

**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 Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**

1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

Form C-101  
August 1, 2011

Permit 364079

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

|                                                                                              |                                                |                               |
|----------------------------------------------------------------------------------------------|------------------------------------------------|-------------------------------|
| 1. Operator Name and Address<br>LARIO OIL & GAS CO<br>301 S. Market St.<br>Wichita, KS 67202 |                                                | 2. OGRID Number<br>13089      |
|                                                                                              |                                                | 3. API Number<br>30-025-52810 |
| 4. Property Code<br>335737                                                                   | 5. Property Name<br>CLOSE ENCOUNTERS STATE COM | 6. Well No.<br>103H           |

**7. Surface Location**

|               |               |                 |              |              |                  |               |                   |               |               |
|---------------|---------------|-----------------|--------------|--------------|------------------|---------------|-------------------|---------------|---------------|
| UL - Lot<br>N | Section<br>13 | Township<br>18S | Range<br>34E | Lot Idn<br>N | Feet From<br>295 | N/S Line<br>S | Feet From<br>1961 | E/W Line<br>W | County<br>Lea |
|---------------|---------------|-----------------|--------------|--------------|------------------|---------------|-------------------|---------------|---------------|

**8. Proposed Bottom Hole Location**

|               |               |                 |              |              |                   |               |                   |               |               |
|---------------|---------------|-----------------|--------------|--------------|-------------------|---------------|-------------------|---------------|---------------|
| UL - Lot<br>J | Section<br>12 | Township<br>18S | Range<br>34E | Lot Idn<br>J | Feet From<br>2546 | N/S Line<br>S | Feet From<br>1867 | E/W Line<br>E | County<br>Lea |
|---------------|---------------|-----------------|--------------|--------------|-------------------|---------------|-------------------|---------------|---------------|

**9. Pool Information**

|       |       |
|-------|-------|
| 97930 | 97930 |
|-------|-------|

**Additional Well Information**

|                           |                             |                                        |                         |                                    |
|---------------------------|-----------------------------|----------------------------------------|-------------------------|------------------------------------|
| 11. Work Type<br>New Well | 12. Well Type<br>OIL        | 13. Cable/Rotary                       | 14. Lease Type<br>State | 15. Ground Level Elevation<br>3977 |
| 16. Multiple<br>N         | 17. Proposed Depth<br>16239 | 18. Formation<br>Bone Spring           | 19. Contractor          | 20. Spud Date<br>8/1/2024          |
| Depth to Ground water     |                             | Distance from nearest fresh water well |                         | Distance to nearest surface water  |

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

**21. Proposed Casing and Cement Program**

| Type | Hole Size | Casing Size | Casing Weight/ft | Setting Depth | Sacks of Cement | Estimated TOC |
|------|-----------|-------------|------------------|---------------|-----------------|---------------|
| Surf | 17.5      | 13.375      | 54.5             | 1800          | 1515            | 0             |
| Int1 | 12.25     | 9.625       | 40               | 6300          | 1080            | 0             |
| Prod | 8.75      | 5.5         | 20               | 16239         | 2765            | 0             |

**Casing/Cement Program: Additional Comments**

|                                    |
|------------------------------------|
| Production casing grade is HCP-110 |
|------------------------------------|

**22. Proposed Blowout Prevention Program**

| Type       | Working Pressure | Test Pressure | Manufacturer |
|------------|------------------|---------------|--------------|
| Annular    | 3000             | 3000          | TBD          |
| Double Ram | 5000             | 5000          | TBD          |

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.  
I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable.

**OIL CONSERVATION DIVISION**

Signature:

Printed Name: Electronically filed by David Thorpe

Title: VP of Land

Email Address: david@lario.net

Date: 4/18/2024

Phone: 720-457-8557

Approved By: Paul F Kautz

Title: Geologist

Approved Date: 4/18/2024

Expiration Date: 4/18/2026

Conditions of Approval Attached

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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, New Mexico 87505

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office  
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                                |               |                                             |               |                                      |                        |                           |                        |                        |               |
|------------------------------------------------|---------------|---------------------------------------------|---------------|--------------------------------------|------------------------|---------------------------|------------------------|------------------------|---------------|
| API Number<br>30-025-                          |               | Pool Code<br>97930                          |               | WC-025<br>G-06 S183518A; BONE SPRING |                        | Pool Name                 |                        |                        |               |
| Property Code                                  |               | Property Name<br>CLOSE ENCOUNTERS STATE COM |               |                                      |                        | Well Number<br>103H       |                        |                        |               |
| OGRID No.<br>13089                             |               | Operator Name<br>LARIO OIL & GAS            |               |                                      |                        | Elevation<br>3977'        |                        |                        |               |
| Surface Location                               |               |                                             |               |                                      |                        |                           |                        |                        |               |
| UL or lot no.<br>N                             | Section<br>13 | Township<br>18-S                            | Range<br>34-E | Lot Idn<br>-                         | Feet from the<br>295'  | North/South line<br>SOUTH | Feet from the<br>1961' | East/West line<br>WEST | County<br>LEA |
| Bottom Hole Location If Different From Surface |               |                                             |               |                                      |                        |                           |                        |                        |               |
| UL or lot no.<br>J                             | Section<br>12 | Township<br>18-S                            | Range<br>34-E | Lot Idn<br>-                         | Feet from the<br>2546' | North/South line<br>SOUTH | Feet from the<br>1867' | East/West line<br>EAST | County<br>LEA |
| Dedicated Acres<br>960.00                      |               | Joint or Infill                             |               | Consolidated Code<br>C               |                        | 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.

**SURFACE LOCATION (SHL)**  
NEW MEXICO EAST  
NAD 1983  
X=792633 Y=634412  
LAT.: N 32.7413724  
LONG.: W 103.5160395  
295' FSL 1961' FVL

**KICK OFF POINT (KOP)**  
NEW MEXICO EAST  
NAD 1983  
X=794073 Y=634236  
LAT.: N 32.7408557  
LONG.: W 103.5113595  
100' FSL 1867' FEL

**FIRST TAKE POINT (FTP)**  
NEW MEXICO EAST  
NAD 1983  
X=794068 Y=634735  
LAT.: N 32.7422299  
LONG.: W 103.5113622  
600' FSL 1867' FEL

**LAST TAKE POINT (LTP)**  
NEW MEXICO EAST  
NAD 1983  
X=794001 Y=641924  
LAT.: N 32.7619893  
LONG.: W 103.5113999  
2496' FSL 1867' FEL

**BOTTOM HOLE LOCATION (BHL)**  
NEW MEXICO EAST  
NAD 1983  
X=794001 Y=641974  
LAT.: N 32.7621267  
LONG.: W 103.5114000  
2546' FSL 1867' FEL

**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 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 voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.



4-1-24

Signature

Date

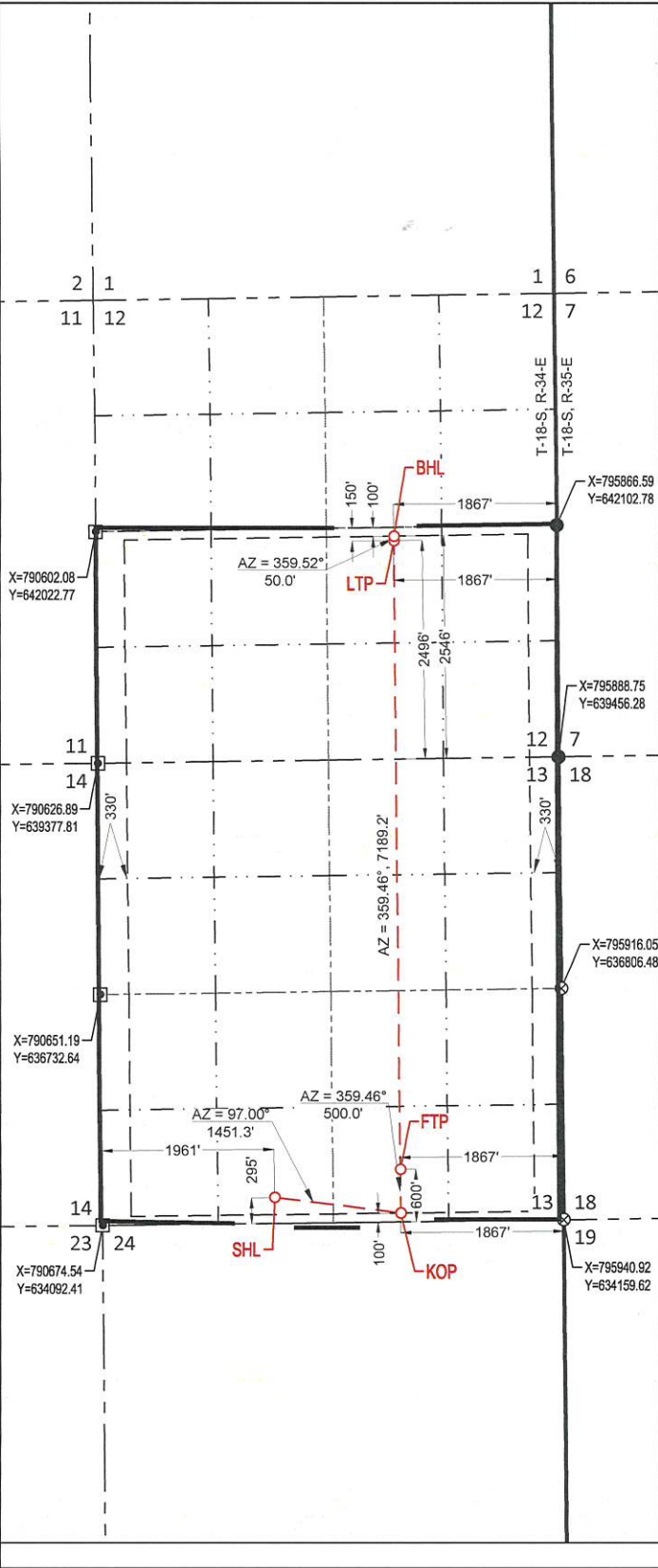
Print Name

BRIAN WOOD

E-mail Address

brian@permitswest.com

505 466-8120



| EFFECTIVE LATERAL  |          |
|--------------------|----------|
| SEC. 13 (SW4/SE/4) | 722.45'  |
| SEC. 13 (NW4/SE/4) | 1322.45' |
| SEC. 13 (SW4/NE/4) | 1324.17' |
| SEC. 13 (NW4/NE/4) | 1324.17' |
| SEC. 12 (SW4/SE/4) | 1323.00' |
| SEC. 12 (NW4/SE/4) | 1173.00' |
| FTP-LTP            | 7189.24' |

GRID CONVERGENCE N +00.44194° W

Not To Scale

**Special Notes:**  
ALL BEARINGS AND DISTANCES SHOWN ARE IN RESPECT TO THE NEW MEXICO STATE PLANE COORDINATE SYSTEM OF 1983 EAST.  
CONVERGENCE ANGLE IS SHOWN TO BE N +00.44194° W

**SURVEYORS 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.  
01/20/2024  
Date of Survey  
Signature and Seal of Professional Surveyor:  
  
03/07/2024

Released to Imaging: 4/18/2024 3:17:06 PM

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**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

Form APD Conditions  
Permit 364079

PERMIT CONDITIONS OF APPROVAL

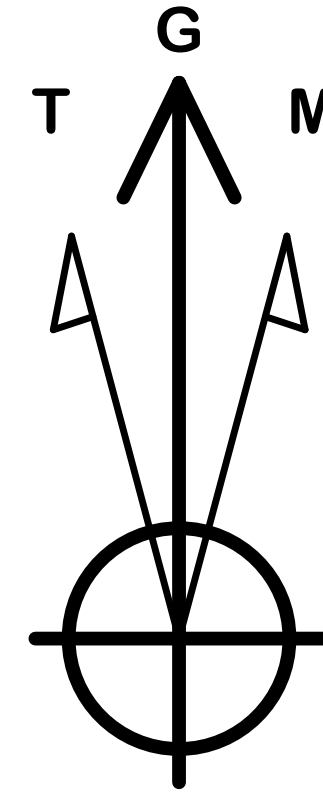
|                                                                                                    |                                           |
|----------------------------------------------------------------------------------------------------|-------------------------------------------|
| Operator Name and Address:<br>LARIO OIL & GAS CO [13089]<br>301 S. Market St.<br>Wichita, KS 67202 | API Number:<br>30-025-52810               |
|                                                                                                    | Well:<br>CLOSE ENCOUNTERS STATE COM #103H |

| OCD<br>Reviewer | Condition                                                                                                                                                                                                                                                            |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| pkautz          | Notify OCD 24 hours prior to casing & cement                                                                                                                                                                                                                         |
| pkautz          | Will require a File As Drilled C-102 and a Directional Survey with the C-104                                                                                                                                                                                         |
| pkautz          | 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 |
| pkautz          | Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system                  |
| pkautz          | Cement is required to circulate on both surface and intermediate1 strings of casing                                                                                                                                                                                  |
| pkautz          | If cement does not circulate on any string, a CBL is required for that string of casing                                                                                                                                                                              |
| pkautz          | The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud                                                                                                                                                                   |



Site: Close Encounters Pad  
Well: (02) Close Encounters State Com 103H  
Wellbore: 103H  
Plan: Plan 2

PROJECT DETAILS: Lea County, NM (N83 - NME)  
Well Name: (02) Close Encounters State Com 103H  
Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: New Mexico Eastern Zone  
System Datum: Mean Sea Level  
Local North: Grid  
KB Elevation: 23' RKB @ 4000.00usft  
Elevation: 3977.00  
To convert a Magnetic Direction to a Grid Direction, Add 5.768°



Azimuths to Grid North  
True North: -0.44°  
Magnetic North: 5.77°

Magnetic Field  
Strength: 47490.3nT  
Dip Angle: 60.27°  
Date: 6/5/2024  
Model: IGRF2020



SECTION DETAILS

| Sec | MD       | Inc   | Azi    | TVD     | +N/-S   | +E/-W   | Dleg  | TFace   | VSect   |
|-----|----------|-------|--------|---------|---------|---------|-------|---------|---------|
| 1   | 0.00     | 0.00  | 0.00   | 0.00    | 0.00    | 0.00    | 0.00  | 0.000   | 0.00    |
| 2   | 2000.00  | 0.00  | 0.00   | 2000.00 | 0.00    | 0.00    | 0.00  | 0.000   | 0.00    |
| 3   | 2829.26  | 16.59 | 96.97  | 2817.72 | -14.46  | 118.30  | 2.00  | 96.968  | -15.57  |
| 4   | 7976.55  | 16.59 | 96.97  | 6988.32 | -161.54 | 1321.70 | 0.00  | 0.000   | -173.99 |
| 5   | 7905.81  | 0.00  | 0.00   | 7706.04 | -176.00 | 1440.00 | 2.00  | 180.000 | -189.56 |
| 6   | 8105.81  | 0.00  | 0.00   | 7906.04 | -176.00 | 1440.00 | 0.00  | 0.000   | -189.56 |
| 7   | 9075.44  | 96.96 | 359.47 | 8474.77 | 466.40  | 1434.03 | 10.00 | 359.468 | 452.86  |
| 8   | 10071.58 | 96.96 | 359.47 | 8354.00 | 1455.14 | 1424.85 | 0.00  | 0.000   | 1441.65 |
| 9   | 10124.40 | 98.02 | 359.47 | 8347.11 | 1507.51 | 1424.36 | 2.00  | -0.066  | 1494.02 |
| 10  | 16238.96 | 98.02 | 359.47 | 7494.00 | 7562.00 | 1368.00 | 0.00  | 0.000   | 7548.77 |

WELL DETAILS: (02) Close Encounters State Com 103H

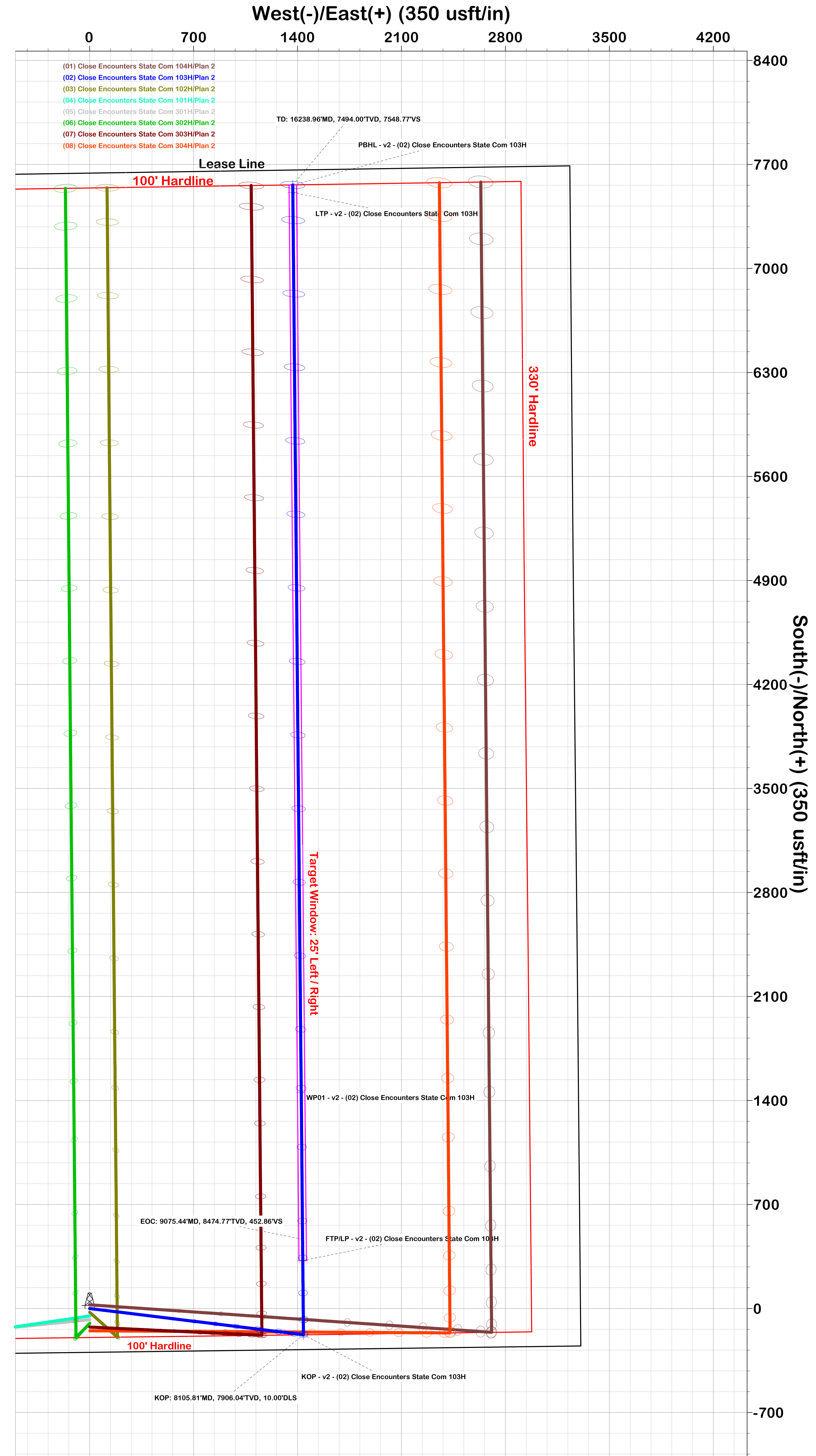
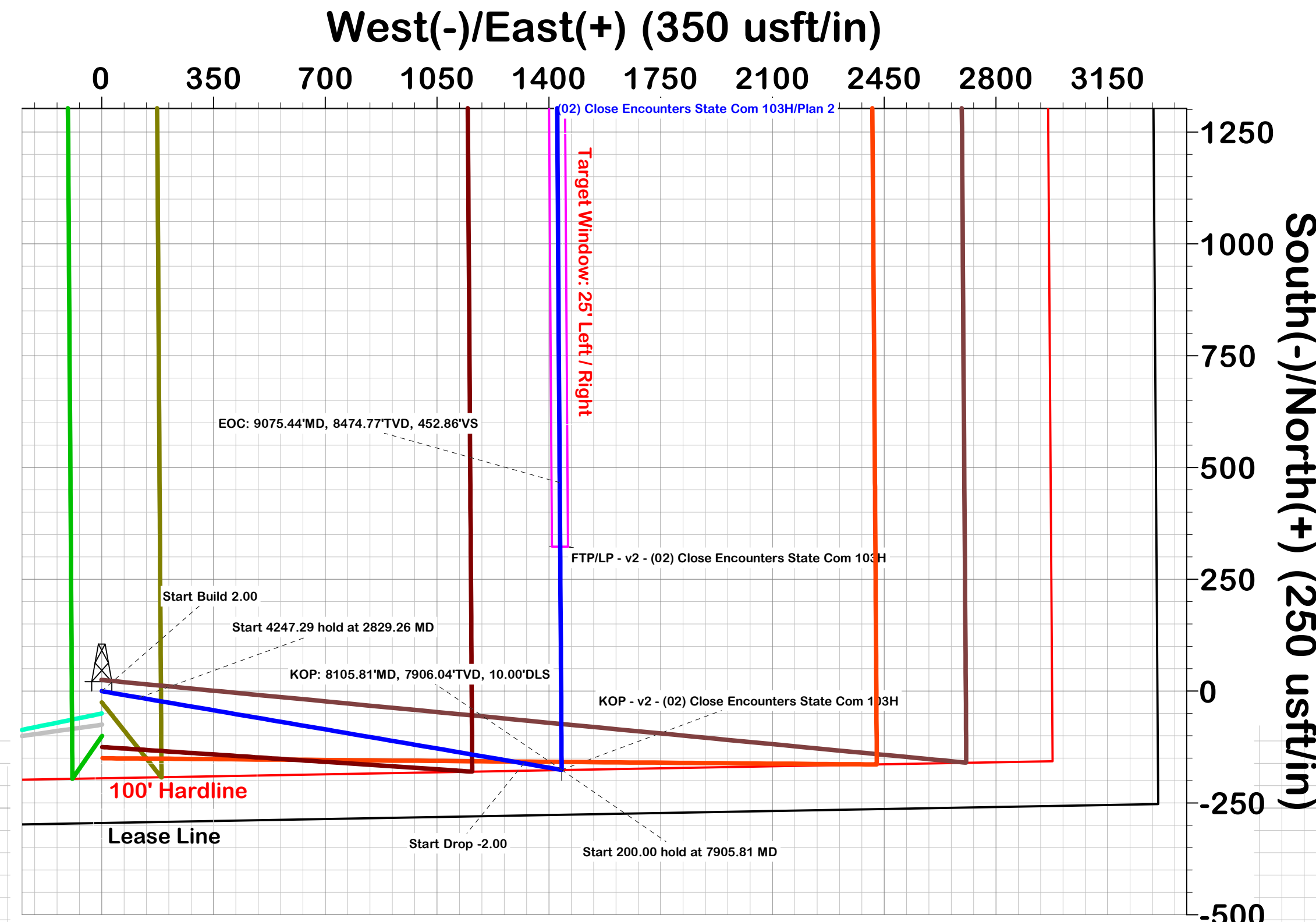
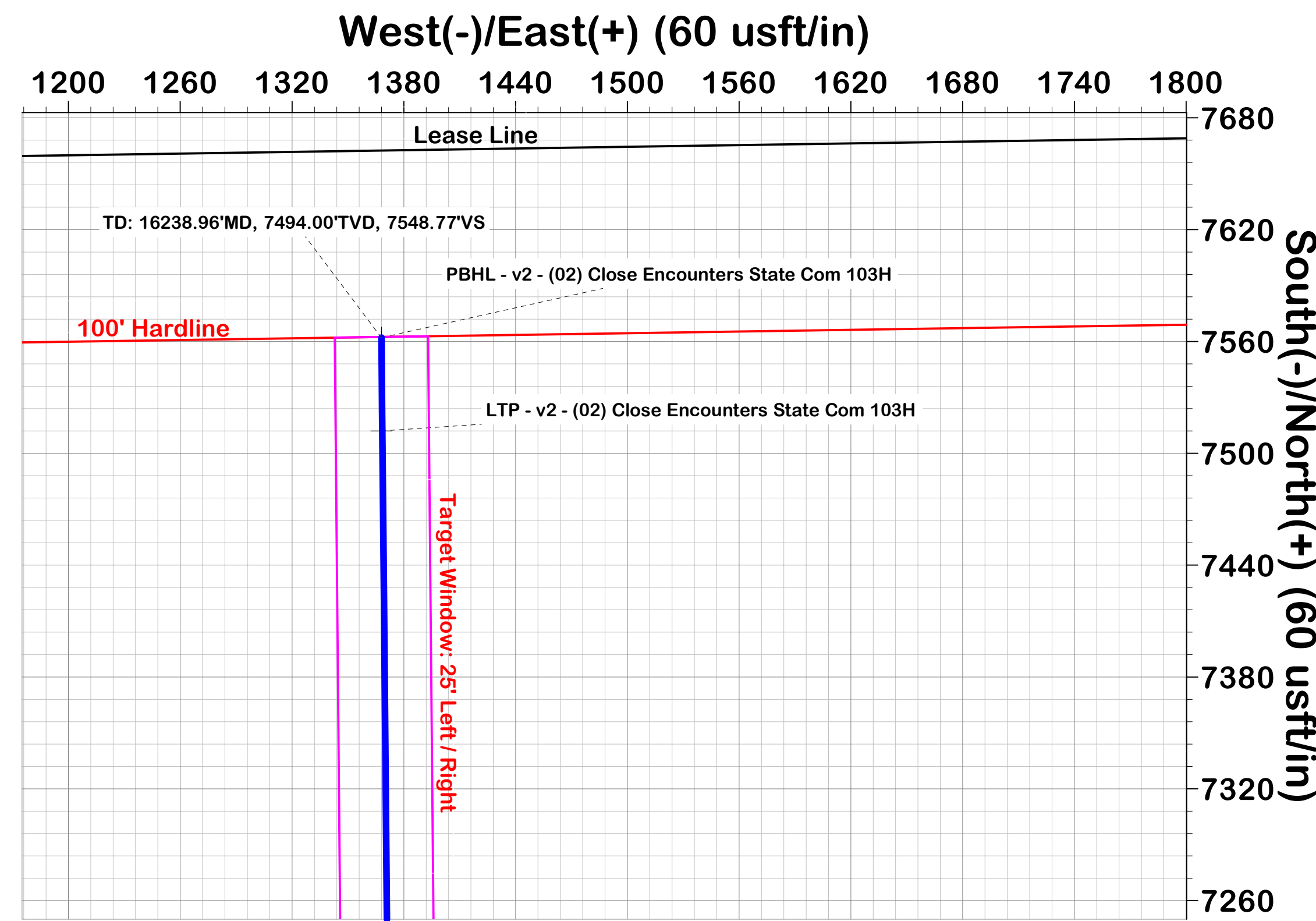
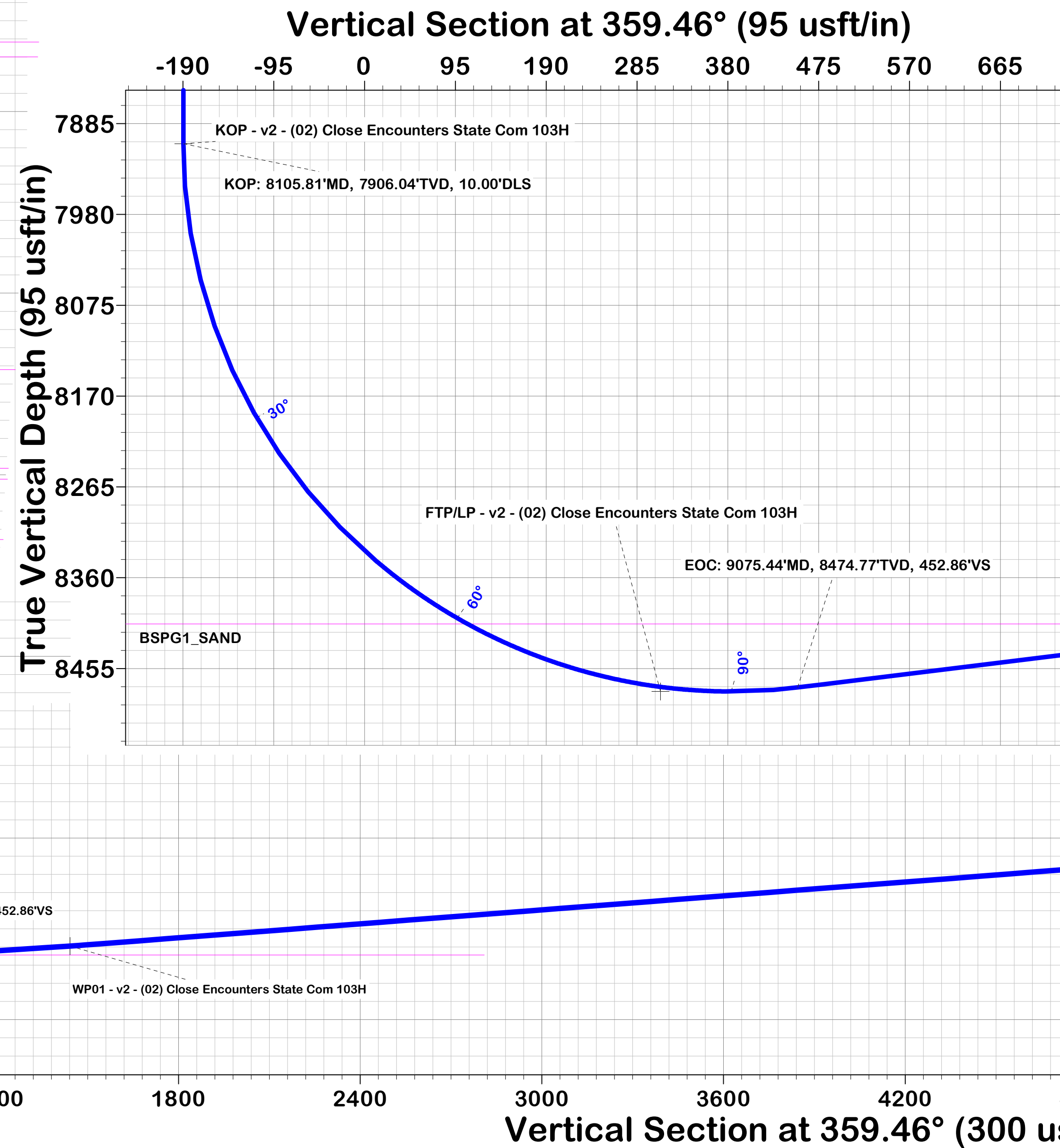
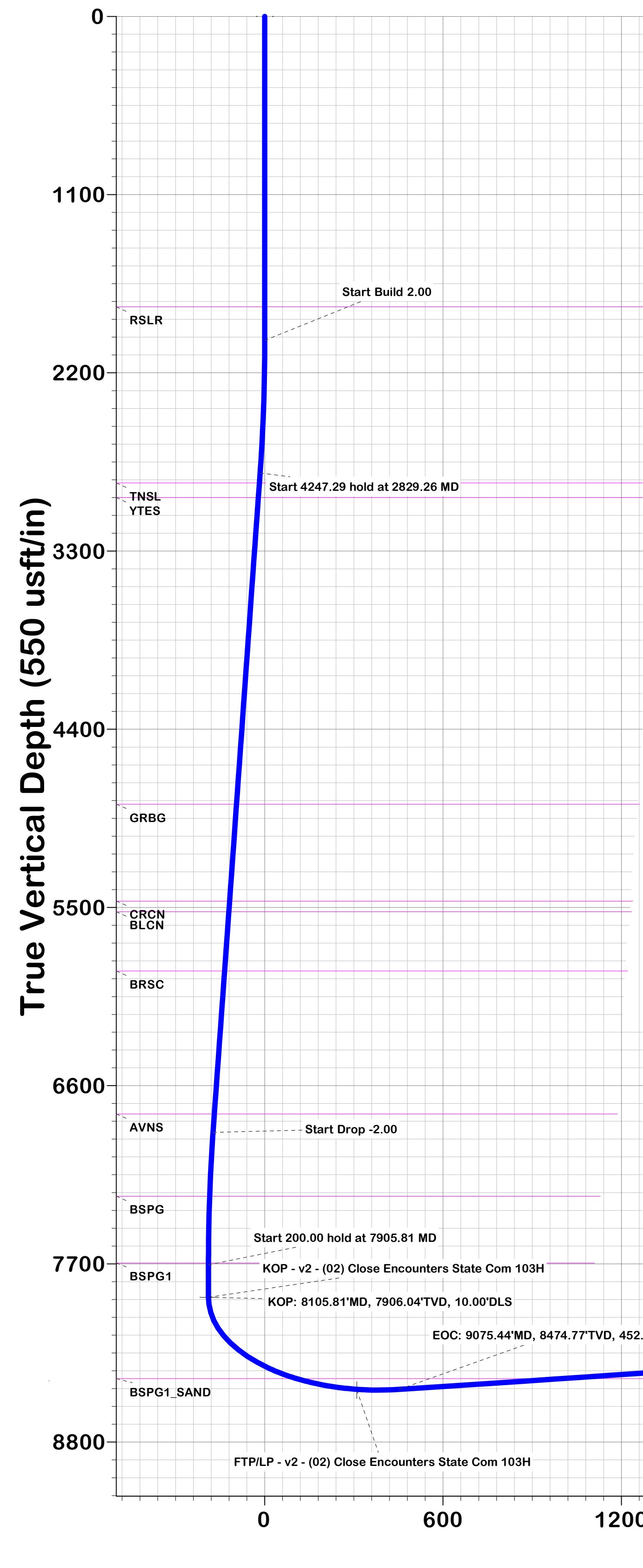
| Northing  | Easting   | Latitude    | Longitude     |
|-----------|-----------|-------------|---------------|
| 634412.00 | 792633.00 | 32.74137135 | -103.51603839 |

DESIGN TARGET DETAILS

| Name                                               | TVD     | +N/-S   | +E/-W   | Northing  | Easting   | Latitude    | Longitude     |
|----------------------------------------------------|---------|---------|---------|-----------|-----------|-------------|---------------|
| PBHL - v2 - (02) Close Encounters State Com 103H   | 7494.00 | 7562.00 | 1368.00 | 641974.00 | 794001.00 | 32.76212561 | -103.51139873 |
| LTP - v2 - (02) Close Encounters State Com 103H    | 7502.35 | 7512.00 | 1368.00 | 641924.00 | 794001.00 | 32.76198819 | -103.51140000 |
| KOP - v2 - (02) Close Encounters State Com 103H    | 7906.04 | -176.00 | 1440.00 | 634236.00 | 794073.00 | 32.74085701 | -103.51135990 |
| WP01 - v2 - (02) Close Encounters State Com 103H   | 8354.00 | 1455.14 | 1424.85 | 635867.14 | 794057.85 | 32.74534035 | -103.51136800 |
| FTP/LP - v2 - (02) Close Encounters State Com 103H | 8479.00 | 323.00  | 1435.00 | 634735.00 | 794068.00 | 32.74222856 | -103.51136357 |

FORMATION TOP DETAILS

| TVDPath | MDPath  | Formation  |
|---------|---------|------------|
| 1793.29 | 1793.29 | RSLR       |
| 2879.71 | 2893.93 | TNSL       |
| 2969.85 | 2987.99 | YTES       |
| 4862.77 | 4963.08 | GRBG       |
| 5460.53 | 5586.78 | CRCN       |
| 5526.95 | 5656.09 | BLCN       |
| 5992.25 | 6037.25 | BRSC       |
| 6774.55 | 6957.95 | AVNS       |
| 7282.43 | 7480.64 | BSPG       |
| 7694.38 | 7894.15 | BSPG1      |
| 8408.33 | 8718.23 | BSPG1_SAND |





# Dixon Planning Report

# DIXON

|                  |                                      |                                     |                                           |
|------------------|--------------------------------------|-------------------------------------|-------------------------------------------|
| <b>Database:</b> | dixon-compass                        | <b>Local Co-ordinate Reference:</b> | Well (02) Close Encounters State Com 103H |
| <b>Company:</b>  | Lario Oil & Gas Company              | <b>TVD Reference:</b>               | 23' RKB @ 4000.00usft                     |
| <b>Project:</b>  | Lea County, NM (N83 - NME)           | <b>MD Reference:</b>                | 23' RKB @ 4000.00usft                     |
| <b>Site:</b>     | Close Encounters Pad                 | <b>North Reference:</b>             | Grid                                      |
| <b>Well:</b>     | (02) Close Encounters State Com 103H | <b>Survey Calculation Method:</b>   | Minimum Curvature                         |
| <b>Wellbore:</b> | 103H                                 |                                     |                                           |
| <b>Design:</b>   | Plan 2                               |                                     |                                           |

|                    |                            |                      |                |
|--------------------|----------------------------|----------------------|----------------|
| <b>Project</b>     | Lea County, NM (N83 - NME) |                      |                |
| <b>Map System:</b> | US State Plane 1983        | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | North American Datum 1983  |                      |                |
| <b>Map Zone:</b>   | New Mexico Eastern Zone    |                      |                |

|                       |           |                      |                 |            |               |
|-----------------------|-----------|----------------------|-----------------|------------|---------------|
| Site                  |           | Close Encounters Pad |                 |            |               |
| Site Position:        |           | Northing:            | 634,437.00 usft | Latitude:  | 32.74144008   |
| From:                 | Map       | Easting:             | 792,632.00 usft | Longitude: | -103.51604101 |
| Position Uncertainty: | 0.00 usft | Slot Radius:         | 13-3/16 "       |            |               |

|                      |                                      |           |                     |                 |               |               |
|----------------------|--------------------------------------|-----------|---------------------|-----------------|---------------|---------------|
| Well                 | (02) Close Encounters State Com 103H |           |                     |                 |               |               |
| Well Position        | +N/-S                                | 0.00 usft | Northing:           | 634,412.00 usft | Latitude:     | 32.74137135   |
|                      | +E/-W                                | 0.00 usft | Easting:            | 792,633.00 usft | Longitude:    | -103.51603839 |
| Position Uncertainty |                                      | 0.00 usft | Wellhead Elevation: | usft            | Ground Level: | 3,977.00 usft |
| Grid Convergence:    | 0.442 °                              |           |                     |                 |               |               |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | 103H              |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | IGRF2020          | 6/5/2024           | 6.210                  | 60.275               | 47,490.28517473            |

|                          |                                |                     |                     |                      |      |
|--------------------------|--------------------------------|---------------------|---------------------|----------------------|------|
| <b>Design</b>            | Plan 2                         |                     |                     |                      |      |
| <b>Audit Notes:</b>      |                                |                     |                     |                      |      |
| <b>Version:</b>          |                                | <b>Phase:</b>       | PLAN                | <b>Tie On Depth:</b> | 0.00 |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b> | <b>Direction (°)</b> |      |
|                          | 0.00                           | 0.00                | 0.00                | 359.46               |      |

|                                 |                        |                          |                  |                |  |
|---------------------------------|------------------------|--------------------------|------------------|----------------|--|
| <b>Plan Survey Tool Program</b> | <b>Date</b>            | 2/2/2024                 |                  |                |  |
| <b>Depth From (usft)</b>        | <b>Depth To (usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Remarks</b> |  |
| 1                               | 0.00                   | 16,238.96 Plan 2 (103H)  | MWD+IFR1         |                |  |
|                                 |                        |                          | OWSG MWD + IFR1  |                |  |



Dixon  
Planning Report



|           |                                      |                              |                                           |
|-----------|--------------------------------------|------------------------------|-------------------------------------------|
| Database: | dixon-compass                        | Local Co-ordinate Reference: | Well (02) Close Encounters State Com 103H |
| Company:  | Lario Oil & Gas Company              | TVD Reference:               | 23' RKB @ 4000.00usft                     |
| Project:  | Lea County, NM (N83 - NME)           | MD Reference:                | 23' RKB @ 4000.00usft                     |
| Site:     | Close Encounters Pad                 | North Reference:             | Grid                                      |
| Well:     | (02) Close Encounters State Com 103H | Survey Calculation Method:   | Minimum Curvature                         |
| Wellbore: | 103H                                 |                              |                                           |
| Design:   | Plan 2                               |                              |                                           |

| 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                  | 0.000   |                       |
| 2,000.00              | 0.00            | 0.00        | 2,000.00              | 0.00         | 0.00         | 0.00                    | 0.00                   | 0.00                  | 0.000   |                       |
| 2,829.26              | 16.59           | 96.97       | 2,817.72              | -14.46       | 118.30       | 2.00                    | 2.00                   | 0.00                  | 96.968  |                       |
| 7,076.55              | 16.59           | 96.97       | 6,888.32              | -161.54      | 1,321.70     | 0.00                    | 0.00                   | 0.00                  | 0.000   |                       |
| 7,905.81              | 0.00            | 0.01        | 7,706.04              | -176.00      | 1,440.00     | 2.00                    | -2.00                  | 0.00                  | 180.000 |                       |
| 8,105.81              | 0.00            | 0.01        | 7,906.04              | -176.00      | 1,440.00     | 0.00                    | 0.00                   | 0.00                  | 0.000   | KOP - v2 - (02) Close |
| 9,075.44              | 96.96           | 359.47      | 8,474.77              | 466.40       | 1,434.03     | 10.00                   | 10.00                  | -0.06                 | 359.468 |                       |
| 10,071.58             | 96.96           | 359.47      | 8,354.00              | 1,455.14     | 1,424.85     | 0.00                    | 0.00                   | 0.00                  | 0.000   | WP01 - v2 - (02) Clos |
| 10,124.40             | 98.02           | 359.47      | 8,347.11              | 1,507.51     | 1,424.36     | 2.00                    | 2.00                   | 0.00                  | -0.066  |                       |
| 16,238.96             | 98.02           | 359.47      | 7,494.00              | 7,562.00     | 1,368.00     | 0.00                    | 0.00                   | 0.00                  | 0.000   | PBHL - v2 - (02) Clos |



# Dixon Planning Report



|                  |                                      |                                     |                                           |
|------------------|--------------------------------------|-------------------------------------|-------------------------------------------|
| <b>Database:</b> | dixon-compass                        | <b>Local Co-ordinate Reference:</b> | Well (02) Close Encounters State Com 103H |
| <b>Company:</b>  | Lario Oil & Gas Company              | <b>TVD Reference:</b>               | 23' RKB @ 4000.00usft                     |
| <b>Project:</b>  | Lea County, NM (N83 - NME)           | <b>MD Reference:</b>                | 23' RKB @ 4000.00usft                     |
| <b>Site:</b>     | Close Encounters Pad                 | <b>North Reference:</b>             | Grid                                      |
| <b>Well:</b>     | (02) Close Encounters State Com 103H | <b>Survey Calculation Method:</b>   | Minimum Curvature                         |
| <b>Wellbore:</b> | 103H                                 |                                     |                                           |
| <b>Design:</b>   | Plan 2                               |                                     |                                           |

| Planned Survey                   |                 |             |                       |              |              |                         |                         |                        |                       |
|----------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)            | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 0.00                             | 0.00            | 0.00        | 0.00                  | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 100.00                           | 0.00            | 0.00        | 100.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 200.00                           | 0.00            | 0.00        | 200.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 300.00                           | 0.00            | 0.00        | 300.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 400.00                           | 0.00            | 0.00        | 400.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 500.00                           | 0.00            | 0.00        | 500.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 600.00                           | 0.00            | 0.00        | 600.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 700.00                           | 0.00            | 0.00        | 700.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 800.00                           | 0.00            | 0.00        | 800.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 900.00                           | 0.00            | 0.00        | 900.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,000.00                         | 0.00            | 0.00        | 1,000.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,100.00                         | 0.00            | 0.00        | 1,100.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,200.00                         | 0.00            | 0.00        | 1,200.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,300.00                         | 0.00            | 0.00        | 1,300.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,400.00                         | 0.00            | 0.00        | 1,400.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,500.00                         | 0.00            | 0.00        | 1,500.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,600.00                         | 0.00            | 0.00        | 1,600.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,700.00                         | 0.00            | 0.00        | 1,700.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,800.00                         | 0.00            | 0.00        | 1,800.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,900.00                         | 0.00            | 0.00        | 1,900.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,000.00                         | 0.00            | 0.00        | 2,000.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| Start Build 2.00                 |                 |             |                       |              |              |                         |                         |                        |                       |
| 2,100.00                         | 2.00            | 96.97       | 2,099.98              | -0.21        | 1.73         | -0.23                   | 2.00                    | 2.00                   | 0.00                  |
| 2,200.00                         | 4.00            | 96.97       | 2,199.84              | -0.85        | 6.93         | -0.91                   | 2.00                    | 2.00                   | 0.00                  |
| 2,300.00                         | 6.00            | 96.97       | 2,299.45              | -1.90        | 15.58        | -2.05                   | 2.00                    | 2.00                   | 0.00                  |
| 2,400.00                         | 8.00            | 96.97       | 2,398.70              | -3.38        | 27.67        | -3.64                   | 2.00                    | 2.00                   | 0.00                  |
| 2,500.00                         | 10.00           | 96.97       | 2,497.47              | -5.28        | 43.20        | -5.69                   | 2.00                    | 2.00                   | 0.00                  |
| 2,600.00                         | 12.00           | 96.97       | 2,595.62              | -7.59        | 62.14        | -8.18                   | 2.00                    | 2.00                   | 0.00                  |
| 2,700.00                         | 14.00           | 96.97       | 2,693.06              | -10.32       | 84.47        | -11.12                  | 2.00                    | 2.00                   | 0.00                  |
| 2,800.00                         | 16.00           | 96.97       | 2,789.64              | -13.46       | 110.16       | -14.50                  | 2.00                    | 2.00                   | 0.00                  |
| 2,829.26                         | 16.59           | 96.97       | 2,817.72              | -14.46       | 118.30       | -15.57                  | 2.00                    | 2.00                   | 0.00                  |
| Start 4247.29 hold at 2829.26 MD |                 |             |                       |              |              |                         |                         |                        |                       |
| 2,900.00                         | 16.59           | 96.97       | 2,885.52              | -16.91       | 138.35       | -18.21                  | 0.00                    | 0.00                   | 0.00                  |
| 3,000.00                         | 16.59           | 96.97       | 2,981.36              | -20.37       | 166.68       | -21.94                  | 0.00                    | 0.00                   | 0.00                  |
| 3,100.00                         | 16.59           | 96.97       | 3,077.20              | -23.84       | 195.01       | -25.67                  | 0.00                    | 0.00                   | 0.00                  |
| 3,200.00                         | 16.59           | 96.97       | 3,173.04              | -27.30       | 223.35       | -29.40                  | 0.00                    | 0.00                   | 0.00                  |
| 3,300.00                         | 16.59           | 96.97       | 3,268.88              | -30.76       | 251.68       | -33.13                  | 0.00                    | 0.00                   | 0.00                  |
| 3,400.00                         | 16.59           | 96.97       | 3,364.72              | -34.22       | 280.01       | -36.86                  | 0.00                    | 0.00                   | 0.00                  |
| 3,500.00                         | 16.59           | 96.97       | 3,460.56              | -37.69       | 308.35       | -40.59                  | 0.00                    | 0.00                   | 0.00                  |
| 3,600.00                         | 16.59           | 96.97       | 3,556.40              | -41.15       | 336.68       | -44.32                  | 0.00                    | 0.00                   | 0.00                  |
| 3,700.00                         | 16.59           | 96.97       | 3,652.24              | -44.61       | 365.01       | -48.05                  | 0.00                    | 0.00                   | 0.00                  |
| 3,800.00                         | 16.59           | 96.97       | 3,748.08              | -48.08       | 393.35       | -51.78                  | 0.00                    | 0.00                   | 0.00                  |
| 3,900.00                         | 16.59           | 96.97       | 3,843.92              | -51.54       | 421.68       | -55.51                  | 0.00                    | 0.00                   | 0.00                  |
| 4,000.00                         | 16.59           | 96.97       | 3,939.76              | -55.00       | 450.01       | -59.24                  | 0.00                    | 0.00                   | 0.00                  |
| 4,100.00                         | 16.59           | 96.97       | 4,035.60              | -58.46       | 478.35       | -62.97                  | 0.00                    | 0.00                   | 0.00                  |
| 4,200.00                         | 16.59           | 96.97       | 4,131.44              | -61.93       | 506.68       | -66.70                  | 0.00                    | 0.00                   | 0.00                  |
| 4,300.00                         | 16.59           | 96.97       | 4,227.28              | -65.39       | 535.01       | -70.43                  | 0.00                    | 0.00                   | 0.00                  |
| 4,400.00                         | 16.59           | 96.97       | 4,323.12              | -68.85       | 563.35       | -74.16                  | 0.00                    | 0.00                   | 0.00                  |
| 4,500.00                         | 16.59           | 96.97       | 4,418.96              | -72.32       | 591.68       | -77.89                  | 0.00                    | 0.00                   | 0.00                  |
| 4,600.00                         | 16.59           | 96.97       | 4,514.80              | -75.78       | 620.01       | -81.62                  | 0.00                    | 0.00                   | 0.00                  |
| 4,700.00                         | 16.59           | 96.97       | 4,610.64              | -79.24       | 648.34       | -85.35                  | 0.00                    | 0.00                   | 0.00                  |
| 4,800.00                         | 16.59           | 96.97       | 4,706.48              | -82.71       | 676.68       | -89.08                  | 0.00                    | 0.00                   | 0.00                  |
| 4,900.00                         | 16.59           | 96.97       | 4,802.32              | -86.17       | 705.01       | -92.81                  | 0.00                    | 0.00                   | 0.00                  |
| 5,000.00                         | 16.59           | 96.97       | 4,898.16              | -89.63       | 733.34       | -96.54                  | 0.00                    | 0.00                   | 0.00                  |



# Dixon Planning Report



|                  |                                      |                                     |                                           |
|------------------|--------------------------------------|-------------------------------------|-------------------------------------------|
| <b>Database:</b> | dixon-compass                        | <b>Local Co-ordinate Reference:</b> | Well (02) Close Encounters State Com 103H |
| <b>Company:</b>  | Lario Oil & Gas Company              | <b>TVD Reference:</b>               | 23' RKB @ 4000.00usft                     |
| <b>Project:</b>  | Lea County, NM (N83 - NME)           | <b>MD Reference:</b>                | 23' RKB @ 4000.00usft                     |
| <b>Site:</b>     | Close Encounters Pad                 | <b>North Reference:</b>             | Grid                                      |
| <b>Well:</b>     | (02) Close Encounters State Com 103H | <b>Survey Calculation Method:</b>   | Minimum Curvature                         |
| <b>Wellbore:</b> | 103H                                 |                                     |                                           |
| <b>Design:</b>   | Plan 2                               |                                     |                                           |

| 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) |
| 5,100.00                                       | 16.59           | 96.97       | 4,994.00              | -93.09       | 761.68       | -100.27                 | 0.00                    | 0.00                   | 0.00                  |
| 5,200.00                                       | 16.59           | 96.97       | 5,089.84              | -96.56       | 790.01       | -104.00                 | 0.00                    | 0.00                   | 0.00                  |
| 5,300.00                                       | 16.59           | 96.97       | 5,185.68              | -100.02      | 818.34       | -107.73                 | 0.00                    | 0.00                   | 0.00                  |
| 5,400.00                                       | 16.59           | 96.97       | 5,281.52              | -103.48      | 846.68       | -111.46                 | 0.00                    | 0.00                   | 0.00                  |
| 5,500.00                                       | 16.59           | 96.97       | 5,377.36              | -106.95      | 875.01       | -115.19                 | 0.00                    | 0.00                   | 0.00                  |
| 5,600.00                                       | 16.59           | 96.97       | 5,473.20              | -110.41      | 903.34       | -118.92                 | 0.00                    | 0.00                   | 0.00                  |
| 5,700.00                                       | 16.59           | 96.97       | 5,569.04              | -113.87      | 931.68       | -122.65                 | 0.00                    | 0.00                   | 0.00                  |
| 5,800.00                                       | 16.59           | 96.97       | 5,664.88              | -117.33      | 960.01       | -126.38                 | 0.00                    | 0.00                   | 0.00                  |
| 5,900.00                                       | 16.59           | 96.97       | 5,760.71              | -120.80      | 988.34       | -130.11                 | 0.00                    | 0.00                   | 0.00                  |
| 6,000.00                                       | 16.59           | 96.97       | 5,856.55              | -124.26      | 1,016.68     | -133.84                 | 0.00                    | 0.00                   | 0.00                  |
| 6,100.00                                       | 16.59           | 96.97       | 5,952.39              | -127.72      | 1,045.01     | -137.57                 | 0.00                    | 0.00                   | 0.00                  |
| 6,200.00                                       | 16.59           | 96.97       | 6,048.23              | -131.19      | 1,073.34     | -141.30                 | 0.00                    | 0.00                   | 0.00                  |
| 6,300.00                                       | 16.59           | 96.97       | 6,144.07              | -134.65      | 1,101.67     | -145.03                 | 0.00                    | 0.00                   | 0.00                  |
| 6,400.00                                       | 16.59           | 96.97       | 6,239.91              | -138.11      | 1,130.01     | -148.76                 | 0.00                    | 0.00                   | 0.00                  |
| 6,500.00                                       | 16.59           | 96.97       | 6,335.75              | -141.58      | 1,158.34     | -152.49                 | 0.00                    | 0.00                   | 0.00                  |
| 6,600.00                                       | 16.59           | 96.97       | 6,431.59              | -145.04      | 1,186.67     | -156.22                 | 0.00                    | 0.00                   | 0.00                  |
| 6,700.00                                       | 16.59           | 96.97       | 6,527.43              | -148.50      | 1,215.01     | -159.95                 | 0.00                    | 0.00                   | 0.00                  |
| 6,800.00                                       | 16.59           | 96.97       | 6,623.27              | -151.96      | 1,243.34     | -163.68                 | 0.00                    | 0.00                   | 0.00                  |
| 6,900.00                                       | 16.59           | 96.97       | 6,719.11              | -155.43      | 1,271.67     | -167.40                 | 0.00                    | 0.00                   | 0.00                  |
| 7,000.00                                       | 16.59           | 96.97       | 6,814.95              | -158.89      | 1,300.01     | -171.13                 | 0.00                    | 0.00                   | 0.00                  |
| 7,076.55                                       | 16.59           | 96.97       | 6,888.32              | -161.54      | 1,321.70     | -173.99                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Start Drop -2.00</b>                        |                 |             |                       |              |              |                         |                         |                        |                       |
| 7,100.00                                       | 16.12           | 96.97       | 6,910.82              | -162.34      | 1,328.25     | -174.85                 | 2.00                    | -2.00                  | 0.00                  |
| 7,200.00                                       | 14.12           | 96.97       | 7,007.35              | -165.51      | 1,354.13     | -178.26                 | 2.00                    | -2.00                  | 0.00                  |
| 7,300.00                                       | 12.12           | 96.97       | 7,104.74              | -168.26      | 1,376.66     | -181.22                 | 2.00                    | -2.00                  | 0.00                  |
| 7,400.00                                       | 10.12           | 96.97       | 7,202.86              | -170.60      | 1,395.79     | -183.74                 | 2.00                    | -2.00                  | 0.00                  |
| 7,500.00                                       | 8.12            | 96.97       | 7,301.59              | -172.52      | 1,411.52     | -185.81                 | 2.00                    | -2.00                  | 0.00                  |
| 7,600.00                                       | 6.12            | 96.97       | 7,400.81              | -174.02      | 1,423.81     | -187.43                 | 2.00                    | -2.00                  | 0.00                  |
| 7,700.00                                       | 4.12            | 96.97       | 7,500.41              | -175.10      | 1,432.67     | -188.60                 | 2.00                    | -2.00                  | 0.00                  |
| 7,800.00                                       | 2.12            | 96.97       | 7,600.26              | -175.76      | 1,438.06     | -189.31                 | 2.00                    | -2.00                  | 0.00                  |
| 7,905.81                                       | 0.00            | 0.01        | 7,706.04              | -176.00      | 1,440.00     | -189.56                 | 2.00                    | -2.00                  | 0.00                  |
| <b>Start 200.00 hold at 7905.81 MD</b>         |                 |             |                       |              |              |                         |                         |                        |                       |
| 8,000.00                                       | 0.00            | 0.00        | 7,800.23              | -176.00      | 1,440.00     | -189.56                 | 0.00                    | 0.00                   | 0.00                  |
| 8,105.81                                       | 0.00            | 0.00        | 7,906.04              | -176.00      | 1,440.00     | -189.56                 | 0.00                    | 0.00                   | 0.00                  |
| <b>KOP: 8105.81'MD, 7906.04'TVD, 10.00'DLS</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 8,150.00                                       | 4.42            | 359.47      | 7,950.19              | -174.30      | 1,439.98     | -187.86                 | 10.00                   | 10.00                  | 0.00                  |
| 8,200.00                                       | 9.42            | 359.47      | 7,999.81              | -168.28      | 1,439.93     | -181.84                 | 10.00                   | 10.00                  | 0.00                  |
| 8,250.00                                       | 14.42           | 359.47      | 8,048.72              | -157.95      | 1,439.83     | -171.51                 | 10.00                   | 10.00                  | 0.00                  |
| 8,300.00                                       | 19.42           | 359.47      | 8,096.54              | -143.41      | 1,439.70     | -156.97                 | 10.00                   | 10.00                  | 0.00                  |
| 8,350.00                                       | 24.42           | 359.47      | 8,142.91              | -124.75      | 1,439.52     | -138.31                 | 10.00                   | 10.00                  | 0.00                  |
| 8,400.00                                       | 29.42           | 359.47      | 8,187.48              | -102.12      | 1,439.31     | -115.68                 | 10.00                   | 10.00                  | 0.00                  |
| 8,450.00                                       | 34.42           | 359.47      | 8,229.90              | -75.69       | 1,439.07     | -89.25                  | 10.00                   | 10.00                  | 0.00                  |
| 8,500.00                                       | 39.42           | 359.47      | 8,269.86              | -45.67       | 1,438.79     | -59.23                  | 10.00                   | 10.00                  | 0.00                  |
| 8,550.00                                       | 44.42           | 359.47      | 8,307.06              | -12.28       | 1,438.48     | -25.83                  | 10.00                   | 10.00                  | 0.00                  |
| 8,600.00                                       | 49.42           | 359.47      | 8,341.20              | 24.23        | 1,438.14     | 10.68                   | 10.00                   | 10.00                  | 0.00                  |
| 8,650.00                                       | 54.42           | 359.47      | 8,372.03              | 63.57        | 1,437.77     | 50.02                   | 10.00                   | 10.00                  | 0.00                  |
| 8,700.00                                       | 59.42           | 359.47      | 8,399.31              | 105.45       | 1,437.39     | 91.90                   | 10.00                   | 10.00                  | 0.00                  |
| 8,750.00                                       | 64.42           | 359.47      | 8,422.84              | 149.55       | 1,436.98     | 136.00                  | 10.00                   | 10.00                  | 0.00                  |
| 8,800.00                                       | 69.42           | 359.47      | 8,442.43              | 195.53       | 1,436.55     | 181.99                  | 10.00                   | 10.00                  | 0.00                  |
| 8,850.00                                       | 74.42           | 359.47      | 8,457.94              | 243.05       | 1,436.11     | 229.50                  | 10.00                   | 10.00                  | 0.00                  |
| 8,900.00                                       | 79.42           | 359.47      | 8,469.26              | 291.73       | 1,435.66     | 278.19                  | 10.00                   | 10.00                  | 0.00                  |
| 8,950.00                                       | 84.42           | 359.47      | 8,476.28              | 341.22       | 1,435.20     | 327.68                  | 10.00                   | 10.00                  | 0.00                  |
| 9,000.00                                       | 89.42           | 359.47      | 8,478.97              | 391.13       | 1,434.73     | 377.59                  | 10.00                   | 10.00                  | 0.00                  |



# Dixon

## Planning Report



|                  |                                      |                                     |                                           |
|------------------|--------------------------------------|-------------------------------------|-------------------------------------------|
| <b>Database:</b> | dixon-compass                        | <b>Local Co-ordinate Reference:</b> | Well (02) Close Encounters State Com 103H |
| <b>Company:</b>  | Lario Oil & Gas Company              | <b>TVD Reference:</b>               | 23' RKB @ 4000.00usft                     |
| <b>Project:</b>  | Lea County, NM (N83 - NME)           | <b>MD Reference:</b>                | 23' RKB @ 4000.00usft                     |
| <b>Site:</b>     | Close Encounters Pad                 | <b>North Reference:</b>             | Grid                                      |
| <b>Well:</b>     | (02) Close Encounters State Com 103H | <b>Survey Calculation Method:</b>   | Minimum Curvature                         |
| <b>Wellbore:</b> | 103H                                 |                                     |                                           |
| <b>Design:</b>   | Plan 2                               |                                     |                                           |

| 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) |
| 9,050.00                                       | 94.42           | 359.47      | 8,477.29              | 441.08       | 1,434.27     | 427.54                  | 10.00                   | 10.00                  | 0.00                  |
| 9,075.44                                       | 96.96           | 359.47      | 8,474.77              | 466.40       | 1,434.03     | 452.86                  | 10.00                   | 10.00                  | 0.00                  |
| <b>EOC: 9075.44'MD, 8474.77'TVD, 452.86'VS</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,100.00                                       | 96.96           | 359.47      | 8,471.79              | 490.77       | 1,433.81     | 477.24                  | 0.00                    | 0.00                   | 0.00                  |
| 9,200.00                                       | 96.96           | 359.47      | 8,459.67              | 590.03       | 1,432.89     | 576.50                  | 0.00                    | 0.00                   | 0.00                  |
| 9,300.00                                       | 96.96           | 359.47      | 8,447.55              | 689.29       | 1,431.96     | 675.76                  | 0.00                    | 0.00                   | 0.00                  |
| 9,400.00                                       | 96.96           | 359.47      | 8,435.42              | 788.54       | 1,431.04     | 775.02                  | 0.00                    | 0.00                   | 0.00                  |
| 9,500.00                                       | 96.96           | 359.47      | 8,423.30              | 887.80       | 1,430.12     | 874.29                  | 0.00                    | 0.00                   | 0.00                  |
| 9,600.00                                       | 96.96           | 359.47      | 8,411.17              | 987.06       | 1,429.20     | 973.55                  | 0.00                    | 0.00                   | 0.00                  |
| 9,700.00                                       | 96.96           | 359.47      | 8,399.05              | 1,086.32     | 1,428.28     | 1,072.81                | 0.00                    | 0.00                   | 0.00                  |
| 9,800.00                                       | 96.96           | 359.47      | 8,386.93              | 1,185.58     | 1,427.35     | 1,172.07                | 0.00                    | 0.00                   | 0.00                  |
| 9,900.00                                       | 96.96           | 359.47      | 8,374.80              | 1,284.83     | 1,426.43     | 1,271.33                | 0.00                    | 0.00                   | 0.00                  |
| 10,000.00                                      | 96.96           | 359.47      | 8,362.68              | 1,384.09     | 1,425.51     | 1,370.60                | 0.00                    | 0.00                   | 0.00                  |
| 10,071.58                                      | 96.96           | 359.47      | 8,354.00              | 1,455.14     | 1,424.85     | 1,441.65                | 0.00                    | 0.00                   | 0.00                  |
| 10,100.00                                      | 97.53           | 359.47      | 8,350.41              | 1,483.33     | 1,424.59     | 1,469.84                | 2.00                    | 2.00                   | 0.00                  |
| 10,124.40                                      | 98.02           | 359.47      | 8,347.11              | 1,507.51     | 1,424.36     | 1,494.02                | 2.00                    | 2.00                   | 0.00                  |
| 10,200.00                                      | 98.02           | 359.47      | 8,336.57              | 1,582.37     | 1,423.67     | 1,568.88                | 0.00                    | 0.00                   | 0.00                  |
| 10,300.00                                      | 98.02           | 359.47      | 8,322.61              | 1,681.38     | 1,422.74     | 1,667.90                | 0.00                    | 0.00                   | 0.00                  |
| 10,400.00                                      | 98.02           | 359.47      | 8,308.66              | 1,780.40     | 1,421.82     | 1,766.92                | 0.00                    | 0.00                   | 0.00                  |
| 10,500.00                                      | 98.02           | 359.47      | 8,294.71              | 1,879.42     | 1,420.90     | 1,865.94                | 0.00                    | 0.00                   | 0.00                  |
| 10,600.00                                      | 98.02           | 359.47      | 8,280.76              | 1,978.44     | 1,419.98     | 1,964.97                | 0.00                    | 0.00                   | 0.00                  |
| 10,700.00                                      | 98.02           | 359.47      | 8,266.80              | 2,077.45     | 1,419.06     | 2,063.99                | 0.00                    | 0.00                   | 0.00                  |
| 10,800.00                                      | 98.02           | 359.47      | 8,252.85              | 2,176.47     | 1,418.14     | 2,163.01                | 0.00                    | 0.00                   | 0.00                  |
| 10,900.00                                      | 98.02           | 359.47      | 8,238.90              | 2,275.49     | 1,417.21     | 2,262.03                | 0.00                    | 0.00                   | 0.00                  |
| 11,000.00                                      | 98.02           | 359.47      | 8,224.95              | 2,374.51     | 1,416.29     | 2,361.05                | 0.00                    | 0.00                   | 0.00                  |
| 11,100.00                                      | 98.02           | 359.47      | 8,211.00              | 2,473.52     | 1,415.37     | 2,460.07                | 0.00                    | 0.00                   | 0.00                  |
| 11,200.00                                      | 98.02           | 359.47      | 8,197.04              | 2,572.54     | 1,414.45     | 2,559.10                | 0.00                    | 0.00                   | 0.00                  |
| 11,300.00                                      | 98.02           | 359.47      | 8,183.09              | 2,671.56     | 1,413.53     | 2,658.12                | 0.00                    | 0.00                   | 0.00                  |
| 11,400.00                                      | 98.02           | 359.47      | 8,169.14              | 2,770.58     | 1,412.60     | 2,757.14                | 0.00                    | 0.00                   | 0.00                  |
| 11,500.00                                      | 98.02           | 359.47      | 8,155.19              | 2,869.59     | 1,411.68     | 2,856.16                | 0.00                    | 0.00                   | 0.00                  |
| 11,600.00                                      | 98.02           | 359.47      | 8,141.24              | 2,968.61     | 1,410.76     | 2,955.18                | 0.00                    | 0.00                   | 0.00                  |
| 11,700.00                                      | 98.02           | 359.47      | 8,127.28              | 3,067.63     | 1,409.84     | 3,054.21                | 0.00                    | 0.00                   | 0.00                  |
| 11,800.00                                      | 98.02           | 359.47      | 8,113.33              | 3,166.65     | 1,408.92     | 3,153.23                | 0.00                    | 0.00                   | 0.00                  |
| 11,900.00                                      | 98.02           | 359.47      | 8,099.38              | 3,265.66     | 1,408.00     | 3,252.25                | 0.00                    | 0.00                   | 0.00                  |
| 12,000.00                                      | 98.02           | 359.47      | 8,085.43              | 3,364.68     | 1,407.07     | 3,351.27                | 0.00                    | 0.00                   | 0.00                  |
| 12,100.00                                      | 98.02           | 359.47      | 8,071.47              | 3,463.70     | 1,406.15     | 3,450.29                | 0.00                    | 0.00                   | 0.00                  |
| 12,200.00                                      | 98.02           | 359.47      | 8,057.52              | 3,562.72     | 1,405.23     | 3,549.32                | 0.00                    | 0.00                   | 0.00                  |
| 12,300.00                                      | 98.02           | 359.47      | 8,043.57              | 3,661.74     | 1,404.31     | 3,648.34                | 0.00                    | 0.00                   | 0.00                  |
| 12,400.00                                      | 98.02           | 359.47      | 8,029.62              | 3,760.75     | 1,403.39     | 3,747.36                | 0.00                    | 0.00                   | 0.00                  |
| 12,500.00                                      | 98.02           | 359.47      | 8,015.67              | 3,859.77     | 1,402.47     | 3,846.38                | 0.00                    | 0.00                   | 0.00                  |
| 12,600.00                                      | 98.02           | 359.47      | 8,001.71              | 3,958.79     | 1,401.54     | 3,945.40                | 0.00                    | 0.00                   | 0.00                  |
| 12,700.00                                      | 98.02           | 359.47      | 7,987.76              | 4,057.81     | 1,400.62     | 4,044.43                | 0.00                    | 0.00                   | 0.00                  |
| 12,800.00                                      | 98.02           | 359.47      | 7,973.81              | 4,156.82     | 1,399.70     | 4,143.45                | 0.00                    | 0.00                   | 0.00                  |
| 12,900.00                                      | 98.02           | 359.47      | 7,959.86              | 4,255.84     | 1,398.78     | 4,242.47                | 0.00                    | 0.00                   | 0.00                  |
| 13,000.00                                      | 98.02           | 359.47      | 7,945.90              | 4,354.86     | 1,397.86     | 4,341.49                | 0.00                    | 0.00                   | 0.00                  |
| 13,100.00                                      | 98.02           | 359.47      | 7,931.95              | 4,453.88     | 1,396.93     | 4,440.51                | 0.00                    | 0.00                   | 0.00                  |
| 13,200.00                                      | 98.02           | 359.47      | 7,918.00              | 4,552.89     | 1,396.01     | 4,539.53                | 0.00                    | 0.00                   | 0.00                  |
| 13,300.00                                      | 98.02           | 359.47      | 7,904.05              | 4,651.91     | 1,395.09     | 4,638.56                | 0.00                    | 0.00                   | 0.00                  |
| 13,400.00                                      | 98.02           | 359.47      | 7,890.10              | 4,750.93     | 1,394.17     | 4,737.58                | 0.00                    | 0.00                   | 0.00                  |
| 13,500.00                                      | 98.02           | 359.47      | 7,876.14              | 4,849.95     | 1,393.25     | 4,836.60                | 0.00                    | 0.00                   | 0.00                  |
| 13,600.00                                      | 98.02           | 359.47      | 7,862.19              | 4,948.96     | 1,392.33     | 4,935.62                | 0.00                    | 0.00                   | 0.00                  |
| 13,700.00                                      | 98.02           | 359.47      | 7,848.24              | 5,047.98     | 1,391.40     | 5,034.64                | 0.00                    | 0.00                   | 0.00                  |
| 13,800.00                                      | 98.02           | 359.47      | 7,834.29              | 5,147.00     | 1,390.48     | 5,133.67                | 0.00                    | 0.00                   | 0.00                  |
| 13,900.00                                      | 98.02           | 359.47      | 7,820.34              | 5,246.02     | 1,389.56     | 5,232.69                | 0.00                    | 0.00                   | 0.00                  |



# Dixon

## Planning Report



|                  |                                      |                                     |                                           |
|------------------|--------------------------------------|-------------------------------------|-------------------------------------------|
| <b>Database:</b> | dixon-compass                        | <b>Local Co-ordinate Reference:</b> | Well (02) Close Encounters State Com 103H |
| <b>Company:</b>  | Lario Oil & Gas Company              | <b>TVD Reference:</b>               | 23' RKB @ 4000.00usft                     |
| <b>Project:</b>  | Lea County, NM (N83 - NME)           | <b>MD Reference:</b>                | 23' RKB @ 4000.00usft                     |
| <b>Site:</b>     | Close Encounters Pad                 | <b>North Reference:</b>             | Grid                                      |
| <b>Well:</b>     | (02) Close Encounters State Com 103H | <b>Survey Calculation Method:</b>   | Minimum Curvature                         |
| <b>Wellbore:</b> | 103H                                 |                                     |                                           |
| <b>Design:</b>   | Plan 2                               |                                     |                                           |

| 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) |
| 14,000.00                                | 98.02           | 359.47      | 7,806.38              | 5,345.03     | 1,388.64     | 5,331.71                | 0.00                    | 0.00                   | 0.00                  |
| 14,100.00                                | 98.02           | 359.47      | 7,792.43              | 5,444.05     | 1,387.72     | 5,430.73                | 0.00                    | 0.00                   | 0.00                  |
| 14,200.00                                | 98.02           | 359.47      | 7,778.48              | 5,543.07     | 1,386.79     | 5,529.75                | 0.00                    | 0.00                   | 0.00                  |
| 14,300.00                                | 98.02           | 359.47      | 7,764.53              | 5,642.09     | 1,385.87     | 5,628.78                | 0.00                    | 0.00                   | 0.00                  |
| 14,400.00                                | 98.02           | 359.47      | 7,750.57              | 5,741.11     | 1,384.95     | 5,727.80                | 0.00                    | 0.00                   | 0.00                  |
| 14,500.00                                | 98.02           | 359.47      | 7,736.62              | 5,840.12     | 1,384.03     | 5,826.82                | 0.00                    | 0.00                   | 0.00                  |
| 14,600.00                                | 98.02           | 359.47      | 7,722.67              | 5,939.14     | 1,383.11     | 5,925.84                | 0.00                    | 0.00                   | 0.00                  |
| 14,700.00                                | 98.02           | 359.47      | 7,708.72              | 6,038.16     | 1,382.19     | 6,024.86                | 0.00                    | 0.00                   | 0.00                  |
| 14,800.00                                | 98.02           | 359.47      | 7,694.77              | 6,137.18     | 1,381.26     | 6,123.89                | 0.00                    | 0.00                   | 0.00                  |
| 14,900.00                                | 98.02           | 359.47      | 7,680.81              | 6,236.19     | 1,380.34     | 6,222.91                | 0.00                    | 0.00                   | 0.00                  |
| 15,000.00                                | 98.02           | 359.47      | 7,666.86              | 6,335.21     | 1,379.42     | 6,321.93                | 0.00                    | 0.00                   | 0.00                  |
| 15,100.00                                | 98.02           | 359.47      | 7,652.91              | 6,434.23     | 1,378.50     | 6,420.95                | 0.00                    | 0.00                   | 0.00                  |
| 15,200.00                                | 98.02           | 359.47      | 7,638.96              | 6,533.25     | 1,377.58     | 6,519.97                | 0.00                    | 0.00                   | 0.00                  |
| 15,300.00                                | 98.02           | 359.47      | 7,625.01              | 6,632.26     | 1,376.66     | 6,618.99                | 0.00                    | 0.00                   | 0.00                  |
| 15,400.00                                | 98.02           | 359.47      | 7,611.05              | 6,731.28     | 1,375.73     | 6,718.02                | 0.00                    | 0.00                   | 0.00                  |
| 15,500.00                                | 98.02           | 359.47      | 7,597.10              | 6,830.30     | 1,374.81     | 6,817.04                | 0.00                    | 0.00                   | 0.00                  |
| 15,600.00                                | 98.02           | 359.47      | 7,583.15              | 6,929.32     | 1,373.89     | 6,916.06                | 0.00                    | 0.00                   | 0.00                  |
| 15,700.00                                | 98.02           | 359.47      | 7,569.20              | 7,028.33     | 1,372.97     | 7,015.08                | 0.00                    | 0.00                   | 0.00                  |
| 15,800.00                                | 98.02           | 359.47      | 7,555.24              | 7,127.35     | 1,372.05     | 7,114.10                | 0.00                    | 0.00                   | 0.00                  |
| 15,900.00                                | 98.02           | 359.47      | 7,541.29              | 7,226.37     | 1,371.12     | 7,213.13                | 0.00                    | 0.00                   | 0.00                  |
| 16,000.00                                | 98.02           | 359.47      | 7,527.34              | 7,325.39     | 1,370.20     | 7,312.15                | 0.00                    | 0.00                   | 0.00                  |
| 16,100.00                                | 98.02           | 359.47      | 7,513.39              | 7,424.40     | 1,369.28     | 7,411.17                | 0.00                    | 0.00                   | 0.00                  |
| 16,200.00                                | 98.02           | 359.47      | 7,499.44              | 7,523.42     | 1,368.36     | 7,510.19                | 0.00                    | 0.00                   | 0.00                  |
| 16,238.96                                | 98.02           | 359.47      | 7,494.00              | 7,562.00     | 1,368.00     | 7,548.77                | 0.00                    | 0.00                   | 0.00                  |
| TD: 16238.96'MD, 7494.00'TVD, 7548.77'VS |                 |             |                       |              |              |                         |                         |                        |                       |

| 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                                                                                          |               |              |            |              |              |                 |                |             |               |
| PBHL - v2 - (02) Close E                                                                         | 0.00          | 0.00         | 7,494.00   | 7,562.00     | 1,368.00     | 641,974.00      | 794,001.00     | 32.76212560 | -103.51139873 |
| - plan hits target center                                                                        |               |              |            |              |              |                 |                |             |               |
| - Point                                                                                          |               |              |            |              |              |                 |                |             |               |
| KOP - v2 - (02) Close Er                                                                         | 0.00          | 0.01         | 7,906.04   | -176.00      | 1,440.00     | 634,236.00      | 794,073.00     | 32.74085701 | -103.51135990 |
| - plan hits target center                                                                        |               |              |            |              |              |                 |                |             |               |
| - Point                                                                                          |               |              |            |              |              |                 |                |             |               |
| WP01 - v2 - (02) Close E                                                                         | 0.00          | 0.00         | 8,354.00   | 1,455.14     | 1,424.85     | 635,867.14      | 794,057.85     | 32.74534035 | -103.51136800 |
| - plan hits target center                                                                        |               |              |            |              |              |                 |                |             |               |
| - Point                                                                                          |               |              |            |              |              |                 |                |             |               |
| LTP - v2 - (02) Close En                                                                         | 0.00          | 0.00         | 8,450.00   | 7,512.00     | 1,368.00     | 641,924.00      | 794,001.00     | 32.76198818 | -103.51140000 |
| - plan misses target center by 939.67usft at 16056.07usft MD (7519.52 TVD, 7380.91 N, 1369.69 E) |               |              |            |              |              |                 |                |             |               |
| - Point                                                                                          |               |              |            |              |              |                 |                |             |               |
| FTP/LP - v2 - (02) Close                                                                         | 0.00          | 0.00         | 8,479.00   | 323.00       | 1,435.00     | 634,735.00      | 794,068.00     | 32.74222856 | -103.51136356 |
| - plan misses target center by 4.77usft at 8932.34usft MD (8474.29 TVD, 323.67 N, 1435.36 E)     |               |              |            |              |              |                 |                |             |               |
| - Point                                                                                          |               |              |            |              |              |                 |                |             |               |



# Dixon

## Planning Report



|                  |                                      |                                     |                                           |
|------------------|--------------------------------------|-------------------------------------|-------------------------------------------|
| <b>Database:</b> | dixon-compass                        | <b>Local Co-ordinate Reference:</b> | Well (02) Close Encounters State Com 103H |
| <b>Company:</b>  | Lario Oil & Gas Company              | <b>TVD Reference:</b>               | 23' RKB @ 4000.00usft                     |
| <b>Project:</b>  | Lea County, NM (N83 - NME)           | <b>MD Reference:</b>                | 23' RKB @ 4000.00usft                     |
| <b>Site:</b>     | Close Encounters Pad                 | <b>North Reference:</b>             | Grid                                      |
| <b>Well:</b>     | (02) Close Encounters State Com 103H | <b>Survey Calculation Method:</b>   | Minimum Curvature                         |
| <b>Wellbore:</b> | 103H                                 |                                     |                                           |
| <b>Design:</b>   | Plan 2                               |                                     |                                           |

| Formations            |                       |            |           |         |                   |  |
|-----------------------|-----------------------|------------|-----------|---------|-------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name       | Lithology | Dip (°) | Dip Direction (°) |  |
| 1,793.29              | 1,793.29              | RS LR      |           |         |                   |  |
| 2,893.93              | 2,879.71              | TNSL       |           |         |                   |  |
| 2,987.99              | 2,969.85              | YTES       |           |         |                   |  |
| 4,963.08              | 4,862.77              | GRBG       |           |         |                   |  |
| 5,586.78              | 5,460.53              | CRCN       |           |         |                   |  |
| 5,656.09              | 5,526.95              | BLCN       |           |         |                   |  |
| 6,037.25              | 5,892.25              | BRSC       |           |         |                   |  |
| 6,957.95              | 6,774.65              | AVNS       |           |         |                   |  |
| 7,480.64              | 7,282.43              | BSPG       |           |         |                   |  |
| 7,894.15              | 7,694.38              | BSPG1      |           |         |                   |  |
| 8,718.23              | 8,408.33              | BSPG1_SAND |           |         |                   |  |

| Plan Annotations      |                       |                   |              |                                          |  |
|-----------------------|-----------------------|-------------------|--------------|------------------------------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              |                                          |  |
|                       |                       | +N/-S (usft)      | +E/-W (usft) | Comment                                  |  |
| 2,000.00              | 2,000.00              | 0.00              | 0.00         | Start Build 2.00                         |  |
| 2,829.26              | 2,817.72              | -14.46            | 118.30       | Start 4247.29 hold at 2829.26 MD         |  |
| 7,076.55              | 6,888.32              | -161.54           | 1,321.70     | Start Drop -2.00                         |  |
| 7,905.81              | 7,706.04              | -176.00           | 1,440.00     | Start 200.00 hold at 7905.81 MD          |  |
| 8,105.81              | 7,906.04              | -176.00           | 1,440.00     | KOP: 8105.81'MD, 7906.04'TVD, 10.00'DLS  |  |
| 9,075.44              | 8,474.77              | 466.40            | 1,434.03     | EOC: 9075.44'MD, 8474.77'TVD, 452.86'VS  |  |
| 16,238.96             | 7,494.00              | 1,455.14          | 1,424.85     | TD: 16238.96'MD, 7494.00'TVD, 7548.77'VS |  |

State of New Mexico  
Energy, Minerals and Natural Resources Department  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Submit Electronically  
Via E-permitting

## NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

### Section 1 – Plan Description

Effective May 25, 2021

**I. Operator:** Lario Oil & Gas Co.

**OGRID:** 13089

**Date:** 4-1-24

**II. Type:** ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: \_\_\_\_\_

**III. Well(s):** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

| Well Name                       | API     | ULSTR        | Footages           | Anticipated Oil BBL/D | Anticipated Gas MCF/D | Anticipated Produced Water BBL/D |
|---------------------------------|---------|--------------|--------------------|-----------------------|-----------------------|----------------------------------|
| Close Encounters State Com 101H | 30-025- | N-13-18S-34E | 245 FSL & 1961 FWL | 1150                  | 550                   | 1575                             |
| Close Encounters State Com 102H | 30-025- | N-13-18S-34E | 270 FSL & 1961 FWL | 1150                  | 550                   | 1575                             |
| Close Encounters State Com 103H | 30-025- | N-13-18S-34E | 295 FSL & 1961 FWL | 1150                  | 550                   | 1575                             |
| Close Encounters State Com 104H | 30-025- | N-13-18S-34E | 320 FSL & 1961 FWL | 1150                  | 550                   | 1575                             |
| Close Encounters State Com 301H | 30-025- | N-13-18S-34E | 220 FSL & 1961 FWL | 1150                  | 550                   | 1575                             |
| Close Encounters State Com 302H | 30-025- | N-13-18S-34E | 219 FSL & 1961 FWL | 1150                  | 550                   | 1575                             |
| Close Encounters State Com 303H | 30-025- | N-13-18S-34E | 170 FSL & 1961 FWL | 1150                  | 550                   | 1575                             |
| Close Encounters State Com 304H | 30-025- | N-13-18S-34E | 145 FSL & 1961 FWL | 1150                  | 550                   | 1575                             |

**IV. Central Delivery Point Name:** DCP Midstream, LP (248749) in M-24-18s-34e [See 19.15.27.9(D)(1) NMAC]

**V. Anticipated Schedule:** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

| Well Name                       | API     | Spud Date | TD Reached Date | Completion Commencement Date | Initial Flow Back Date | First Production Date |
|---------------------------------|---------|-----------|-----------------|------------------------------|------------------------|-----------------------|
| Close Encounters State Com 101H | 30-025- | 6-1-24    | 7-1-24          | 7-5-24                       | 8-5-24                 | 8-10-24               |
| Close Encounters State Com 102H | 30-025- | 7-1-24    | 8-1-24          | 8-5-24                       | 9-5-24                 | 9-10-24               |
| Close Encounters State Com 103H | 30-025- | 8-1-24    | 9-1-24          | 9-5-24                       | 10-5-24                | 10-10-24              |
| Close Encounters State Com 104H | 30-025- | 9-1-24    | 10-1-24         | 10-5-24                      | 11-5-24                | 11-10-24              |
| Close Encounters State Com 301H | 30-025- | 10-1-24   | 11-1-24         | 11-5-24                      | 12-5-24                | 12-10-24              |

|                                    |         |         |         |         |        |         |
|------------------------------------|---------|---------|---------|---------|--------|---------|
| Close Encounters<br>State Com 302H | 30-025- | 11-1-24 | 12-1-24 | 12-5-24 | 1-5-25 | 1-10-25 |
| Close Encounters<br>State Com 303H | 30-025- | 12-1-24 | 1-1-25  | 1-5-25  | 2-5-25 | 2-10-25 |
| Close Encounters<br>State Com 304H | 30-025- | 1-1-25  | 2-1-25  | 2-5-25  | 3-5-25 | 3-10-25 |

**VI. Separation Equipment:** ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

**VII. Operational Practices:** ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

**VIII. Best Management Practices:** ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

## **Section 2 – Enhanced Plan** **EFFECTIVE APRIL 1, 2022**

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

### **IX. Anticipated Natural Gas Production:**

| Well | API | Anticipated Average<br>Natural Gas Rate MCF/D | Anticipated Volume of Natural<br>Gas for the First Year MCF |
|------|-----|-----------------------------------------------|-------------------------------------------------------------|
|      |     |                                               |                                                             |
|      |     |                                               |                                                             |

### **X. Natural Gas Gathering System (NGGS):**

| Operator | System | ULSTR of Tie-in | Anticipated Gathering<br>Start Date | Available Maximum Daily Capacity<br>of System Segment Tie-in |
|----------|--------|-----------------|-------------------------------------|--------------------------------------------------------------|
|          |        |                 |                                     |                                                              |
|          |        |                 |                                     |                                                              |

**XI. Map.** ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

**XII. Line Capacity.** The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

**XIII. Line Pressure.** Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

**XIV. Confidentiality:** ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

### **Section 3 - Certifications**

**Effective May 25, 2021**

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

***If Operator checks this box, Operator will select one of the following:***

**Well Shut-In.** ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

**Venting and Flaring Plan.** ☒ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

### **Section 4 - Notices**

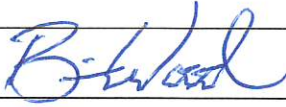
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

|                                                                                           |                                                                                   |
|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Signature:                                                                                |  |
| Printed Name:                                                                             | Brian Wood                                                                        |
| Title:                                                                                    | Consultant                                                                        |
| E-mail Address:                                                                           | brian@permitswest.com                                                             |
| Date:                                                                                     | 4-1-24                                                                            |
| Phone:                                                                                    | 505 466-8120                                                                      |
| <b>OIL CONSERVATION DIVISION</b><br>(Only applicable when submitted as a standalone form) |                                                                                   |
| Approved By:                                                                              |                                                                                   |
| Title:                                                                                    |                                                                                   |
| Approval Date:                                                                            |                                                                                   |
| Conditions of Approval:                                                                   |                                                                                   |

## VI. Equipment

Lario Oil & Gas Co. tentatively plans to install:

fuel safety shut-off valves  
gas scrubbers  
oil tanks  
meters  
stack  
separators  
compressor  
water tanks  
heater-treaters  
vapor recovery units  
vapor recovery piping for all tanks

## VII. Operational Practices

### NMAC 19.15.27.8 (A) Venting & Flaring of Natural Gas

1. Lario Oil & Gas Co. (LARIO) will comply NMAC 19.15.27.8 – venting and flaring of gas during drilling, completion, or production that constitutes waste as defined in 19.15.2 is banned.

### NMAC 19.15.27.8 (B) Venting & Flaring During Drilling

1. LARIO will capture or combust gas if technically feasible during drilling operations using best industry practices.
2. A flare stack with a 100% capacity for expected volume will be set on the pad  $\geq 100$  feet from the nearest well head and storage tank.
3. In an emergency, LARIO will vent gas in order to avoid substantial impact. LARIO will report vented or flared gas to the NMOCD.

### NMAC 19.15.27.8 (C) Venting & Flaring During Completion or Recompletion

1. Facilities will be built and ready from the first day of flowback
2. Test separator will be properly separate gas and liquids. Temporary test separator will be used initially to process volumes. In addition, separator will be tied into flowback tanks which will be tied into the gas processing equipment for sale down a pipeline.
3. Should the facility not be ready to process gas, or the gas does not meet quality standards, then storage tanks will be set that are tied into gas busters or a temporary flare to manage all gas. This flare would meet the following requirements:
  - a) An appropriate sized flare stack with an automatic igniter
  - b) LARIO analyzes gas samples twice a week

- c) LARIO flows the gas into a gathering line as soon as the pipeline specifications are met
- d) LARIO provides the NMOCD with pipeline specifications and natural gas data.

#### NMAC 19.15.27.8 (D) Venting & Flaring During Production

LARIO will not vent or flare natural gas except:

1. During an emergency or malfunction
2. To unload or clean-up liquid holdup in a well to atmospheric pressure, provided
  - a) LARIO does not vent after the well achieves a stabilized rate and pressure
  - b) LARIO will be on-site while unloading liquids by manual purging and take all reasonable actions to achieve a stabilized rate and pressure as soon as possible
  - c) LARIO will optimize the system to minimize gas venting if the well is equipped with a plunger lift or auto control system
  - d) Best management practices will be used during downhole well maintenance.
3. During the first year of production from an exploratory well provided
  - a) LARIO receives approval from the NMOCD
  - b) LARIO stays in compliance with NMOCD gas capture requirements
  - c) LARIO submits an updated C-129 form to the NMOCD
4. During the following activities unless prohibited
  - a) Gauging or sampling a storage tank or low-pressure production vessel
  - b) Loading out liquids from a storage tank
  - c) Repair and maintenance
  - d) Normal operation of a gas-activated pneumatic controller or pump
  - e) Normal operation of a storage tank but not including venting from a thief hatch
  - f) Normal operation of dehydration units
  - g) Normal operations of compressors, engines, turbines, valves, flanges, & connectors
  - h) During a Braden head, packer leak test, or production test lasting <24 hours
  - i) When natural gas does not meet the gathering line specifications
  - j) Commissioning of lines, equipment, or facilities only for as long as necessary to purge introduced impurities.

#### NMAC 19.15.27.8 (E) Performance Standards

1. LARIO used a safety factor to design the separation and storage equipment. The equipment will be routed to a vapor recovery system and uses a flare as back up for startup, shutdown, maintenance, or malfunction of the VRU system.
2. LARIO will install a flare that will handle the full facility vapor volume in case the VRU fails. It will have an auto-ignition system.
3. Flare stacks will be appropriately sized and designed to ensure proper combustion efficiency
  - a) Flare stacks installed or replaced will be equipped with an automatic ignitor or continuous pilot.

- b) Previously installed flare stacks will be retrofitted within 18 months of May 25, 2021 with an automatic ignitor, continuous pilot, or technology that alerts LARIO to flare malfunction.
  - c) Flare stacks replaced after May 25, 2021 will be equipped with an automatic ignitor or continuous pilot if at a well or facility with an average production of  $\leq 60$  Mcfd of natural gas.
  - d) Flare stacks will be located  $>100$  feet from well head and storage tanks and securely anchored.
- 4. LARIO will conduct an audio/visual/olfactory inspection on all components for leaks and defects every week.
  - 5. LARIO will make and keep records of AVO inspections available to the NMOCD for at least 5 years.
  - 6. LARIO may use a remote or automated monitoring technology to detect leaks and releases in lieu of AVO inspections with prior NMOCD approval.
  - 7. Facilities will be designed to minimize waste.
  - 8. LARIO will resolve emergencies as promptly as possible.

NMAC 19.15.27.8 (F) Measuring or Estimating Vented & Flared Natural Gas

- 1. LARIO will have meters on both the low pressure and high-pressure sides of the flares. Volumes will be recorded in the SCADA system.
- 2. LARIO will install equipment to measure the volume of flared natural gas that has an average production of  $\geq 60$  Mcfd.
- 3. LARIO's measuring equipment will conform to industry standards.
- 4. Measurement system will be designed such that it cannot be bypassed except for inspections and servicing the meters.
- 5. LARIO will estimate the volume of vented or flared gas using a methodology that can be independently verified if metering is not practicable due to low flow rate or pressure.
- 6. LARIO will estimate the volume of vented and flared gas based on the results of an annual GOR test for wells that do not require measuring equipment reported on form C-116.
- 7. LARIO will install measuring equipment whenever the NMOCD determines that metering is necessary.

**VIII. Best Management Practices**

LARIO Permian LLC will minimize venting during maintenance by:

- 1. Designing and operating system to route storage tank and process equipment emissions to the VRU. If the VRU is not operable, then vapors will be routed to the flare.
- 2. Scheduling maintenance for multiple tasks to minimize the need for blowdowns.
- 3. After completion of maintenance, gas will be flared until it meets pipeline specifications.