 466-8120)	Date 06/20/2016
---	--	--------------------

Title

CONSULTANT

(FAX: 505 466-9682)

Approved by (Signature) 	Name (Printed/Typed) Cody A. Layton	Date 08/18/2018
Title for Field Manager	Office CFO	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

*(Instructions on page 2)

NM OIL CONSERVATION
ARTESIA DISTRICT

APR 26 2018

RECEIVED

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

RWP 5-1-18

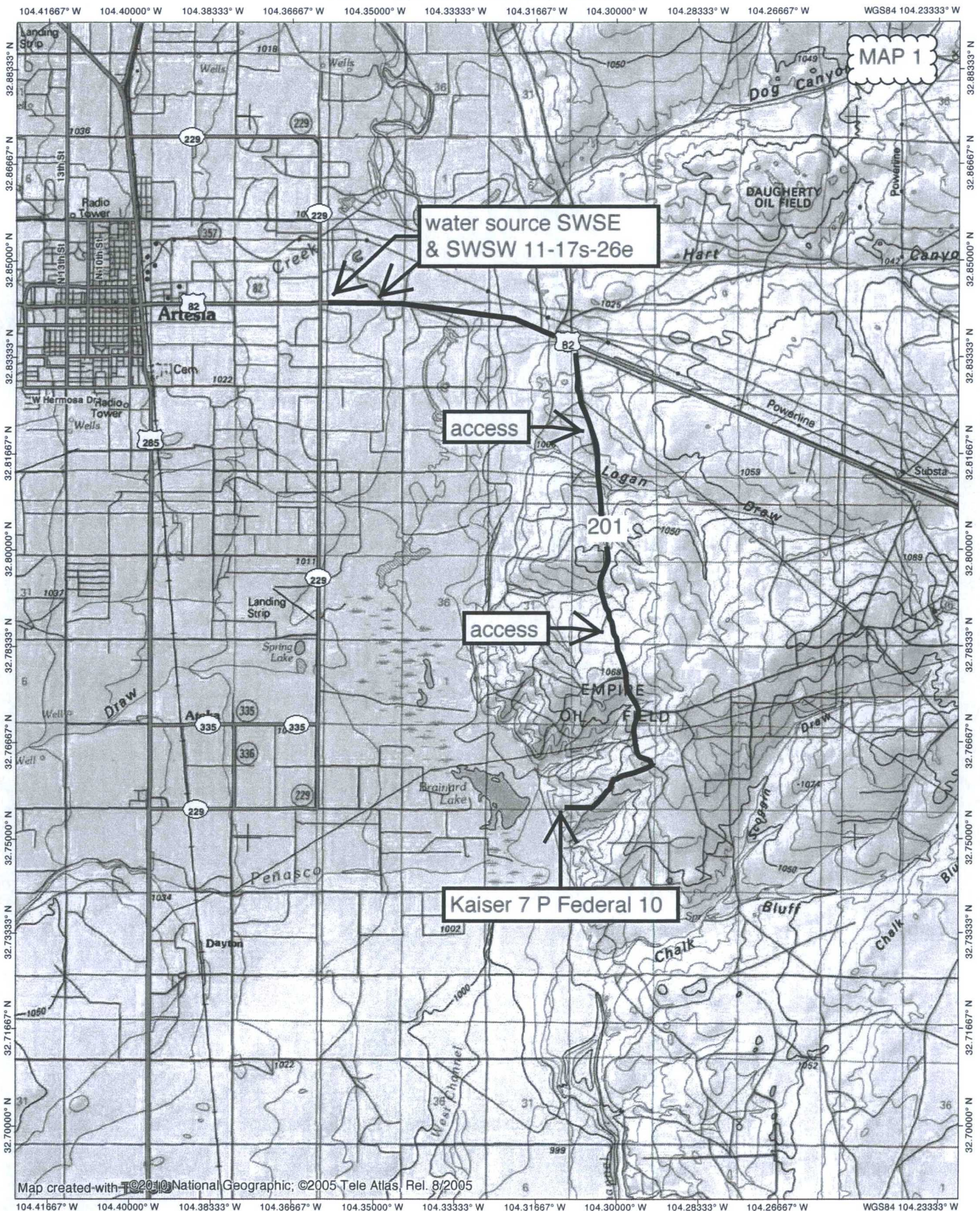
June 20, 2016

To Who it May Concern:

Lime Rock Resources II-A, L. P. has a surface use agreement with the J. W. Gissler Estate (P. O. Box 967, Artesia NM 88211) for the Kaiser 7 P Federal 10 pipelines in NENE Section 18, T. 18 S., R. 27 E., Eddy County, NM.

A handwritten signature in black ink, appearing to read "B. Wood". The signature is stylized with a large, looping "B" and a cursive "Wood".

Brian Wood



MAP 2

1 mile radius

Kaiser 7 P Federal 10

access

BLM O&G lease
NMLC-067981B

LEGEND

- New
- ◆ Active
- ⊕ P&A
- ⊙ INJ
- ⊙ SWD
- ⊙ Water

Quad: SPRING LAKE
Scale: 1 inch = 2,000 ft.



Kaiser 7 P Federal 10

Lime Rock road
R/W NM-133721

592.98' proposed
power line

road right-of-way application

Hawk 8 N
Fed'l. 50

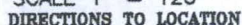
1978.89' proposed
road work

1600.58' proposed
pipelines

Kaiser 18
battery

SITE MAP

MAP 4



LIME ROCK RESOURCES II-A, L.P.
KAISER "7P" FEDERAL 10
LOCATED 475 FT. FROM THE SOUTH LINE
AND 540 FT. FROM THE EAST LINE OF
SECTION 7, TOWNSHIP 18 SOUTH,
RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

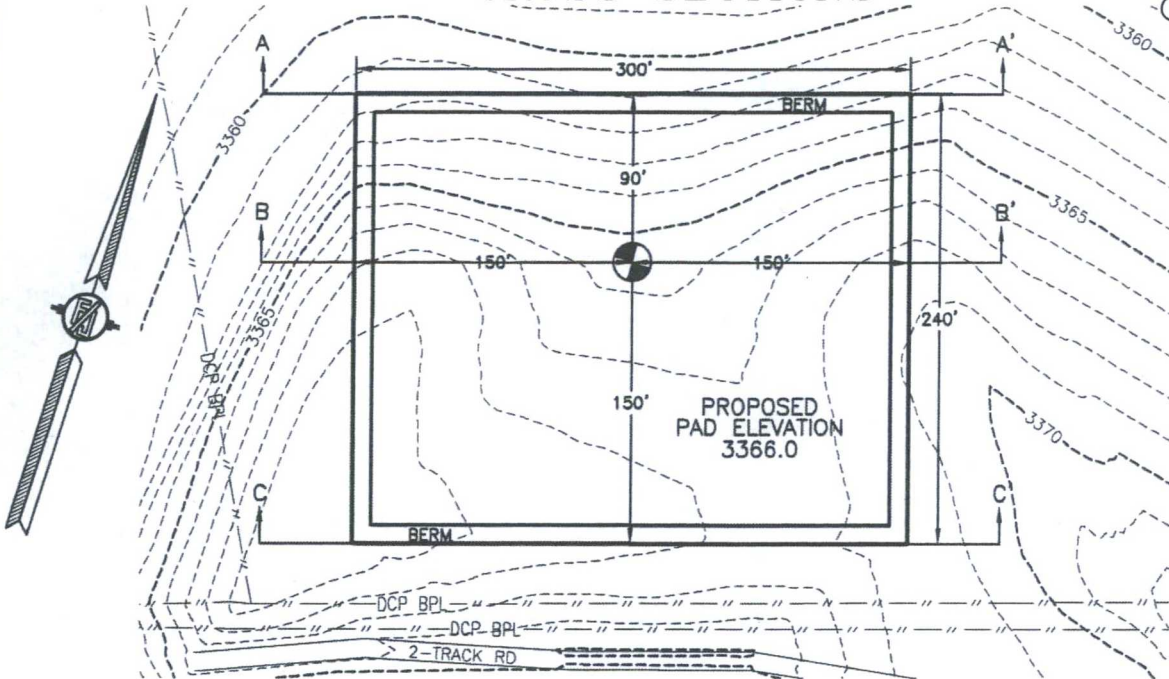
SURVEY NO. 3165

301 SOUTH CANAL
(575) 234-3341

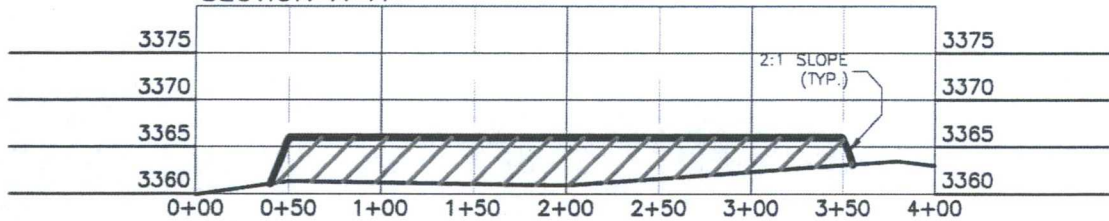
CARLSBAD, NEW MEXICO

KAISER "7P" FEDERAL 10 CROSS SECTIONS

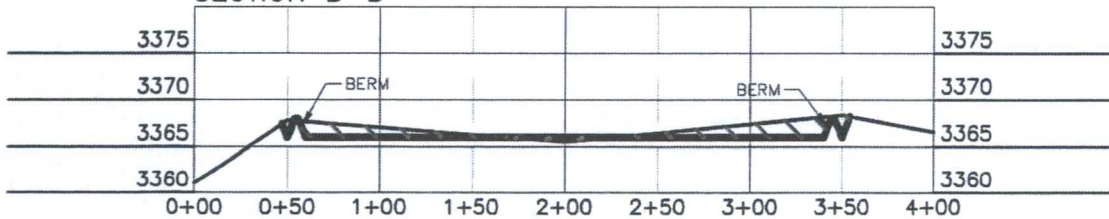
MAP 5



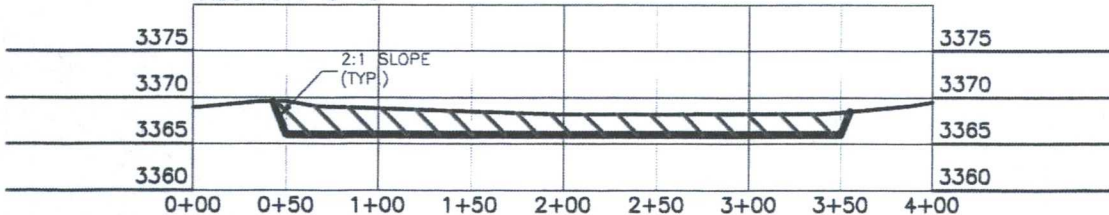
SECTION A-A'



SECTION B-B'



SECTION C-C'



LIME ROCK RESOURCES II-A, L.P.
KAISER "7P" FEDERAL 10
LOCATED 475 FT. FROM THE SOUTH LINE
AND 540 FT. FROM THE EAST LINE OF
SECTION 7, TOWNSHIP 18 SOUTH,
RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

0 10 50 100 200
SCALE 1" = 100' HORZ.
SCALE 1" = 20' VER.

CUT	FILL	NET
2670 CU. YD	2428 CU. YD	242 CU. YD (CUT)

EARTHWORK QUANTITIES ARE ESTIMATED

MARCH 28, 2016

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

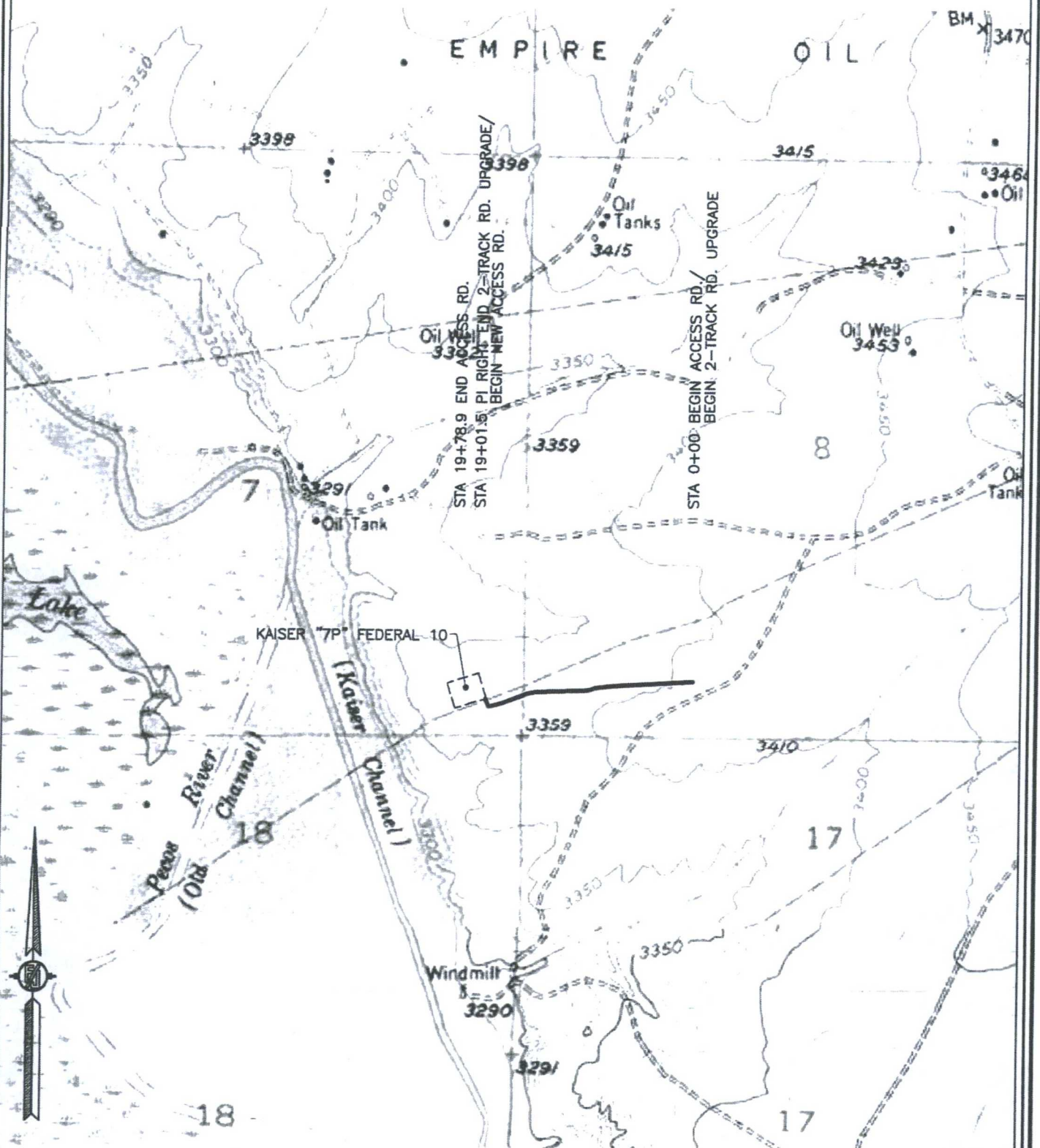
SURVEY NO. 3165
CARLSBAD, NEW MEXICO

ACCESS ROAD PLAT

ACCESS ROAD TO THE KAISER "7P" FEDERAL 10

MAP 6

LIME ROCK RESOURCES II-A, L.P.
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTIONS 8, 7, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
FEBRUARY 11, 2015

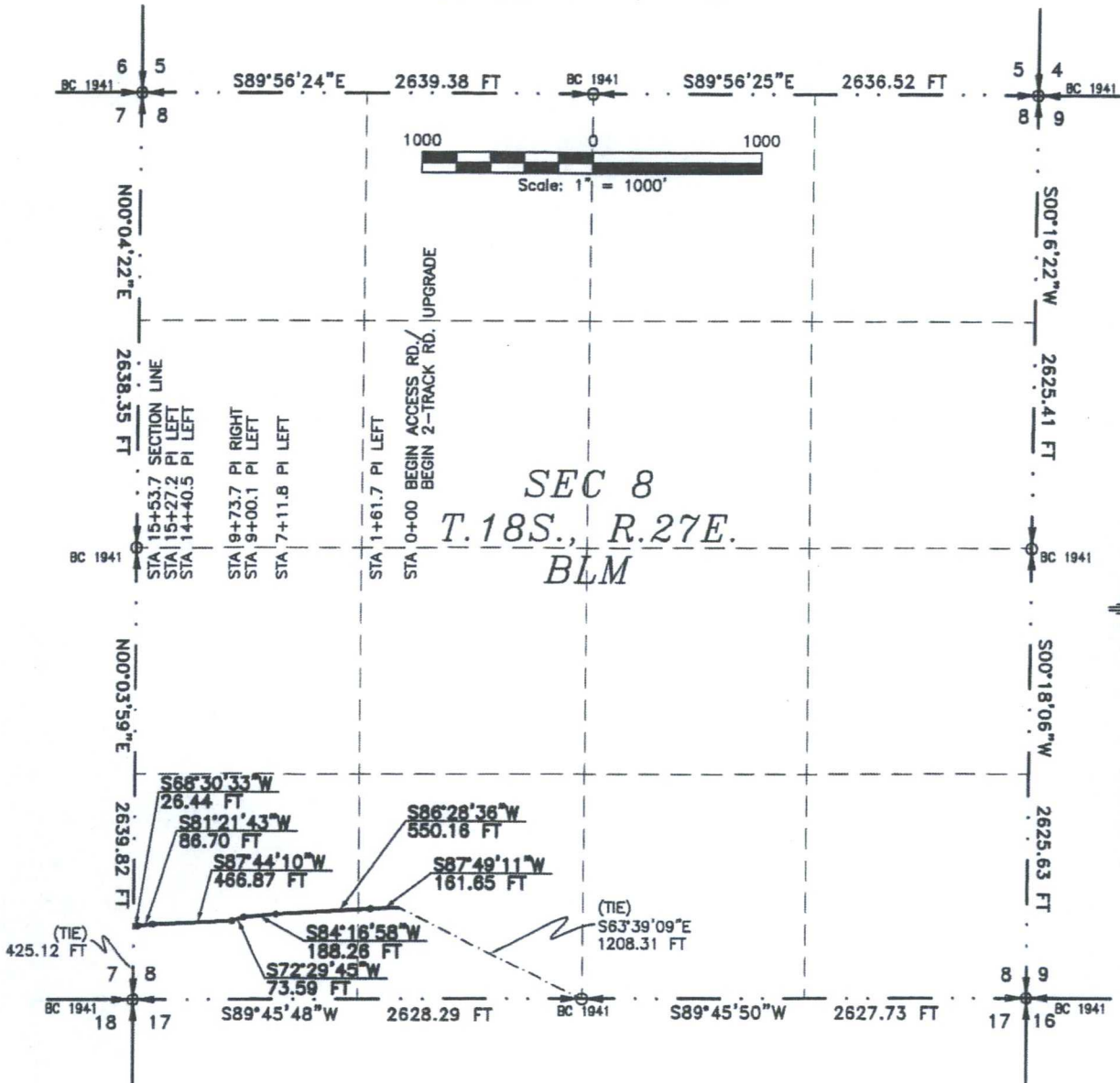


ACCESS ROAD PLAT

ACCESS ROAD TO THE KAISER "7P" FEDERAL 10

MAP 7

LIME ROCK RESOURCES II-A, L.P.
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 8, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
FEBRUARY 11, 2015



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 16 DAY OF FEBRUARY 2015

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

SURVEY NO. 3685

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

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.

ACCESS ROAD PLAT
ACCESS ROAD TO THE KAISER "7P" FEDERAL 10

MAP 8

LIME ROCK RESOURCES II-A, L.P.
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 8, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
FEBRUARY 11, 2015

DESCRIPTION

A STRIP OF LAND 20 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 8, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M., EDDY COUNTY, STATE OF NEW MEXICO AND BEING 10 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE SE/4 SW/4 OF SAID SECTION 8, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M., WHENCE THE SOUTH QUARTER CORNER OF SAID SECTION 8, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M. BEARS S63°39'09"E, A DISTANCE OF 1208.31 FEET;
THENCE S87°49'11"W A DISTANCE OF 161.65 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S86°28'36"W A DISTANCE OF 550.16 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S84°16'58"W A DISTANCE OF 188.26 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S72°29'45"W A DISTANCE OF 73.59 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S87°44'10"W A DISTANCE OF 466.87 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S81°21'43"W A DISTANCE OF 86.70 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S68°30'33"W A DISTANCE OF 26.44 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHWEST CORNER OF SAID SECTION 8, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M. BEARS S00°03'59"W, A DISTANCE OF 425.12 FEET;

SAID STRIP OF LAND BEING 1553.67 FEET OR 94.16 RODS IN LENGTH, CONTAINING 0.714 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SE/4 SW/4	230.40 L.F.	13.96 RODS	0.106 ACRES
SW/4 SW/4	1323.27 L.F.	80.20 RODS	0.608 ACRES

SURVEYOR CERTIFICATE

I, FILIMON 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 16 DAY OF FEBRUARY 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.

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

SURVEY NO. 3685

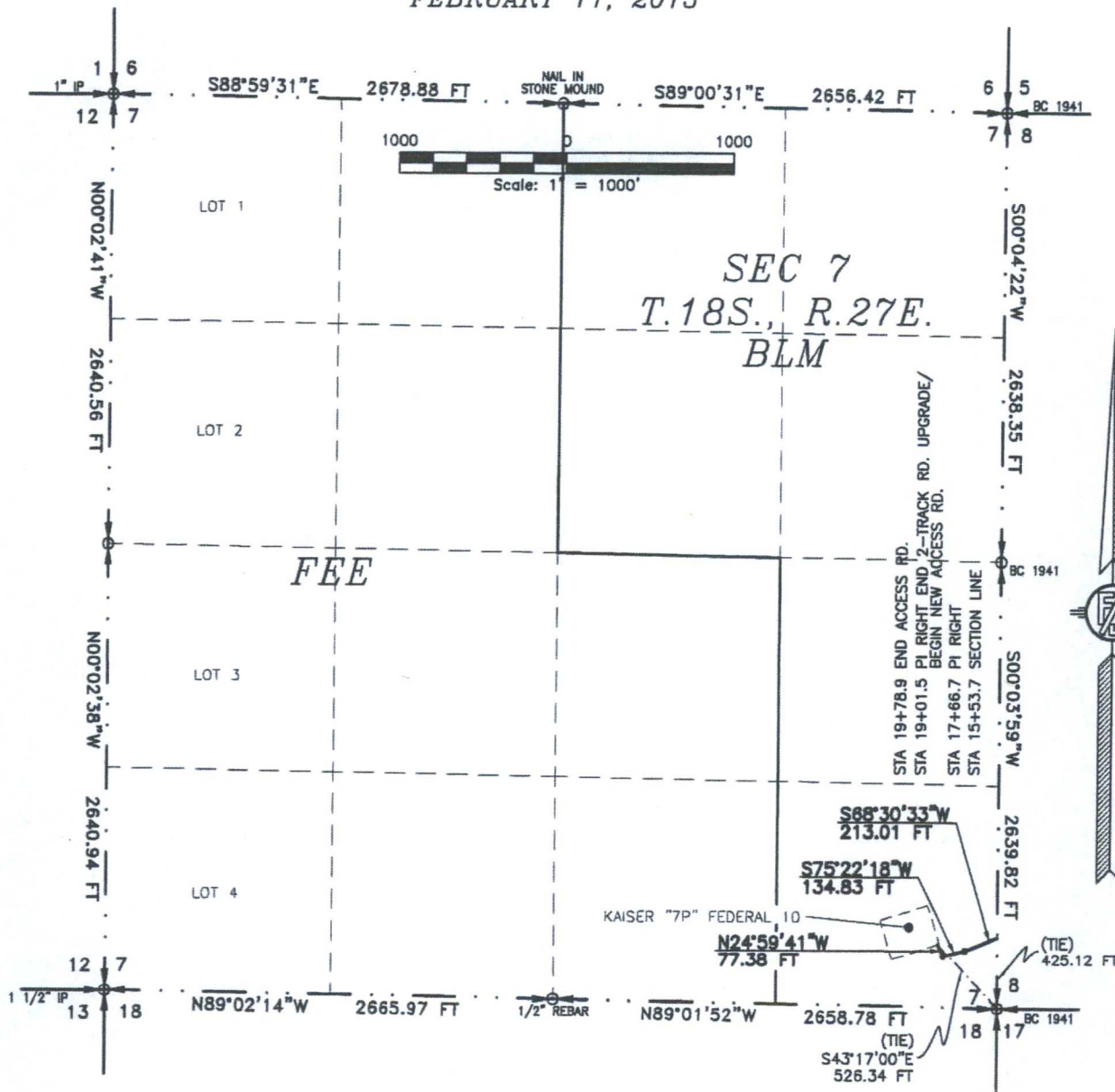
MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 **CARLSBAD, NEW MEXICO**

ACCESS ROAD PLAT

ACCESS ROAD TO THE KAISER "7P" FEDERAL 10

LIME ROCK RESOURCES II-A, L.P.
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 7, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
FEBRUARY 11, 2015

MAP 9



SURVEYOR CERTIFICATE

I, FILIMON 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.

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NEW MEXICO, THIS 16 DAY OF FEBRUARY 2015

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

GENERAL NOTES

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

SURVEY NO. 3685

ACCESS ROAD PLAT

ACCESS ROAD TO THE KAISER "7P" FEDERAL 10

MAP 10

LIME ROCK RESOURCES II-A, L.P.
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 7, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
FEBRUARY 11, 2015

DESCRIPTION

A STRIP OF LAND 20 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 7, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M., EDDY COUNTY, STATE OF NEW MEXICO AND BEING 10 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE SE/4 SE/4 OF SAID SECTION 7, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M., WHENCE THE SOUTHEAST CORNER OF SAID SECTION 7, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M. BEARS S00°03'59"W, A DISTANCE OF 425.12 FEET;

THENCE S68°30'33"W A DISTANCE OF 213.01 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;

THENCE S75°22'18"W A DISTANCE OF 134.83 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;

THENCE N24°59'41"W A DISTANCE OF 77.38 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHEAST CORNER OF SAID SECTION 7, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M. BEARS S43°17'00"E, A DISTANCE OF 526.34 FEET;

SAID STRIP OF LAND BEING 425.22 FEET OR 25.77 RODS IN LENGTH, CONTAINING 0.195 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SE/4 SE/4 425.22 L.F. 25.77 RODS 0.195 ACRES

SURVEYOR CERTIFICATE

I, FILIMON 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.

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NEW MEXICO, THIS 16 DAY OF FEBRUARY 2015

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

SURVEY NO. 3685

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

GENERAL NOTES

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

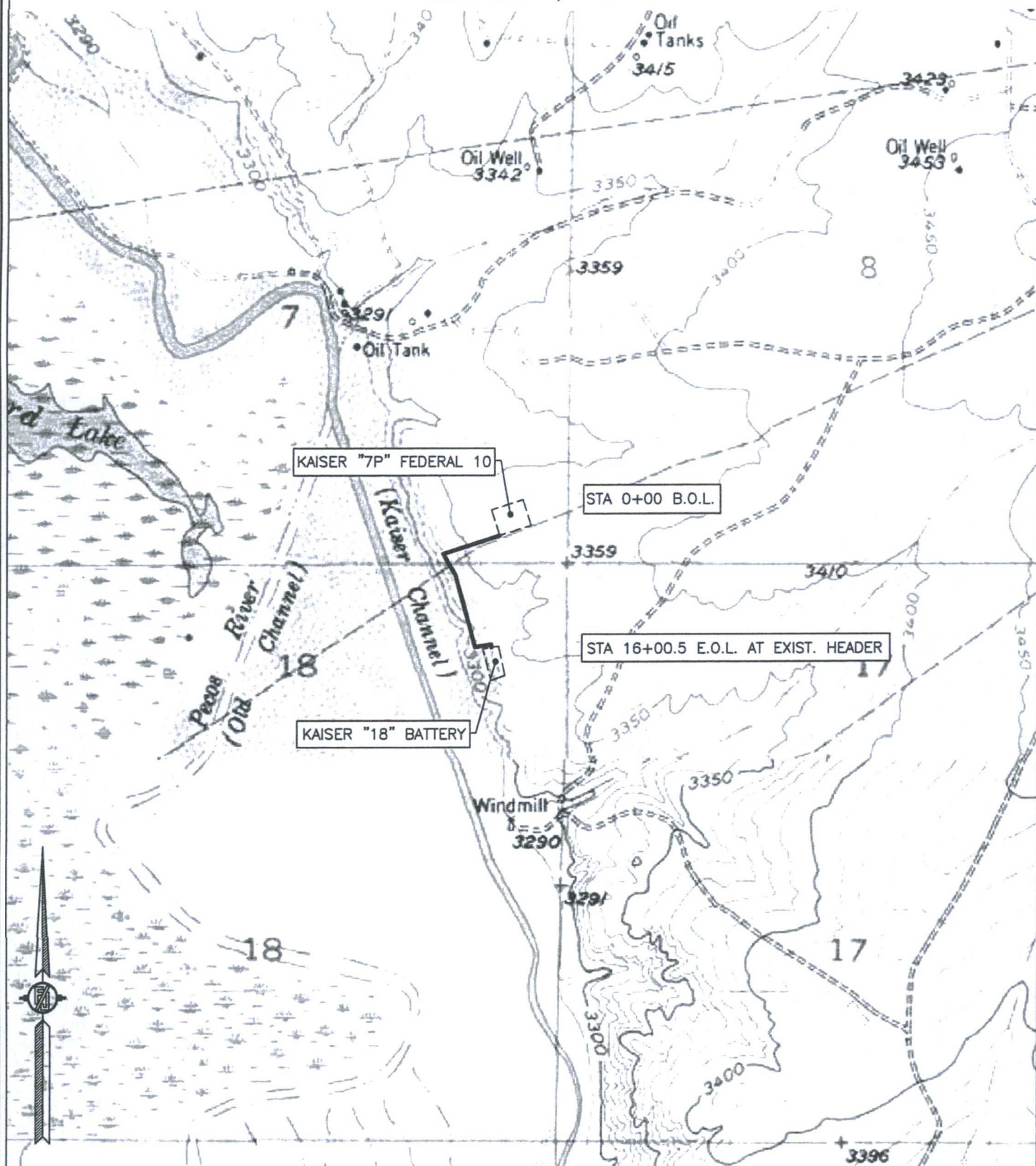
2.) BASIS OF BEARING IS NMSP EAST MODIFIED TO SURFACE COORDINATES.

FLOWLINE PLAT

TWO 3" SDR 7 SURFACE POLY LINES (1-GAS & 1-PRODUCTION) FROM THE
KAISER "7P" FEDERAL 10 TO THE KAISER "18" BATTERY

MAP 11

LIME ROCK RESOURCES II-A, L.P.
CENTERLINE SURVEY OF A PIPELINE CROSSING
SECTIONS 7, 18, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
FEBRUARY 1, 2016



MADRON SURVEYING, INC.

301 SOUTH CANAL
(575) 234-3341

CARLSBAD, NEW MEXICO

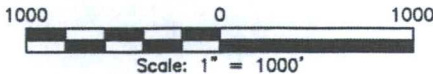
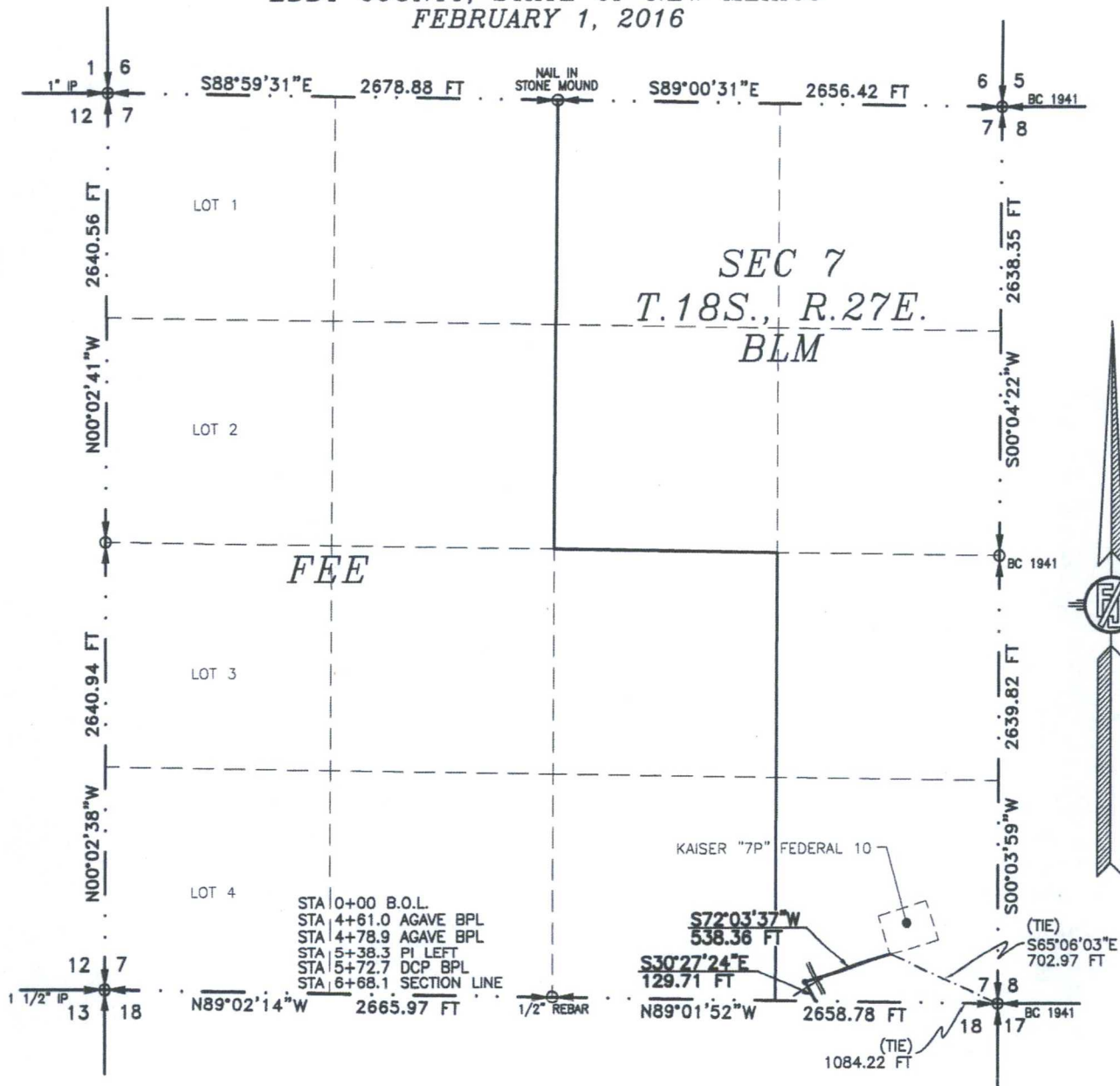
SURVEY NO. 3165A

FLOWLINE PLAT

TWO 3" SDR 7 SURFACE POLY LINES (1-GAS & 1-PRODUCTION) FROM THE KAISER "7P" FEDERAL 10 TO THE KAISER "18" BATTERY

MAP 12

LIME ROCK RESOURCES II-A, L.P.
CENTERLINE SURVEY OF A PIPELINE CROSSING
SECTION 7, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
FEBRUARY 1, 2016



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.

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 3 DAY OF FEBRUARY 2016

[Signature]
FILMON F. JARAMILLO P.E.S. 12797

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

SHEET: 1-6

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

SURVEY NO. 3165A

FLOWLINE PLAT

TWO 3" SDR 7 SURFACE POLY LINES (1-GAS & 1-PRODUCTION) FROM THE
KAISER "7P" FEDERAL 10 TO THE KAISER "18" BATTERY

MAP 13

LIME ROCK RESOURCES II-A, L.P.
CENTERLINE SURVEY OF A PIPELINE CROSSING
SECTION 7, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
FEBRUARY 1, 2016

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 7, TOWNSHIP 18 SOUTH, RANGE 27 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 SE/4 OF SAID SECTION 7, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M., WHENCE THE SOUTHEAST CORNER OF SAID SECTION 7, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M. BEARS S65°06'03"E, A DISTANCE OF 702.97 FEET;

THENCE S72°03'37"W A DISTANCE OF 538.36 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;

THENCE S30°27'24"E A DISTANCE OF 129.71 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHEAST CORNER OF SAID SECTION 7, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M. BEARS S89°01'52"E, A DISTANCE OF 1084.22 FEET;

SAID STRIP OF LAND BEING 668.07 FEET OR 40.49 RODS IN LENGTH, CONTAINING 0.460 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SE/4 SE/4 668.07 L.F. 40.49 RODS 0.460 ACRES

GENERAL NOTES

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

SURVEYOR CERTIFICATE

I, FILIMON 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 3 DAY OF FEBRUARY 2016

Filimon F. Jaramillo
FILIMON F. JARAMILLO, P.S. 12797

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

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

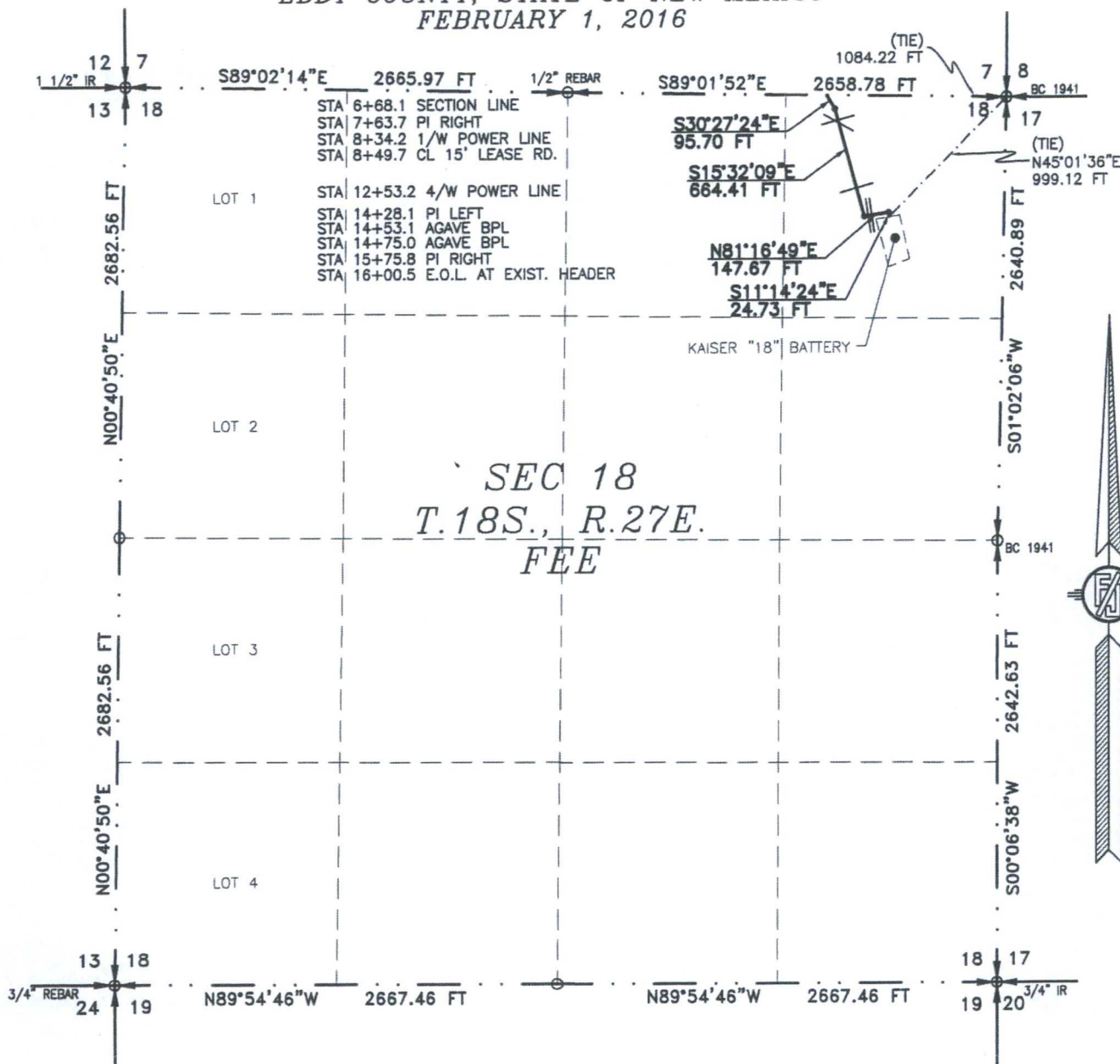
SURVEY NO. 3165A

FLOWLINE PLAT

TWO 3" SDR 7 SURFACE POLY LINES (1-GAS & 1-PRODUCTION) FROM THE KAISER "7P" FEDERAL 10 TO THE KAISER "18" BATTERY

MAP 14

LIME ROCK RESOURCES II-A, L.P.
CENTERLINE SURVEY OF A PIPELINE CROSSING
SECTION 18, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
FEBRUARY 1, 2016



SURVEYOR CERTIFICATE

I, FILIMON 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 3 DAY OF FEBRUARY 2016

FILIMON F. JARAMILLO PLS: 12797

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

SURVEY NO. 3165A

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO

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.

FLOWLINE PLAT

TWO 3" SDR 7 SURFACE POLY LINES (1-GAS & 1-PRODUCTION) FROM THE
KAISER "7P" FEDERAL 10 TO THE KAISER "18" BATTERY

MAP 15

LIME ROCK RESOURCES II-A, L.P.
CENTERLINE SURVEY OF A PIPELINE CROSSING
SECTION 18, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
FEBRUARY 1, 2016

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING FEE LAND IN SECTION 18, TOWNSHIP 18 SOUTH, RANGE 27 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 NE/4 NE/4 OF SAID SECTION 18, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M., WHENCE THE NORTHEAST CORNER OF SAID SECTION 18, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M. BEARS S89°01'52"E, A DISTANCE OF 1084.22 FEET;

THENCE S30°27'24"E A DISTANCE OF 95.70 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;

THENCE S15°32'09"E A DISTANCE OF 664.41 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;

THENCE N81°16'49"E A DISTANCE OF 147.67 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;

THENCE S11°14'24"E A DISTANCE OF 24.73 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE NORTHEAST CORNER OF SAID SECTION 18, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M. BEARS N45°01'36"E, A DISTANCE OF 999.12 FEET;

SAID STRIP OF LAND BEING 932.51 FEET OR 56.52 RODS IN LENGTH, CONTAINING 0.642 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

NE/4 NE/4 932.51 L.F. 56.52 RODS 0.642 ACRES

SURVEYOR CERTIFICATE

I, FILIMON 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 13 DAY OF FEBRUARY 2016

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.

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

SURVEY NO. 3165A

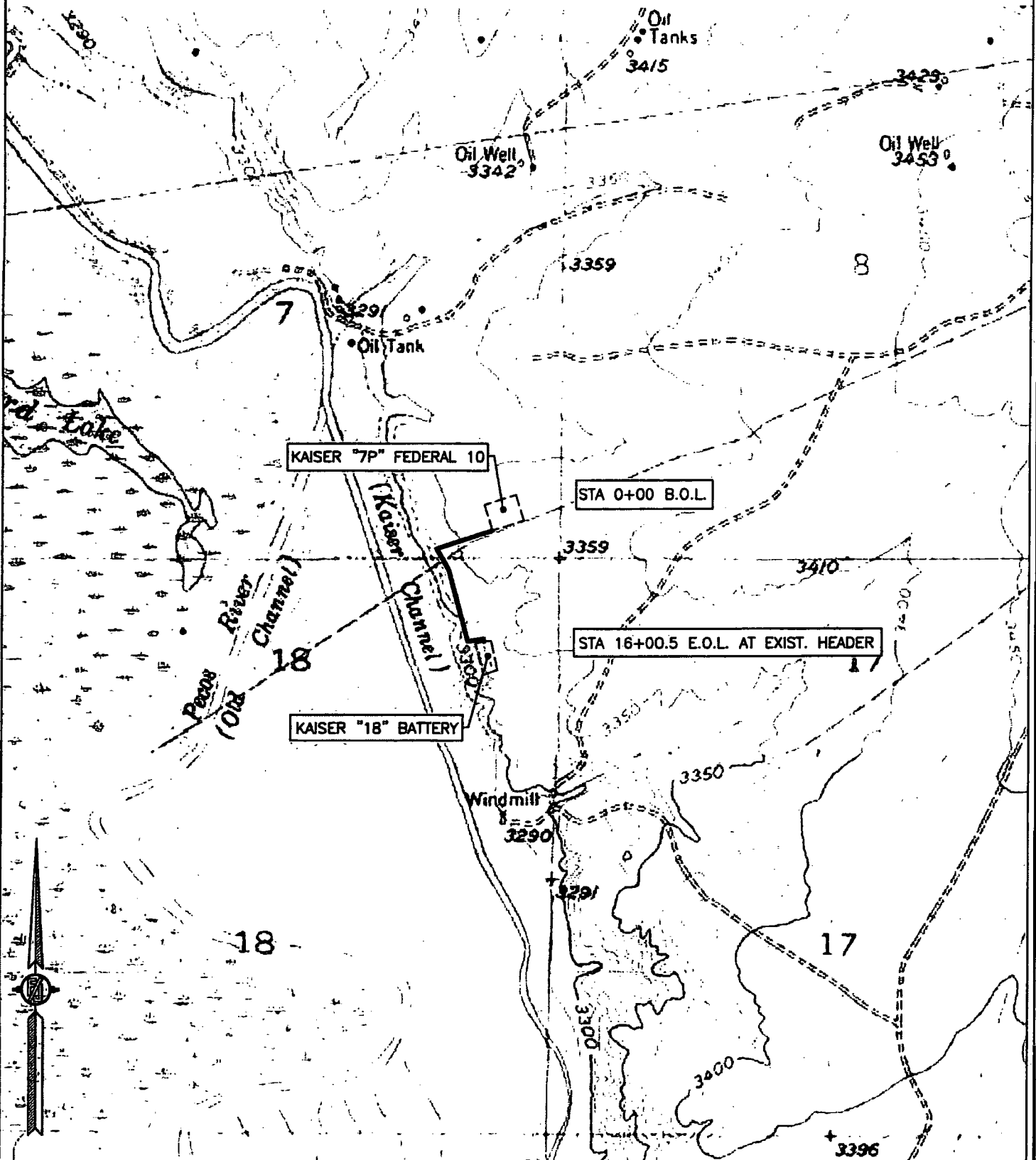
MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO
(575) 234-3341

FLOWLINE PLAT

TWO 3" SDR 7 SURFACE POLY LINES (1-GAS & 1-PRODUCTION) FROM THE
KAISER "7P" FEDERAL 10 TO THE KAISER "18" BATTERY

MAP 16

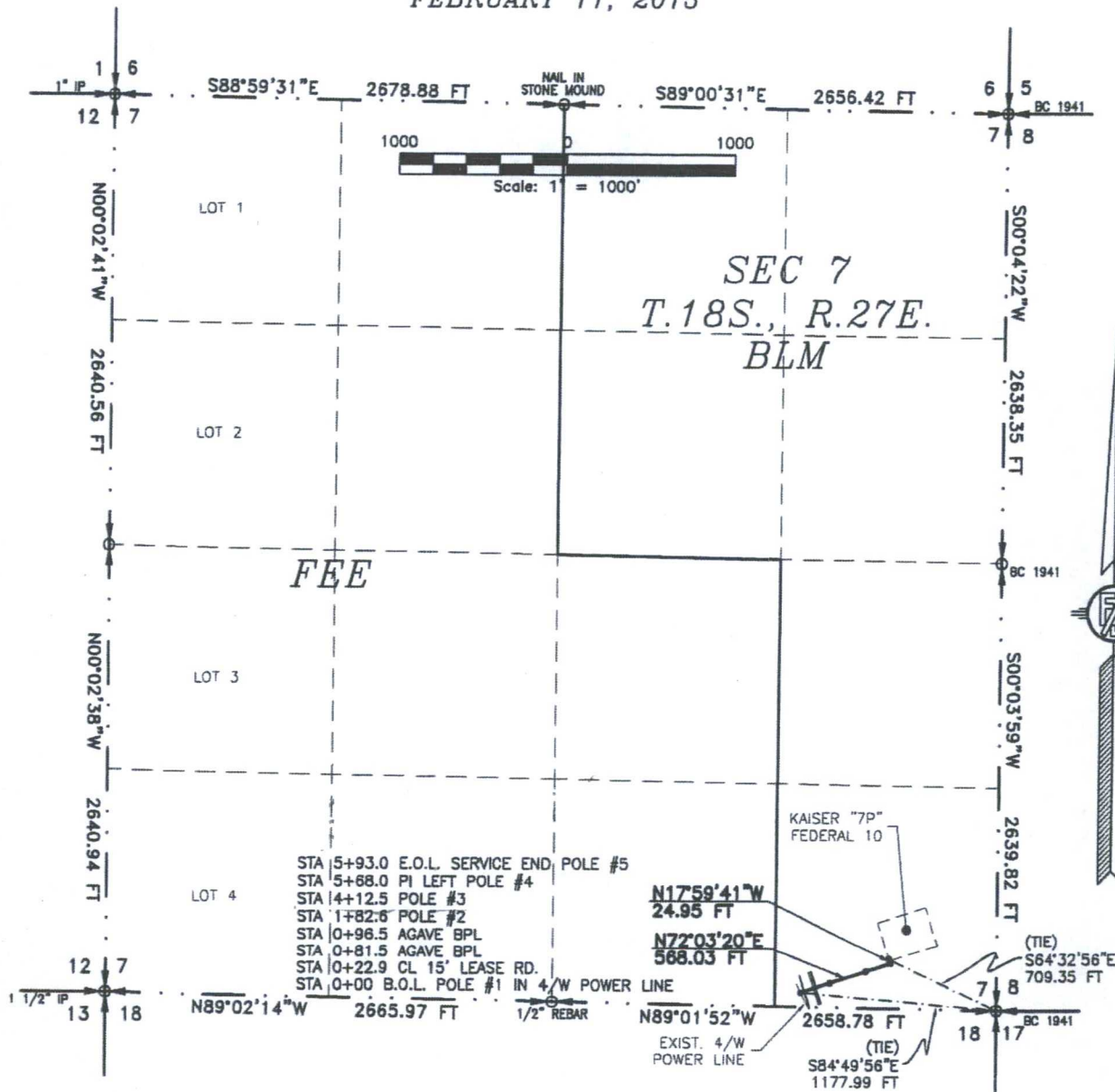
LIME ROCK RESOURCES II-A, L.P.
CENTERLINE SURVEY OF A PIPELINE CROSSING
SECTIONS 7, 18, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
FEBRUARY 1, 2016



ELECTRIC LINE PLAT
ELECTRIC LINE TO CONNECT THE KAISER "7P" FEDERAL 10

MAP 17

LIME ROCK RESOURCES II-A, L.P.
CENTERLINE SURVEY OF AN ELECTRIC LINE CROSSING
SECTION 7, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
FEBRUARY 11, 2015



SURVEYOR CERTIFICATE

I, FILIMON 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 18 DAY OF FEBRUARY 2015

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

SURVEY NO. 3684

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO
(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.

ELECTRIC LINE PLAT
ELECTRIC LINE TO CONNECT THE KAISER "7P" FEDERAL 10

MAP 18

LIME ROCK RESOURCES II-A, L.P.
CENTERLINE SURVEY OF AN ELECTRIC LINE CROSSING
SECTION 7, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
FEBRUARY 11, 2015

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 7, TOWNSHIP 18 SOUTH, RANGE 27 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 SE/4 OF SAID SECTION 7, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M., WHENCE THE SOUTHEAST CORNER OF SAID SECTION 7, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M. BEARS S84°49'56"E, A DISTANCE OF 1177.99 FEET;
THENCE N72°03'20"E A DISTANCE OF 568.03 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N17°59'41"W A DISTANCE OF 24.95 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHEAST CORNER OF SAID SECTION 7, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M. BEARS S64°32'56"E, A DISTANCE OF 709.35 FEET;

SAID STRIP OF LAND BEING 592.98 FEET OR 35.94 RODS IN LENGTH, CONTAINING 0.408 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SE/4 SE/4 592.98 L.F. 35.94 RODS 0.408 ACRES

SURVEYOR CERTIFICATE

I, FILIMON 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 13 DAY OF FEBRUARY 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.

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

SURVEY NO. 3684
MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO
(575) 234-3341

Lime Rock Resources II-A, L.P.
Kaiser 7 P Federal 10
SHL: 475' FSL & 540' FEL
BHL: 990' FSL & 990' FEL
Sec. 7, T. 18 S., R. 27 E., Eddy County, NM

DRILL PLAN PAGE 1

Drilling Program

1. ESTIMATED TOPS

<u>Name</u>	<u>TVD</u>	<u>MD</u>	<u>Content</u>
Seven Rivers*	0'	0'	oil, gas, saltwater
Queen	475'	475'	oil, gas, saltwater
Grayburg	852'	869'	oil, gas, saltwater
San Andres	1098'	1121'	oil, gas
Glorieta	2520'	2625'	oil, gas
Yeso	2682'	2788'	oil, gas
Tubb	4140'	4246'	---
Abo**	4780'	4886'	oil, gas
Total Depth	4900'	5006'	---

*In which surface casing will be set at 425' and contingency string, if needed, will be set at 375'

**Abo will not be perforated. Extra depth needed for logs and pump.

2. NOTABLE ZONES

Water bearing strata were found at 115' in the George Kaiser 1 (30-015-01198). That well is 1479' south. Closest (5999' northeast) water well (RA 03714) found water at 325'.

3. PRESSURE CONTROL

A 2000 psi BOP stack and manifold system will be used. A typical 2000 system is attached behind the directional plan. If the equipment changes, then a Sundry Notice will be filed. System will meet Onshore Orders 2 (BOP) and 6 (H₂S) requirements.

Lime Rock Resources II-A, L.P.
Kaiser 7 P Federal 10
SHL: 475' FSL & 540' FEL
BHL: 990' FSL & 990' FEL
Sec. 7, T. 18 S., R. 27 E., Eddy County, NM

DRILL PLAN PAGE 2

The blowout preventer equipment (BOP) will consist of a 2000 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 and kill side shall be at least 2" diameter),
- Kill line (2" minimum),
- 1 choke line valve (2" minimum),
- 2" diameter choke line,
- 2 kill valves, one of which will be a check valve (2" minimum),
- 1 choke that 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.

Lime Rock Resources II-A, L.P.
 Kaiser 7 P Federal 10
 SHL: 475' FSL & 540' FEL
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 Sec. 7, T. 18 S., R. 27 E., Eddy County, NM

DRILL PLAN PAGE 3

4. CASING & CEMENT

Type	Setting Depth	Hole	Casing	#/ft	Grade	Casing Thread	API	Age
Conductor	60'	26"	20"	91.5	B	Weld	No	New
Surface	425'	11"	8.625"	24	J-55	S T & C	Yes	New
Production	5006'	7.875"	5.5"	17	J-55	L T & C	Yes	New

All casing designed with a minimum of:

Burst Safety Factor	Collapse Safety Factor	Tension Safety Factor
1.18	1.20	2.00

casing	depth set	sacks cement	top	gallons per sack	density (ppg)	yield (cu ft per sack)	total cubic feet	% excess	blend
conductor	60'	N/A	GL	ready mix	ready mix	ready mix	ready mix	ready mix	ready mix
surface	425'	350	GL	6.2	14.8	1.35	472	200	1
production lead	5006'	200	GL	9.8	12.8	1.903	380	80	2
production tail	5006'	710	GL	6.2	14.8	1.33	944	50	3

Surface casing blend (1) will be Class C + ¼ pound/sack cello flake + 2% CaCl₂.
 Centralizers will be installed as required by Onshore Order 2.

Production casing lead blend (2) will be 35:65 poz Class C + 5% NaCl + 1/4 pound/sack cello flake + 5 pounds per sack LCM-1 + 0.2% R-3 + 6% gel.

Production casing tail blend (3) will be Class C + 0.6% R-3 + ¼ pound/sack cello flake.

Lime Rock Resources II-A, L.P.
Kaiser 7 P Federal 10
SHL: 475' FSL & 540' FEL
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Sec. 7, T. 18 S., R. 27 E., Eddy County, NM

DRILL PLAN PAGE 4

Cement volumes will be adjusted based on caliper log volumes and depths of casing and adjusted proportionately for depth changes of the multi stage tool if applicable.

A 13-3/8", 48#, H-40, ST&C, New, API contingency string will be set at 375' in a reamed 17-1/2" hole if circulation is lost in cave or karst (cave & karst potential to 350') and not regained. Contingency string will be cemented to the surface with 400 sacks (536 cubic feet) Class C + 1/4 pound per sack cello flake + 2% CaCl₂ mixed with 6.2 gallons per sack to yield 1.34 cubic feet per sack and 14.8 pounds per gallon. Excess >100%

Upon the setting of a 13-3/8" contingency casing string, a 13-5/8" x 13-3/8" weld on wellhead will be installed. A 13-3/8" to 11" adapter flange will be installed and the 11" XLT 2000 psi NOV double ram BOP/BOPE (Schematic attached) will be installed. The BOP will be tested against the casing to 70% of the internal yield pressure of the 13-3/8", 48#, H-40, ST&C (1211 psi) casing and held for 30 minutes before drilling out the 13-3/8" casing shoe. The formation will be drilled with a 10-3/4" bit approximately 50 feet past the 13-3/8" casing shoe into a competent formation and 8-5/8" casing will be set at approximately 425' (≥50' beyond the previous casing shoe) in the Seven Rivers and cemented with 410 sacks (549 cubic feet) Class C + 1/4 pound per sack cello flake + 2% CaCl₂ mixed with 6.2 gallons per sack to yield 1.34 cubic feet per sack and 14.8 pounds per gallon. Excess >125%

5. MUD PROGRAM

An electronic/mechanical mud monitor will with a minimum pit volume totalizer, stroke counter, and flow sensor will be used. All necessary mud products will be on site to handle any abnormal hole condition that could possibly be encountered during the drilling of this well. Circulation could be lost in the Grayburg and San Andres.

Lime Rock Resources II-A, L.P.

DRILL PLAN PAGE 5

Kaiser 7 P Federal 10

SHL: 475' FSL & 540' FEL

BHL: 990' FSL & 990' FEL

Sec. 7, T. 18 S., R. 27 E., Eddy County, NM

Interval	0' - 375' (if contingency string run)	0' - 425'	425' - 4750'	4750' -TD
Type	fresh water	fresh water	brine	brine w/ gel & starch
weight	8.5 - 9.2	8.5 - 9.2	9.9 - 10.2	9.9 - 10.2
pH	10	10	10 - 11.5	10 - 11.5
WL	NC	NC	NC	15 - 20
viscosity	28 - 34	28 - 34	30 - 32	32 - 35
MC	NC	NC	NC	1
solids	NC	NC	<2%	<3%
pump rate	300 - 350 gpm	300 - 350 gpm	350 - 400 gpm	400 - 450 gpm
other	LCM as needed	LCM as needed	salt gel & MF as needed, pump high viscosity sweeps to control solids	salt gel, acid, & MF as needed; pump high viscosity sweeps to control solids

6. CORES, TESTS, & LOGS

No core or drill stem test is planned. A triple combo with spectral GR - dual lateral log, micro spherical focused log, & spectral density log will be run after tagging total depth. Will log from total depth to surface. A dual spaced neutron log and compensated spectral natural GR log will be run from total depth to surface.

7. DOWN HOLE CONDITIONS

No abnormal pressure or temperature is expected. Maximum expected bottom hole pressure is 2121 psi. No H₂S is expected during the drilling phase. Nevertheless, H₂S monitoring equipment will be on the rig floor and air packs will be available before drilling out of the surface casing. The mud logger will be warned to use a gas trap to detect H₂S. If any H₂S is detected, then the mud

Lime Rock Resources II-A, L.P.

DRILL PLAN PAGE 6

Kaiser 7 P Federal 10

SHL: 475' FSL & 540' FEL

BHL: 990' FSL & 990' FEL

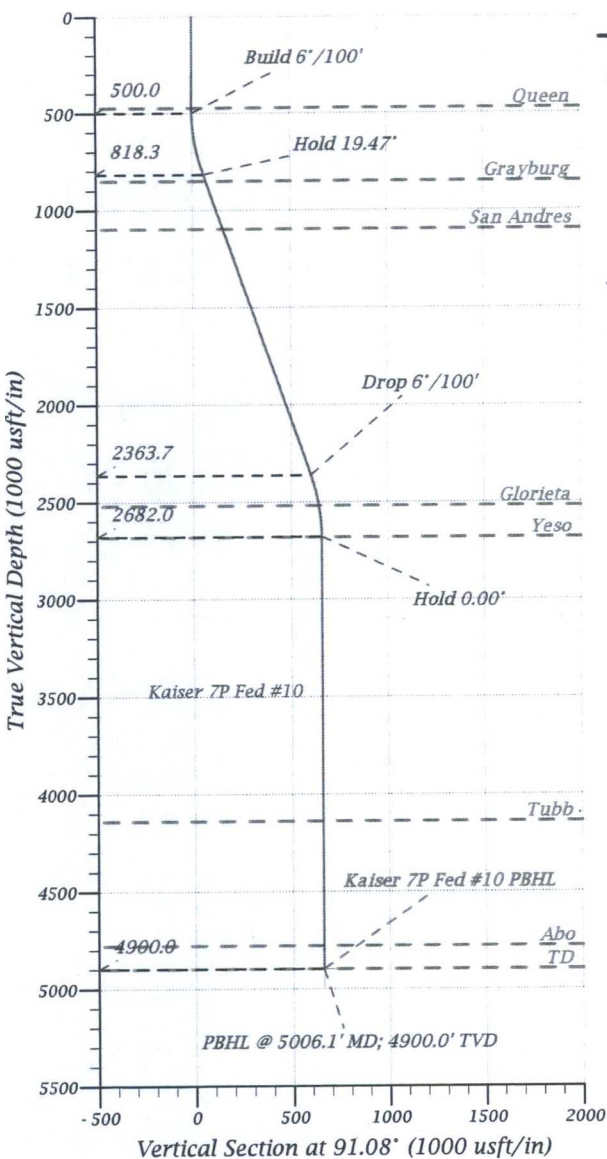
Sec. 7, T. 18 S., R. 27 E., Eddy County, NM

weight will be increased and H₂S inhibitors will be added to control the gas. An H₂S drilling operations contingency plan is attached.

The well is located in a potential cave or karst area. Thus, lost circulation is possible down to 350'. See the contingency casing string and cement plan on Page 4.

8. OTHER INFORMATION

The anticipated spud date is upon approval. It is expected it will take ≈1 month to drill and complete the well.



WELL DETAILS: Fed #10

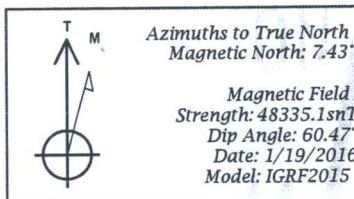
+N/-S	+E/-W	Ground Level: 3365.6	RKB @ 3378.4usft	Latitude	Longitude
0.0	0.0	Northings 639436.34	Eastings 547126.64	32° 45' 28.116 N	104° 10' 48.127 W

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northings	Eastings
Kaiser 7P Fed #10 PBHL	4900.0	- 12.4	655.4	639424.90	547782.06

PROJECT DETAILS: Eddy, NM (NAD 27)

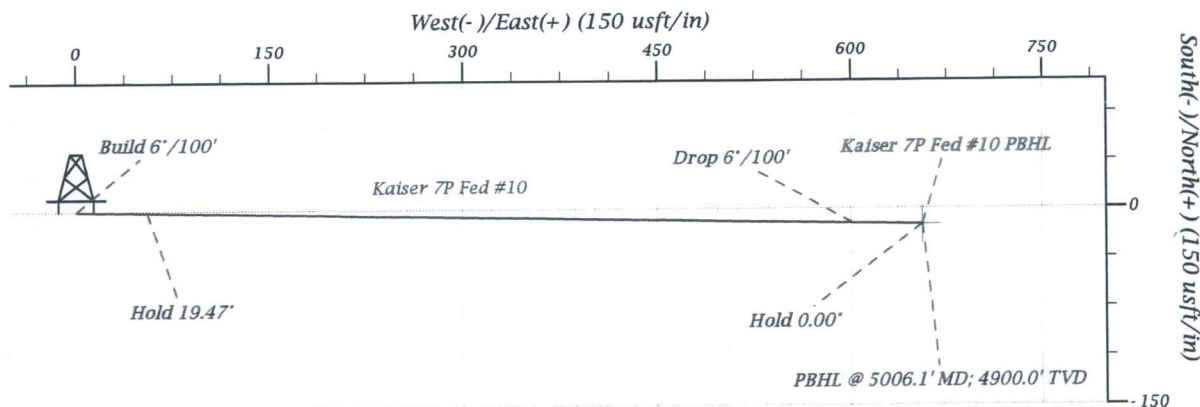
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
475.0	475.0	Queen
852.0	860.3	Grayburg
1098.0	1121.2	San Andres
2520.0	2625.3	Glorieta
2682.0	2788.1	Yeso
4140.0	4246.1	Tubb
4780.0	4886.1	Abo

To convert a Magnetic Direction to a True Direction, Add 7.43° East
Magnetic North is 7.43° East of True North (Magnetic Declination)



Section Plans

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.0	Build 6°/100'
824.5	19.47	91.08	818.3	- 1.0	54.6	6.00	91.08	54.6	Hold 19.47'
2463.7	19.47	91.08	2363.7	- 11.4	600.8	0.00	0.00	600.9	Drop 6°/100'
2788.1	0.00	0.00	2682.0	- 12.4	655.4	6.00	180.00	655.5	Hold 0.00'
5006.1	0.00	0.00	4900.0	- 12.4	655.4	0.00	0.00	655.5	PBHL @ 5006.1' MD; 4900.0' TVD



Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Fed #10
Company:	Lime Rock Resources	TVD Reference:	RKB @ 3378.4usft
Project:	Eddy, NM (NAD 27)	MD Reference:	RKB @ 3378.4usft
Site:	Kaiser 7P	North Reference:	True
Well:	Fed #10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan 1		

Project	Eddy, NM (NAD 27)		
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	Kaiser 7P		
Site Position:		Northing:	638,902.36 usft
From:	Map	Easting:	548,231.31 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 45' 22.816 N
		Longitude:	104° 10' 35.200 W
		Grid Convergence:	0.08 °

Well	Fed #10		
Well Position	+N/-S	535.6 usft	Northing:
	+E/-W	-1,103.9 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft
		Latitude:	32° 45' 28.116 N
		Longitude:	104° 10' 48.127 W
		Ground Level:	3,365.6 usft

Wellbore	Original Hole		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	1/19/2016	7.43
			Dip Angle (°)
			60.47
			Field Strength (nT)
			48,335

Design	Plan 1		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction (°)
			91.08

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
824.5	19.47	91.08	818.3	-1.0	54.6	6.00	6.00	0.00	91.08	
2,463.7	19.47	91.08	2,363.7	-11.4	600.8	0.00	0.00	0.00	0.00	
2,788.1	0.00	0.00	2,682.0	-12.4	655.4	6.00	-6.00	0.00	180.00	
5,006.1	0.00	0.00	4,900.0	-12.4	655.4	0.00	0.00	0.00	0.00	Kaiser 7P Fed #10 PE



Planning Report



Database: EDM 5000.1 Single User Db
Company: Lime Rock Resources
Project: Eddy, NM (NAD 27)
Site: Kaiser 7P
Well: Fed #10
Wellbore: Original Hole
Design: Plan 1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well Fed #10
RKB @ 3378.4usft
RKB @ 3378.4usft
True
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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
475.0	0.00	0.00	475.0	0.0	0.0	0.0	0.00	0.00	0.00
Queen									
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
Build 6°/100'									
600.0	6.00	91.08	599.8	-0.1	5.2	5.2	6.00	6.00	0.00
700.0	12.00	91.08	698.5	-0.4	20.9	20.9	6.00	6.00	0.00
800.0	18.00	91.08	795.1	-0.9	46.7	46.7	6.00	6.00	0.00
824.5	19.47	91.08	818.3	-1.0	54.6	54.6	6.00	6.00	0.00
Hold 19.47°									
860.3	19.47	91.08	852.0	-1.3	66.5	66.5	0.00	0.00	0.00
Grayburg									
900.0	19.47	91.08	889.5	-1.5	79.8	79.8	0.00	0.00	0.00
1,000.0	19.47	91.08	983.8	-2.1	113.1	113.1	0.00	0.00	0.00
1,100.0	19.47	91.08	1,078.0	-2.8	146.4	146.4	0.00	0.00	0.00
1,121.2	19.47	91.08	1,098.0	-2.9	153.5	153.5	0.00	0.00	0.00
San Andres									
1,200.0	19.47	91.08	1,172.3	-3.4	179.7	179.8	0.00	0.00	0.00
1,300.0	19.47	91.08	1,266.6	-4.0	213.0	213.1	0.00	0.00	0.00
1,400.0	19.47	91.08	1,360.9	-4.7	246.4	246.4	0.00	0.00	0.00
1,500.0	19.47	91.08	1,455.2	-5.3	279.7	279.7	0.00	0.00	0.00
1,600.0	19.47	91.08	1,549.5	-5.9	313.0	313.1	0.00	0.00	0.00
1,700.0	19.47	91.08	1,643.7	-6.5	346.3	346.4	0.00	0.00	0.00
1,800.0	19.47	91.08	1,738.0	-7.2	379.7	379.7	0.00	0.00	0.00
1,900.0	19.47	91.08	1,832.3	-7.8	413.0	413.1	0.00	0.00	0.00
2,000.0	19.47	91.08	1,926.6	-8.4	446.3	446.4	0.00	0.00	0.00
2,100.0	19.47	91.08	2,020.9	-9.1	479.6	479.7	0.00	0.00	0.00
2,200.0	19.47	91.08	2,115.1	-9.7	513.0	513.0	0.00	0.00	0.00
2,300.0	19.47	91.08	2,209.4	-10.3	546.3	546.4	0.00	0.00	0.00
2,400.0	19.47	91.08	2,303.7	-11.0	579.6	579.7	0.00	0.00	0.00
2,463.7	19.47	91.08	2,363.7	-11.4	600.8	600.9	0.00	0.00	0.00
Drop 6°/100'									
2,500.0	17.29	91.08	2,398.2	-11.6	612.3	612.4	6.00	-6.00	0.00
2,600.0	11.29	91.08	2,495.1	-12.0	636.9	637.0	6.00	-6.00	0.00
2,625.3	9.77	91.08	2,520.0	-12.1	641.6	641.7	6.00	-6.00	0.00
Glorieta									
2,700.0	5.29	91.08	2,594.0	-12.3	651.3	651.5	6.00	-6.00	0.00
2,788.1	0.00	0.00	2,682.0	-12.4	655.4	655.5	6.00	-6.00	0.00
Hold 0.00° - Yeso									
2,800.0	0.00	0.00	2,693.9	-12.4	655.4	655.5	0.00	0.00	0.00
2,900.0	0.00	0.00	2,793.9	-12.4	655.4	655.5	0.00	0.00	0.00
3,000.0	0.00	0.00	2,893.9	-12.4	655.4	655.5	0.00	0.00	0.00
3,100.0	0.00	0.00	2,993.9	-12.4	655.4	655.5	0.00	0.00	0.00
3,200.0	0.00	0.00	3,093.9	-12.4	655.4	655.5	0.00	0.00	0.00
3,300.0	0.00	0.00	3,193.9	-12.4	655.4	655.5	0.00	0.00	0.00
3,400.0	0.00	0.00	3,293.9	-12.4	655.4	655.5	0.00	0.00	0.00
3,500.0	0.00	0.00	3,393.9	-12.4	655.4	655.5	0.00	0.00	0.00
3,600.0	0.00	0.00	3,493.9	-12.4	655.4	655.5	0.00	0.00	0.00
3,700.0	0.00	0.00	3,593.9	-12.4	655.4	655.5	0.00	0.00	0.00



Planning Report



Database: EDM 5000.1 Single User Db
Company: Lime Rock Resources
Project: Eddy, NM (NAD 27)
Site: Kaiser 7P
Well: Fed #10
Wellbore: Original Hole
Design: Plan 1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well Fed #10
RKB @ 3378.4usft
RKB @ 3378.4usft
True
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)
3,800.0	0.00	0.00	3,693.9	-12.4	655.4	655.5	0.00	0.00	0.00
3,900.0	0.00	0.00	3,793.9	-12.4	655.4	655.5	0.00	0.00	0.00
4,000.0	0.00	0.00	3,893.9	-12.4	655.4	655.5	0.00	0.00	0.00
4,100.0	0.00	0.00	3,993.9	-12.4	655.4	655.5	0.00	0.00	0.00
4,200.0	0.00	0.00	4,093.9	-12.4	655.4	655.5	0.00	0.00	0.00
4,246.1	0.00	0.00	4,140.0	-12.4	655.4	655.5	0.00	0.00	0.00
Tubb									
4,300.0	0.00	0.00	4,193.9	-12.4	655.4	655.5	0.00	0.00	0.00
4,400.0	0.00	0.00	4,293.9	-12.4	655.4	655.5	0.00	0.00	0.00
4,500.0	0.00	0.00	4,393.9	-12.4	655.4	655.5	0.00	0.00	0.00
4,600.0	0.00	0.00	4,493.9	-12.4	655.4	655.5	0.00	0.00	0.00
4,700.0	0.00	0.00	4,593.9	-12.4	655.4	655.5	0.00	0.00	0.00
4,800.0	0.00	0.00	4,693.9	-12.4	655.4	655.5	0.00	0.00	0.00
4,886.1	0.00	0.00	4,780.0	-12.4	655.4	655.5	0.00	0.00	0.00
Abo									
4,900.0	0.00	0.00	4,793.9	-12.4	655.4	655.5	0.00	0.00	0.00
5,000.0	0.00	0.00	4,893.9	-12.4	655.4	655.5	0.00	0.00	0.00
5,006.1	0.00	0.00	4,900.0	-12.4	655.4	655.5	0.00	0.00	0.00
PBHL @ 5006.1' MD; 4900.0' TVD									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Kaiser 7P Fed #10 PBHL - plan hits target center - Point	0.00	0.00	4,900.0	-12.4	655.4	639,424.90	547,782.06	32° 45' 27.993 N	104° 10' 40.452 W

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
475.0	475.0	Queen		0.00	
860.3	852.0	Grayburg		0.00	
1,121.2	1,098.0	San Andres		0.00	
2,625.3	2,520.0	Glorieta		0.00	
2,788.1	2,682.0	Yeso		0.00	
4,246.1	4,140.0	Tubb		0.00	
4,886.1	4,780.0	Abo		0.00	

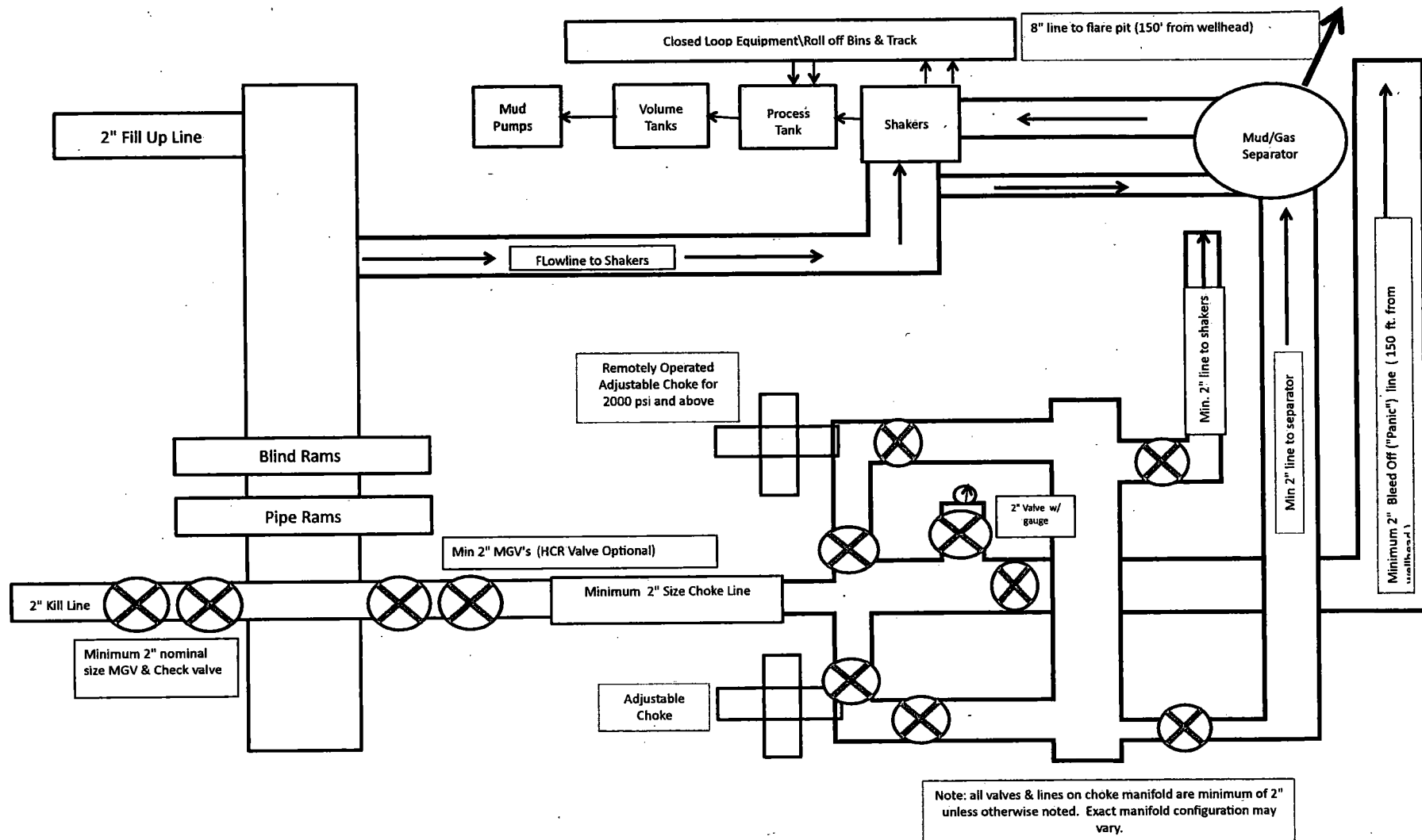


Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Fed #10
Company:	Lime Rock Resources	TVD Reference:	RKB @ 3378.4usft
Project:	Eddy, NM (NAD 27)	MD Reference:	RKB @ 3378.4usft
Site:	Kaiser 7P	North Reference:	True
Well:	Fed #10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan 1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
500.0	500.0	0.0	0.0	Build 6"/100'
824.5	818.3	-1.0	54.6	Hold 19.47°
2,463.7	2,363.7	-11.4	600.8	Drop 6"/100'
2,788.1	2,682.0	-12.4	655.4	Hold 0.00°
5,006.1	4,900.0	-12.4	655.4	PBHL @ 5006.1' MD; 4900.0' TVD



**11" Minimum 2000 psi BOP and
Minimum 2000 psi BOPE System Schematic
W/ Closed Loop System Equipment**

Lime Rock Resources II-A, L.P.

Kaiser 7 P Federal 10

Section 7, T. 18 S., R. 27 E., 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.

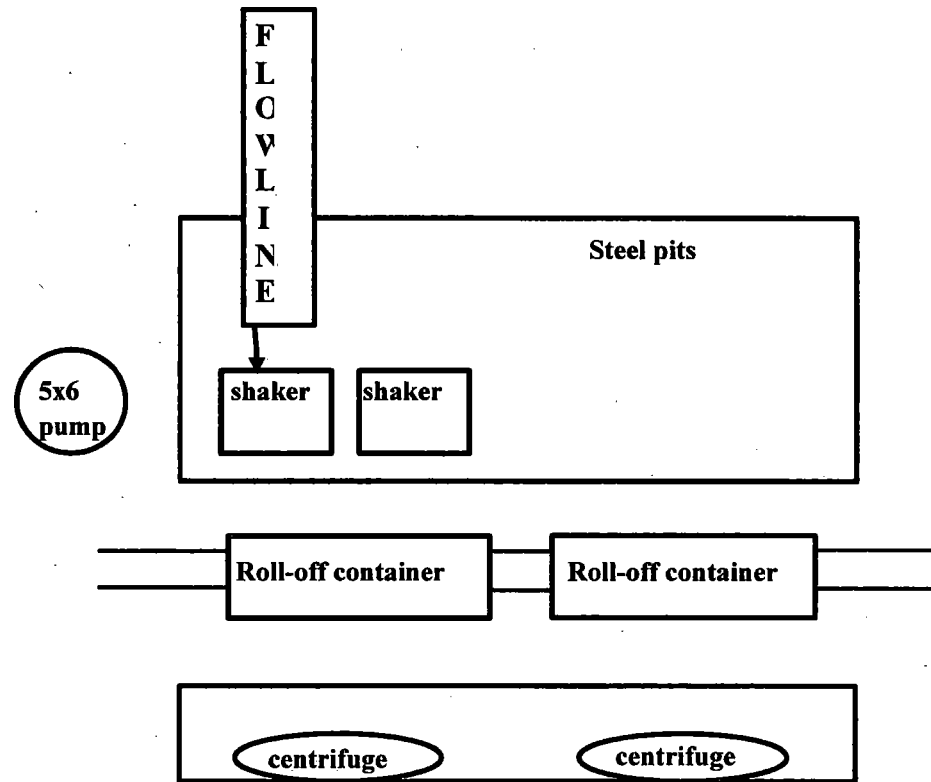
2- (250 bbl) tanks to hold fluid
2-CRI bins with track system
1-500 bbl frac tanks with fresh water
1-500 bbl frac tanks for brine water

Operations:

Closed Loop System equipment will be inspected daily by each tour and any necessary maintenance performed. Any 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:

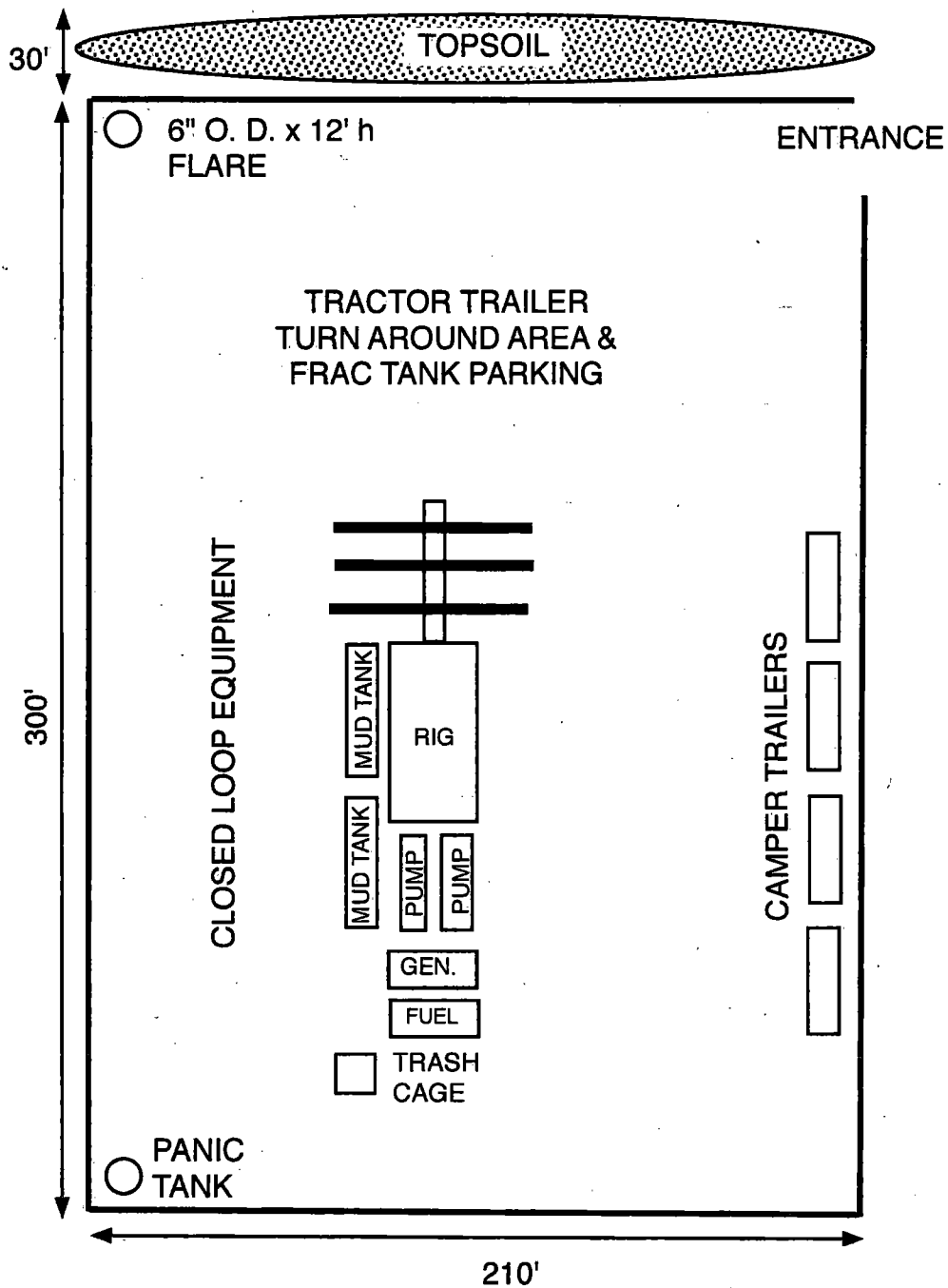
During drilling operations all liquids, drilling fluids and cuttings will be hauled off via CRI equipment to Disposal Facility Permit NM-01-0006.



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

Lime Rock's
Kaiser 7 P Federal 10
rig diagram

NORTH 
1" = 50'



Hydrogen Sulfide Drilling Plan Summary

- A. All personnel will 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 will be placed at each breathing area, 2 will be stored in the safety trailer.
- b. Work/Escapes packs — 4 packs will be stored on the rig floor and contain sufficiently long air hoses as to not restrict work activity.
- c. Emergency Escape Packs — 4 packs will 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

<u>Company Offices -</u>	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
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KEY PERSONNEL

Name	Title	Location	Office #	Cell #	Home #
MIKE LOUDERMILK	OPERATIONS MANAGER	HOUSTON	713-292-9526	832-331-7367	SAME AS CELL
SPENCER COX	PRODUCTION ENGINEER	HOUSTON	713-292-9528	432-254-5140	SAME AS CELL
ERIC MCCLUSKY	PRODUCTION 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 MCCCELLAND	WELL SITE SUPERVISOR	ROTATES ON SITE	NA	903-503-8997	NA
DAVE WILLIAMSON	WELL SITE SUPERVISOR	ROTATES ON SITE	NA	575-308-9980	NA

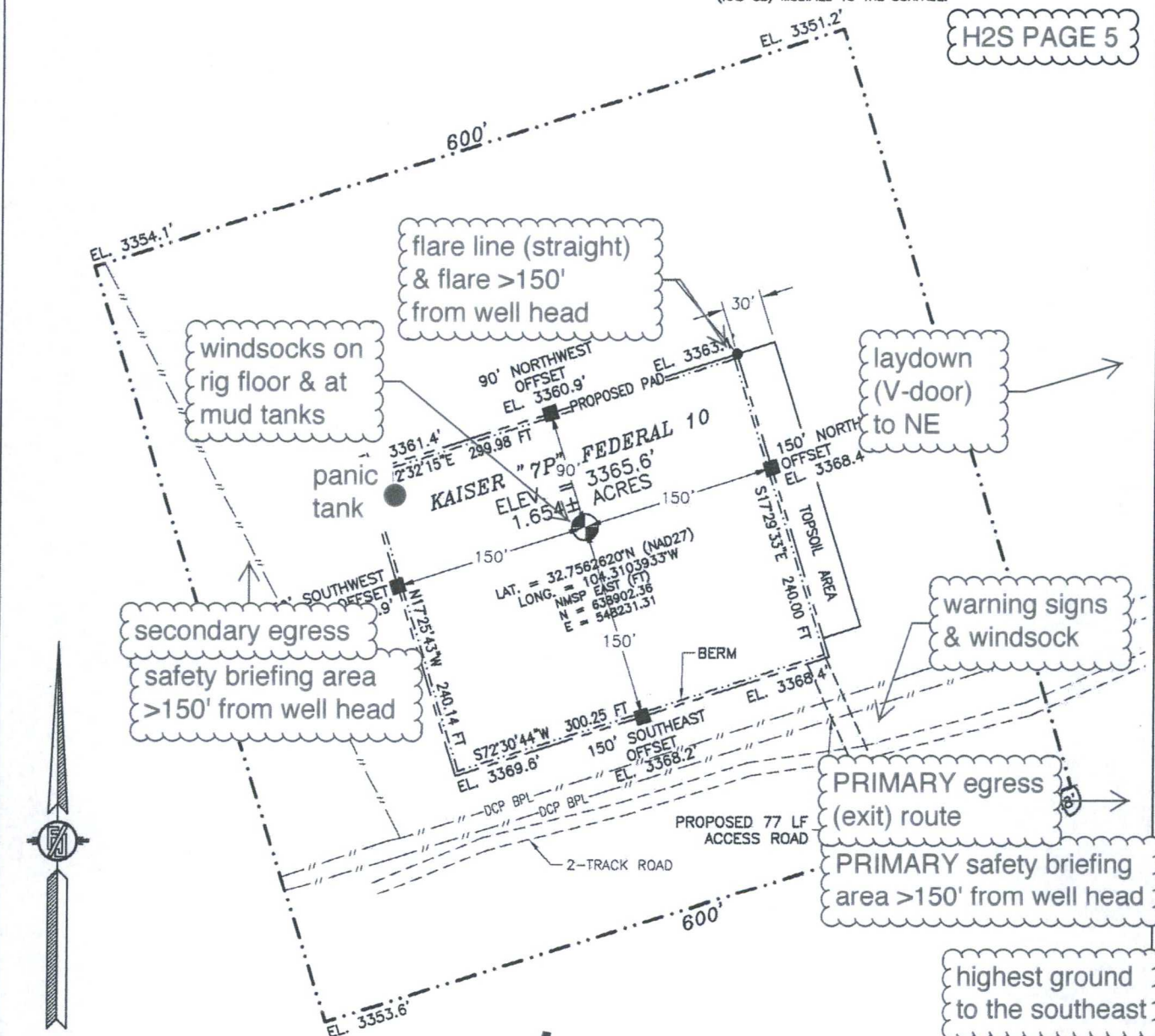
Agency Call List		
City	Agency or Office	Phone
Artesia	Ambulance	911
Artesia	State Police	575-746-2703
Artesia	Sheriff's Office	575-746-9888
Artesia	City Police	575-746-2703
Artesia	Fire Department	575-746-2701
Artesia	Local Emergency Planning Committee	575-746-2122
Artesia	New Mexico OCD District II	575-748-1283
Carlsbad	Ambulance	911
Carlsbad	State Police	575-885-3137
Carlsbad	Sheriff'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

H2S CONTINGENCY DRILLING PLAN EMERGENCY CONTACTS

Emergency Services				
Name	Service	Location	Phone	Alternate
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 Service	Artesia, Hobbs and Odessa	575-746-2757	SAME
Total Safety	Safety Equipment and Personnel	Artesia	575-746-2847	SAME
Cutter Oilfield Services	Drilling Systems Equipment	Midland	432-488-6707	SAME
Assurance Fire & Safety	Safety Equipment and Personnel	Artesia	575-396-9702	575-441-2224
Flight 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 13 Street

SITE MAP

H2S PAGE 5



SCALE 1" = 120'

FROM CR 201 (CHALK BLUFF) AND CR 227 (LITTLE DIAMOND) AND CALICHE LEASE ROAD, GO SOUTH ON CALICHE LEASE ROAD 0.5 MILES, BEND LEFT AND GO SOUTHEAST 0.22 MILES, BEND RIGHT AND GO SOUTHWEST 0.34 MILES, TURN RIGHT AND GO WEST 0.11 MILES, TURN LEFT AND GO SOUTH-SOUTHWEST 0.25 MILES, TURN RIGHT AND GO WEST 0.1 MILES AND CONTINUE WEST ON 2-TRACK PIPELINE ROAD 0.36 MILES, THEN FOLLOW PROPOSED ROAD SURVEY FLAGS NORTH 77° TO THE PROPOSED SOUTHEAST PAD CORNER FOR THIS LOCATION.

prevailing wind
blows from SSW

LIME ROCK RESOURCES II-A, L.P.
KAISER "7P" FEDERAL 10
LOCATED 475 FT. FROM THE SOUTH LINE
AND 540 FT. FROM THE EAST LINE OF
SECTION 7, TOWNSHIP 18 SOUTH,
RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

SURVEY NO. 3165

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

CARLSBAD, NEW MEXICO



**Kaiser 7 P Federal #10
H₂S Contingency Plan:
1 Mile Radius Map**

Section 7, Township 18S, Range 27E
Eddy County, New Mexico



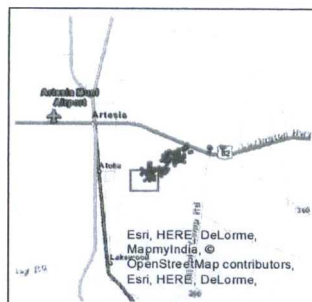
Kaiser 7 P Federal #10



NAD 1927 New Mexico State Plane East
FIPS 3001 Feet

PERMITS WEST
PROVIDING PERMITS FOR LAND USERS

Prepared by Permits West, Inc., June 17, 2015
for Lime Rock Resources II-A, L.P.

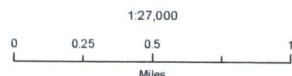


Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, IGP, etc., and the GIS User Community



**Kaiser 7 P Federal #10
H₂S Contingency Plan:
2 Mile Radius Map**

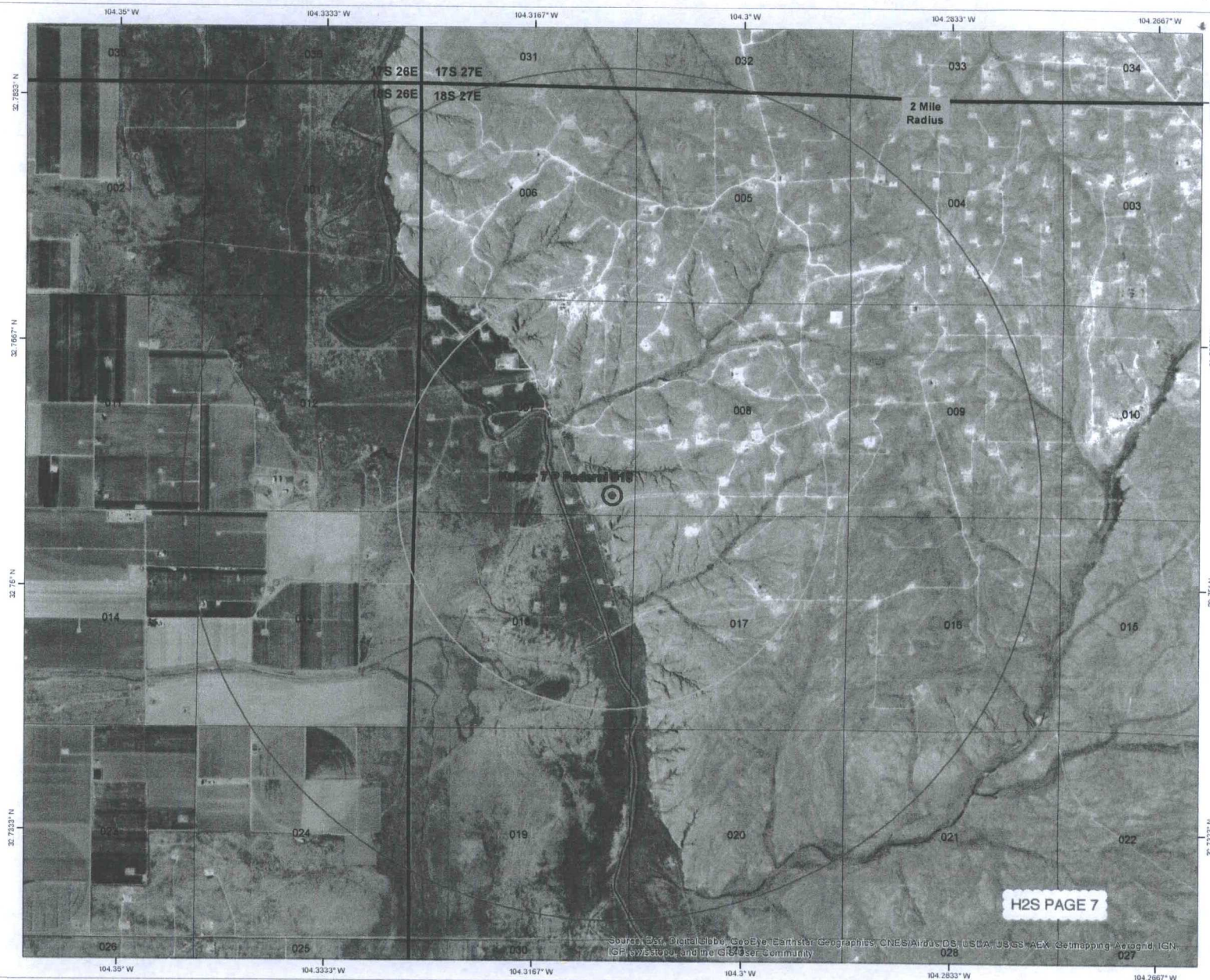
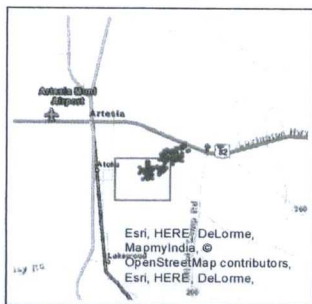
Section 7, Township 18S, Range 27E
Eddy County, New Mexico



NAD 1927 New Mexico State Plane East
FIPS 3001 Feet

PERMITS WEST INC.
PROVIDING PERMITS FOR LAND USERS

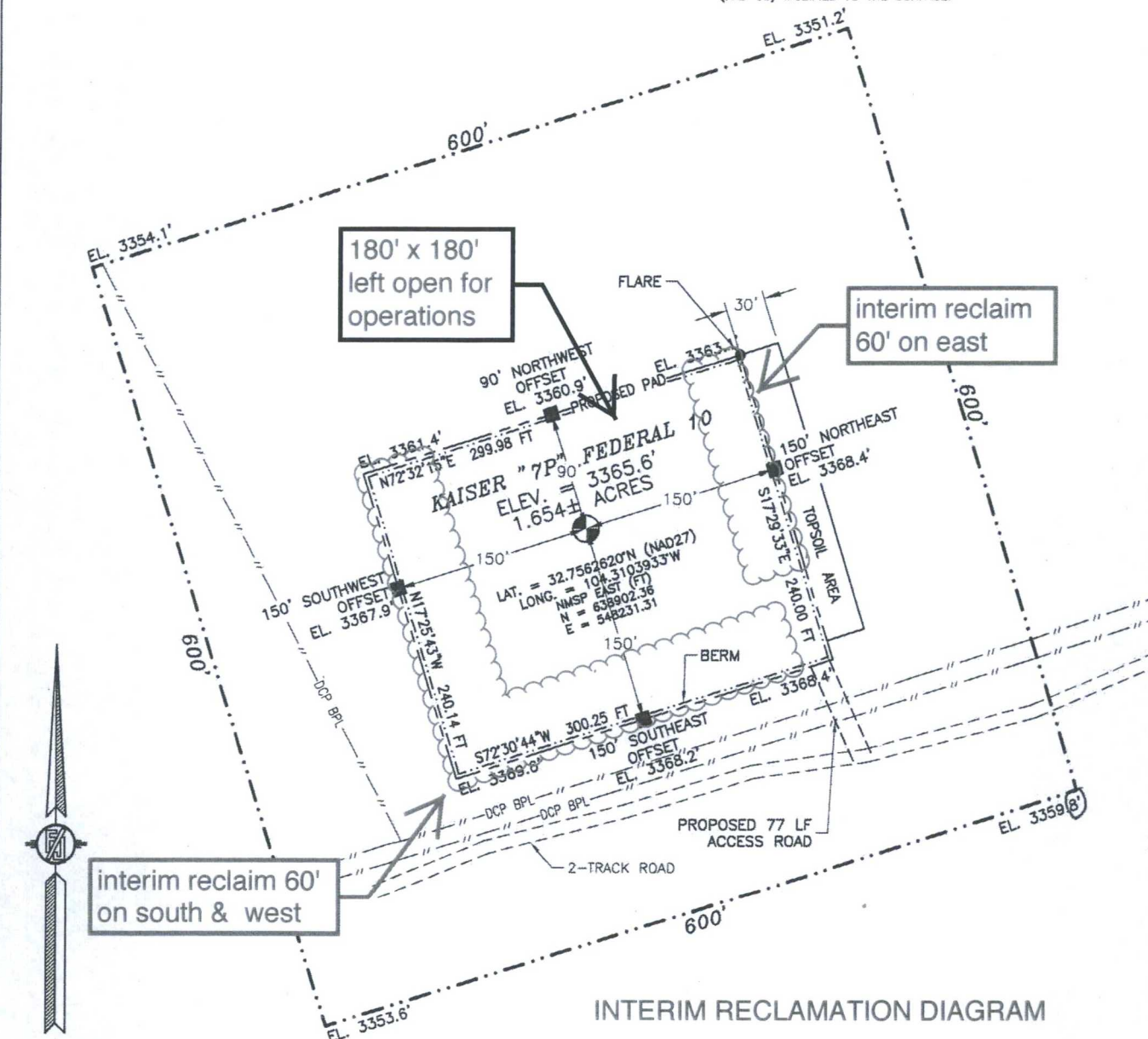
Prepared by Permits West, Inc., June 17, 2015
for Lime Rock Resources II-A, L.P.



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, Aero, GeoMapping, AeroGRID, IGN, IGP, Swisstopo, and the GIS User Community

SECTION 7, TOWNSHIP 18 SOUTH, RANGE 27 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 12 60 120 240

SCALE 1" = 120'

DIRECTIONS TO LOCATION

FROM CR 201 (CHALK BLUFF) AND CR 227 (LITTLE DIAMOND) AND CALICHE LEASE ROAD, GO SOUTH ON CALICHE LEASE ROAD 0.5 MILES, BEND LEFT AND GO SOUTHEAST 0.22 MILES, BEND RIGHT AND GO SOUTHWEST 0.34 MILES, TURN RIGHT AND GO WEST 0.11 MILES, TURN LEFT AND GO SOUTH-SOUTHWEST 0.25 MILES, TURN RIGHT AND GO WEST 0.1 MILES AND CONTINUE WEST ON 2-TRACK PIPELINE ROAD 0.36 MILES, THEN FOLLOW PROPOSED ROAD SURVEY FLAGS NORTH 77' TO THE PROPOSED SOUTHEAST PAD CORNER FOR THIS LOCATION.

INTERIM RECLAMATION DIAGRAM

LIME ROCK RESOURCES II-A, L.P.
KAISER "7P" FEDERAL 10
LOCATED 475 FT. FROM THE SOUTH LINE
AND 540 FT. FROM THE EAST LINE OF
SECTION 7, TOWNSHIP 18 SOUTH,
RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

FEBRUARY 11, 2015

SURVEY NO. 3165

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

Lime Rock Resources II-A, L.P.

SURFACE PLAN PAGE 1

Kaiser 7 P Federal 10

SHL: 475' FSL & 540' FEL

BHL: 990' FSL & 990' FEL

Sec. 7, T. 18 S., R. 27 E., Eddy County, NM

Surface Use Plan

1. ROAD DIRECTIONS & DESCRIPTIONS (See MAPS 1-4 & 6-10)

From the center of Artesia...

Go East 5 miles on US 82 to the equivalent of Mile Post 112.5

Then turn right and go South 5.2 miles on paved, then caliche County Road 201 (and subsequently Lime Rock road right-of-way NMNM-084250)

Then bear right and go SW 0.5 mile on a caliche road to just past a tank battery

Then turn left and go South 0.28 mile on a caliche road to the Hawk 8 N 50 pad

Then turn right and go West 0.1 mile on a caliche road to a DCP meter

Continue West 1901.51' on a jeep trail/pipeline patrol road

Then turn right and go North 77.38' cross-country to the pad

This APD is also doubling as a plan of development for a BLM road right-of-way application. Application covers 20' x 2506.89' (1.15 acre) in SESE Section 7 and S2SW4 Section 8 in 18s-27e starting at pending NMNM-133721 (Hawk 8 N Federal 50).*

*528' existing road + 1901.51' jeep trail + 77.38' cross-country = 2506.89'

Non-county roads will be maintained as needed to Gold Book standards. This includes pulling ditches, preserving the crown, and cleaning culverts. This will occur at least once a year, and more often as needed. Caliche will be hauled from Lime Rock's approved (HA-0258-0000) caliche pit on State land in NESE 36-17s-27e.

2. ROAD TO BE BUILT OR UPGRADED (See MAPS 3, 4, & 6-10)

The 77.38' of new road and 1901.51' of jeep trail will be crowned with a 14' wide driving surface and surfaced with caliche. Rolling broad based drainage dips will be installed at least half in cut and skewed to drain every $\approx 250'$ on the jeep trail. Maximum disturbed width = 20'. Maximum grade = 5%. Maximum cut of fill = 2'. No upgrade, culvert, cattle guard, or vehicle turn out is needed.

Lime Rock Resources II-A, L.P.

SURFACE PLAN PAGE 2

Kaiser 7 P Federal 10

SHL: 475' FSL & 540' FEL

BHL: 990' FSL & 990' FEL

Sec. 7, T. 18 S., R. 27 E., Eddy County, NM

3. EXISTING WELLS (See MAP 2)

Existing water, oil, gas, injection, disposal, and P & A wells are within a mile.

4. PROPOSED PRODUCTION FACILITIES (See MAPS 3 & 11-18)

The only production equipment on the pad will be the pump jack. Two 3" O. D. poly surface pipelines (one gas + one production) will be laid 1600.58' west and south to Lime Rock's existing header at the Kaiser 18 battery. Pipelines will operate at \approx 50 psi.

A 592.98' long overhead raptor safe power line will be built east to the pad.

5. WATER SUPPLY (See MAPS 1 - 4)

Water will be trucked from existing wells on private land between Artesia and Riverside.

6. CONSTRUCTION MATERIALS & METHODS

NM One Call (811) will be notified before construction starts. Topsoil and brush will be stockpiled east of the pad. V door will be to the east. A closed loop drilling system will be used. Caliche will be bought and hauled from Lime Rock's approved (HA-0258-0000) caliche pit on State land in NESE 36-17s-27e.

An on pad berm (MAPS 4 & 5) will surround the pad to prevent off site migration of soil. A geotextile fabric fence will be at the toe of the fill to prevent further migration. The fence bottom will be buried to prevent gaps.

Lime Rock Resources II-A, L.P.
Kaiser 7 P Federal 10
SHL: 475' FSL & 540' FEL
BHL: 990' FSL & 990' FEL
Sec. 7, T. 18 S., R. 27 E., Eddy County, NM

SURFACE PLAN PAGE 3

7. WASTE DISPOSAL

All trash will be placed in a portable trash cage. It will be hauled to the Eddy County landfill. There will be no trash burning. Contents (drill cuttings, mud, salts, and other chemicals) of the mud tanks will be hauled to CRI's state approved (NM-01-0006) disposal site. Human waste will be disposed of in chemical toilets and hauled to the Artesia wastewater treatment plant.

8. ANCILLARY FACILITIES

There will be no airstrip or camp. Camper trailers will be on location for the company man, tool pusher, or mud logger.

9. WELL SITE LAYOUT

See Rig Diagram for depictions of the well pad, trash cage, access onto the location, parking, living facilities, and rig orientation.

10. RECLAMATION

Interim reclamation be completed within 6 months of completion and will consist of removing caliche and reclaiming 60' wide swaths on the west, south, and east sides. This will shrink the pad by half to a 180' x 180' area around the pump jack. Disturbed areas will be contoured to match pre-construction grades. Soil and brush will be evenly spread over disturbed areas. Seeded areas will be ripped or harrowed. A BLM approved seed mix will be sown in a BLM approved manner. Enough stockpiled topsoil will be retained to cover the remainder of the pad when the well is plugged. Once the well is plugged, then the remainder of the pad will be similarly reclaimed within 6 months of plugging. Noxious weeds will be controlled.

Lime Rock Resources II-A, L.P.

SURFACE PLAN PAGE 4

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11. SURFACE OWNER

All pad, road, and power line construction will be on BLM.

Most (58%) of the pipeline construction will be on private (J. W. Gissler Estate, P. O. Box 967, Artesia NM 88211) land (NENE 18-18s-27e). Remainder of pipeline construction will be on BLM.

12. OTHER INFORMATION

On site inspection was held with Indra Dahal (BLM) on February 10, 2015.

Boone filed archaeology reports NMCRIS 133143 on April 17, 2015 and NMCRIS 135564 on April 8, 2016. Former covered the pad, road, and power line. Latter covered the pipeline.

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

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U. S. C. 1001 for the filing of false statements. Executed this 20th day of June, 2016.



Brian Wood, Consultant
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