

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

AUG 10 2017

FORM APPROVED  
OMB No. 1004-0137  
Expires: January 31, 2018

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

Farmington Field Office  
Bureau of Land Management

5. Lease Serial No.  
**NOG14031948**  
6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator  
**WPX Energy Production, LLC**

3a. Address  
**PO Box 640 Aztec, NM 87410**

3b. Phone No. (include area code)  
**505-333-1808**

7. If Unit of CA/Agreement, Name and/or No.  
**NMNM 135216A**

8. Well Name and No.  
**W Lybrook Unit 754H**

9. API Well No.  
**30-045-35817**

10. Field and Pool or Exploratory Area  
**Lybrook Mancos W**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**SHL: 1889' FSL & 708' FEL Sec 14 T23N R9W Unit: I**  
**BHL: 330' FSL & 344' FWL Sec 19 T23N R8W Unit: M**

11. Country or Parish, State  
**San Juan, NM**

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

| TYPE OF SUBMISSION                                   | TYPE OF ACTION                                   |                                               |                                                    |                                                                  |
|------------------------------------------------------|--------------------------------------------------|-----------------------------------------------|----------------------------------------------------|------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Notice of Intent | <input type="checkbox"/> Acidize                 | <input type="checkbox"/> Deepen               | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut Off                          |
| <input type="checkbox"/> Subsequent Report           | <input type="checkbox"/> Alter Casing            | <input type="checkbox"/> Hydraulic Fracturing | <input type="checkbox"/> Reclamation               | <input type="checkbox"/> Well Integrity                          |
| <input type="checkbox"/> Final Abandonment Notice    | <input type="checkbox"/> Casing Repair           | <input type="checkbox"/> New Construction     | <input type="checkbox"/> Recomplete                | <input checked="" type="checkbox"/> Other <u>Change in Plans</u> |
|                                                      | <input checked="" type="checkbox"/> Change Plans | <input type="checkbox"/> Plug and Abandon     | <input type="checkbox"/> Temporarily Abandon       |                                                                  |
|                                                      | <input type="checkbox"/> Convert to Injection    | <input type="checkbox"/> Plug Back            | <input type="checkbox"/> Water Disposal            |                                                                  |

OIL CONS. DIV DIST. 3

AUG 17 2017

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

WPX Energy request a change in plans for the POE, Total Depth (TD) per attached C102, OPS & Directional Drill Plans.

**ADHERE TO PREVIOUS NMOCD  
CONDITIONS OF APPROVAL**

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)  
**Marie E. Jaramillo**

Title: Permit Tech

Signature

Date: 8/10/17

**THE SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

PE

Date

8/15/17

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

Office

FTO

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

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

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

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

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

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised August 1, 2011

Submit one copy to  
Appropriate District Office

OIL CONSERVATION DIVISION  
1220 South St. Francis Drive  
Santa Fe, NM 87505

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                             |                                              |                                |
|-----------------------------|----------------------------------------------|--------------------------------|
| *API Number<br>30-045-35817 | *Pool Code<br>98157                          | *Pool Name<br>LYBROOK MANCOS W |
| *Property Code<br>315250    | *Property Name<br>W LYBROOK UNIT             | *Well Number<br>754H           |
| *GRID No.<br>120782         | *Operator Name<br>WPX ENERGY PRODUCTION, LLC | *Elevation<br>6719'            |

<sup>10</sup> Surface Location

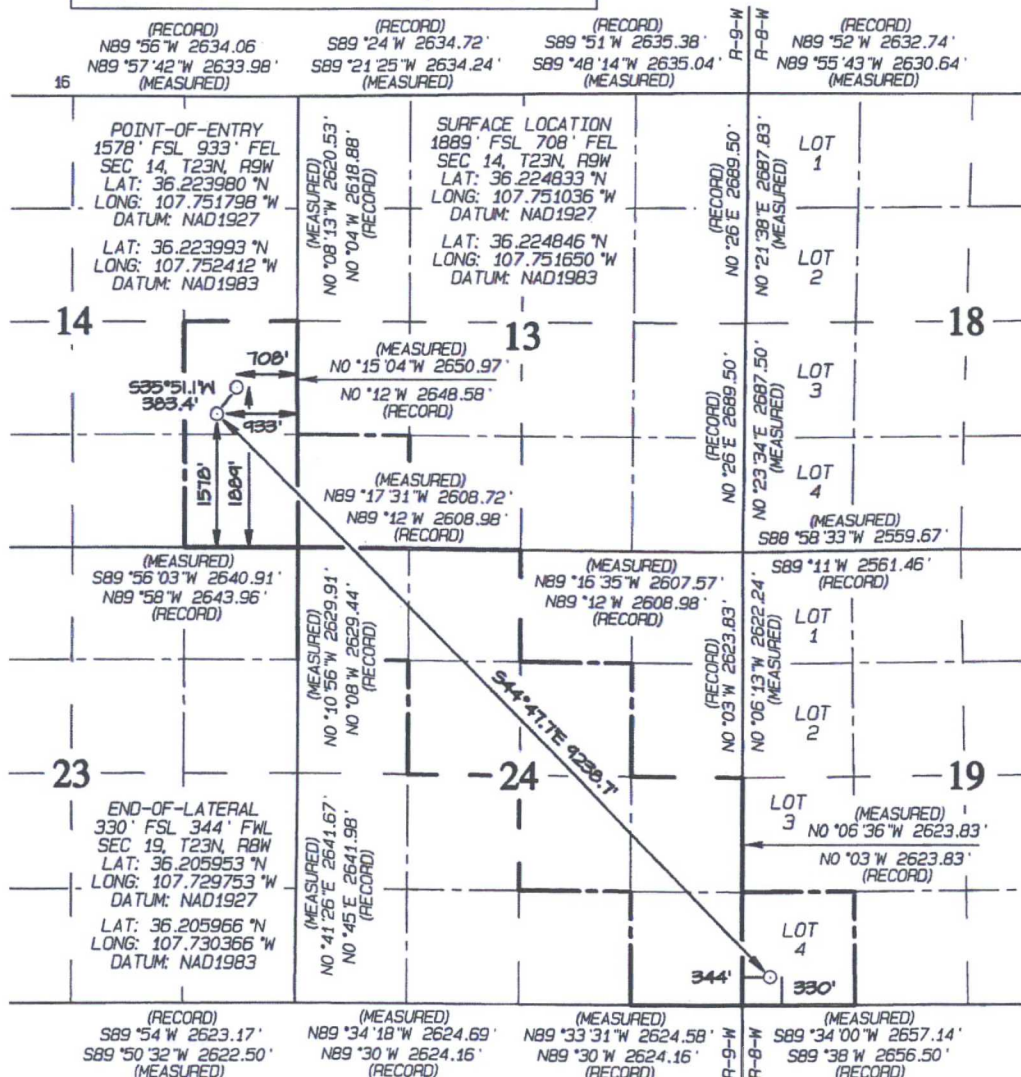
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County   |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| I             | 14      | 23N      | 9W    |         | 1889          | SOUTH            | 708           | EAST           | SAN JUAN |

<sup>11</sup> Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County   |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| M             | 19      | 23N      | 8W    | 4       | 330           | SOUTH            | 344           | WEST           | SAN JUAN |

|                                         |                                                                                                                                                                         |                               |                                  |                                                      |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|----------------------------------|------------------------------------------------------|
| <sup>12</sup> Dedicated Acres<br>440.21 | E/2 SE/4 - Section 14<br>SW/4 SW/4 - Section 13<br>N/2 NW/4, SE/4 NW/4<br>SW/4 NE/4, N/2 SE/4<br>SE/4 SE/4 - Section 24, T23N, R9W<br>SW/4 SW/4 - Section 19, T23N, R8W | <sup>13</sup> Joint or Infill | <sup>14</sup> Consolidation Code | <sup>15</sup> Order No.<br>R-14051 - 12,807.24 Acres |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|----------------------------------|------------------------------------------------------|

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



<sup>17</sup> 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 a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: *Marie E. Jaramillo* Date: 8/10/17

Printed Name: Marie E. Jaramillo

E-mail Address: marie.jaramillo@wpenergy.com

<sup>18</sup> SURVEYOR CERTIFICATION

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

Date Revised: AUGUST 10, 2017  
Survey Date: SEPTEMBER 16, 2015

Signature and Seal of Professional Surveyor



JASON C. EDWARDS

Certificate Number 15269



## **WPX Energy**

### **Operations Plan**

*(Note: This procedure will be adjusted onsite based upon actual conditions)*

**Date:** August 10, 2017  
**Well Name:** W Lybrook Unit 754H  
**SH Location:** NESE Sec 14 23N-09W  
**BH Location:** SWSW Sec 19 23N-08W

**Field:** Lybrook Mancos W  
**Surface:** IA  
**Elevation:** 6719' GR  
**Minerals:** FED

**Measured Depth:** 14637.76'

## **I. GEOLOGY**

Surface formation - NACIMIENTO

### **A. FORMATION TOPS: (KB)**

| NAME            | MD       | TVD      | NAME          | MD        | TVD      |
|-----------------|----------|----------|---------------|-----------|----------|
| OJO ALAMO       | 424.00   | 424.00   | POINT LOOKOUT | 3,569.00  | 3,494.00 |
| KIRTLAND        | 566.00   | 566.00   | MANCOS        | 3,747.00  | 3,667.00 |
| PICTURED CLIFFS | 1,036.00 | 1,033.00 | GALLUP        | 4,091.00  | 4,001.00 |
| LEWIS           | 1,241.00 | 1,233.00 | KICKOFF POINT | 4,094.51  | 4,004.43 |
| CHACRA          | 1,460.00 | 1,446.00 | TOP TARGET    | 5,236.00  | 4,777.00 |
| CLIFF HOUSE     | 1,586.00 | 2,568.00 | LANDING POINT | 8,142.75  | 4,767.79 |
| MENEFEE         | 2,627.00 | 2,579.00 | BASE TARGET   | 8,142.75  | 4,767.79 |
|                 |          |          | TD            | 14,637.76 | 4,747.00 |

### **B. MUD LOGGING PROGRAM:**

Mudlogger on location from surface csg to TD.

### **C. LOGGING PROGRAM:**

LWD GR from surface casing to TD.

### **D. NATURAL GAUGES:**

Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

## **II. DRILLING**

### **A. MUD PROGRAM:**

LSND mud (WBM) will be used to drill the 12-1/4" Surface hole, the 8 3/4" Directional Vertical hole, and the curve portion of the wellbore. A LSND (WBM) or (OBM) will be used to drill the lateral portion of well. Treat for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses.

### **B. BOP TESTING:**

While drill pipe is in use, the pipe rams and the blind rams will be function tested once each trip. The BOPE will be tested to 2,000 psi (High) for 10 minutes and the annular tested to 1,500 psi for 10 minutes. Pressure test surface casing to 1,500 psi for 30 minutes and intermediate casing to 1,500 psi for 30 minutes. Utilize a BOPE Testing Unit with a recording chart and appropriate test plug for testing. All tests and inspections will be recorded in the tour book as to time and results.

### III. MATERIALS

#### A. CASING PROGRAM:

| CASING TYPE  | OH SIZE (IN) | DEPTH (MD)           | CSG SIZE | WEIGHT   | GRADE          | CONN |
|--------------|--------------|----------------------|----------|----------|----------------|------|
| SURFACE      | 12.25"       | 320.00'              | 9.625"   | 36 LBS   | J-55 or equiv  | STC  |
| INTERMEDIATE | 8.75"        | 8142.75'             | 7"       | 23 LBS   | J-55 or equiv  | LTC  |
| PRODUCTION   | 6.125"       | 7992.75' - 14637.76' | 4.5"     | 11.6 LBS | P-110 or equiv | LTC  |
| TIE BACK     | 6.125"       | Surf. - 7992.75'     | 4.5"     | 11.6 LBS | P-110 or equiv | LTC  |

#### B. FLOAT EQUIPMENT:

##### 1. SURFACE CASING:

9-5/8" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (4) joints of Surface Casing.

##### 2. INTERMEDIATE CASING:

7" cement nose guide shoe with a self-fill insert float. Place float collar one joint above the shoe. Install (1) centralizer on each of the bottom (3) joints and one standard centralizer every (3) joints to 2,500 ft. Run (1) centralizer at 2,500 ft., 2,300ft., 2,000ft., 1,500 ft., and 1,000 ft. If losses are encountered during the drilling of the intermediate section a DV tool will be utilized and a 2 stage cement job may be planned to ensure cement circ back to surface. The DV tool will be placed 100' above the top of the Chacra formation. If cement is circulated back to surface on the first stage, a cancelation device will be dropped to shift the dv tool closed and the 2nd stage cement job will be aborted at that time, if no cement is seen at surface on the 1st stage the stage tool will be opened and a 2nd stage cement job will be pumped.

##### 3. PRODUCTION LINER:

Run 4-1/2" Liner with cement nose guide Float Shoe + 2jts. of 4-1/2" casing + Landing Collar + 4-1/2" pup joint + 1 RSI (Sliding Sleeve) positioned inside the 330ft Hard line. Centralizer program will be determined by Wellbore condition and when Lateral is evaluated by Geoscientists and Reservoir Engineers. Set seals on Liner Hanger. Test TOL to 1500 psi for 15 minutes.

#### C. CEMENT:

*(Note: Volumes may be adjusted onsite due to actual conditions)*

##### 1. Surface:

5 bbl Fresh Water Spacer, 100 sx (160 cu.ft.) of 14.5 ppg Type I-II (Neat G) + 20% Fly Ash cement w/ 7.41 gal/sack mix water ratio @ 1.61 cu ft/sx yield. Calculated @ volume + 50% excess. WOC 12 hours. Test csg to 600psi. Total Volume: (160 cu-ft/100 sx/ Bbls).TOC at Surface.

##### 2. Intermediate:

Spacer #1: 20 bbl (112 cuft) Chemwash. Lead Cement: 181 bbls, 516 sks, (1016 cuft), 12.3 ppg @ 1.97 cuft/sk yield. Tail Cement: 59 bbls, 254 sks, (331 cuft), 13.5 ppg @ 1.3 cuft/sk yield. Displacement: Displace w/ +/- 321 bbl Drilling mud or water. Total Cement: 240 bbls, 770 sks, (1347 cuft)

3. Prod Liner:

Spacer #1: 10 bbl (56 cu-ft) Water Spacer. Spacer #2: 40 bbl 9.5 ppg (224.6 cu-ft) Tuned Spacer III. Spacer #3: 10 bbl Water Spacer. Lead Cement: Extencem™ System. Yield 1.36 cuft/sk 13.3 ppg (651 sx / 885 cuft / 158 bbls). Tail Spacer: 20 BBL of MMCR. Displacement: Displace w/ +/- 187 bbl Fr Water. Total Cement (651 sx / 885 bbls).

**D. COMPLETION:**

Run CCL for perforating

**A. PRESSURE TEST:**

1. Pressure test 4-1/2" casing to 4500 psi max, hold at 1500 psi for 30 minutes. Increase pressure to Open RSI sleeves.

**B. STIMULATION:**

1. Stimulate with approximately 2,805,000# 20/40 mesh sand and 340,000# 16/30 mesh sand in 619,113 gallons water with 42,696 mscf N2 for 17 stages.
2. Isolate stages with flow through frac plug.
3. Drill out frac plugs and flowback lateral.

**C. RUNNING TUBING:**

1. Production Tubing: Run 2-7/8", 6.5#, J-55, EUE tubing with a SN on top of bottom joint. Land tubing near Top of Liner.

If this horizontal well is drilled past the applicable setbacks, an unorthodox location application is not required because the completed interval in this well, as defined by 19.15.16.7 B(1) NMAC, will be entirely within the applicable setbacks. This approach complies with all applicable rules, including 19.15.16.14 A(3) NMAC, 19.15.16.14 B(2) NMAC, 19.15.16.15 B(2) NMAC, and 19.15.16.15. B(4) NMAC.

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**NOTES:**

A 4-1/2" 11.6# P-110 Liner will be run to TD and landed +/- 150 ft. into the 7" 23# J-55 Intermediate casing with a Liner Hanger and pack-off assembly then cemented to top of liner hanger.

After cementing and TOL clean up operations are complete, the TOL will be tested to 1500 psi (per BLM).

# **WPX Energy**

T23N R9W

W Lybrook UT 716 Pad

W Lybrook UT 754H

API: 30-045-35817

Wellbore #1

Plan: Plan #1

## **Standard Planning Report**

27 July, 2017



[www.scientificdrilling.com](http://www.scientificdrilling.com)



Scientific Drilling

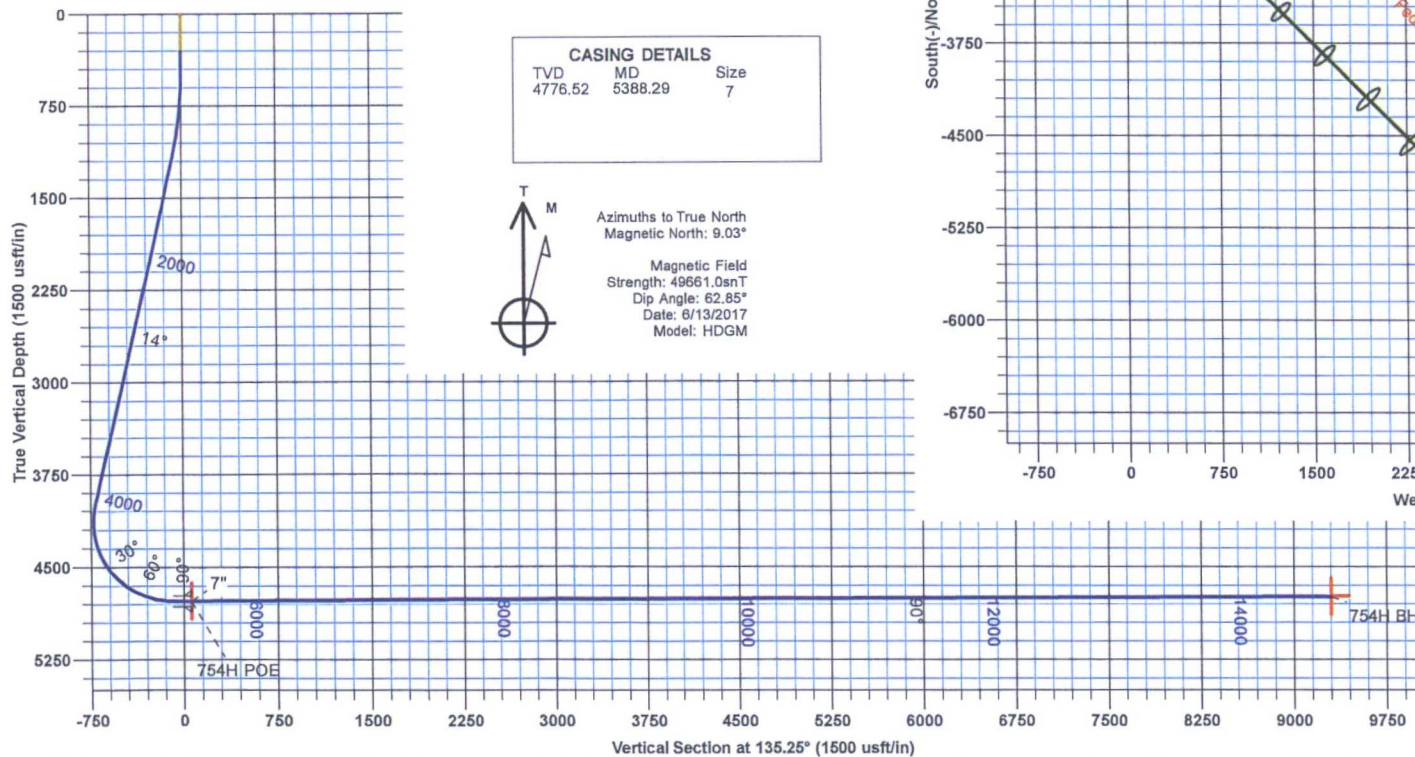
|                                                                                                                                                                                                 |                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>SITE DETAILS:</b> W Lybrook UT 716 Pad</p> <p>Site Centre Northing: 1901036.92<br/>Easting: 524357.92</p> <p>Positional Uncertainty: 0.00<br/>Convergence: 0.05<br/>Local North: True</p> | <p><b>PROJECT DETAILS:</b> T23N R9W</p> <p>Geodetic System: US State Plane 1927 (Exact solution)<br/>Datum: NAD 1927 (NADCON CONUS)<br/>Ellipsoid: Clarke 1866<br/>Zone: New Mexico West 3003<br/>System Datum: Mean Sea Level</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



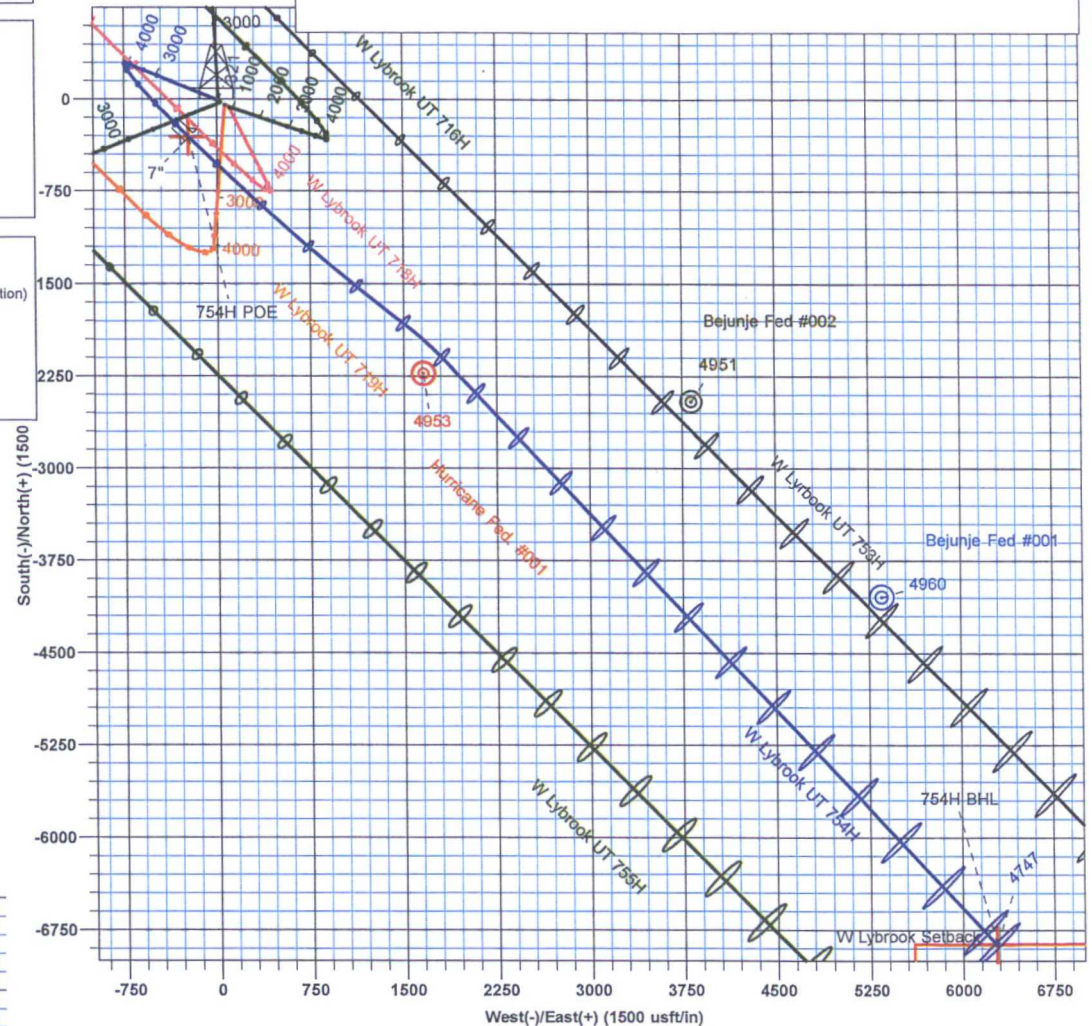
| CASING DETAILS |         |      |
|----------------|---------|------|
| TVD            | MD      | Size |
| 4776.52        | 5388.29 | 7    |



Magnetic Field  
Strength: 49661.0snT  
Dip Angle: 62.85°  
Date: 6/13/2017  
Model: HDGM



| ANNOTATIONS |          |       |        |          |         |         |                                  |  |  |
|-------------|----------|-------|--------|----------|---------|---------|----------------------------------|--|--|
| TVD         | MD       | Inc   | Azi    | +N/-S    | +E/-W   | VSector | Annotation                       |  |  |
| 306.97      | 307.00   | 0.74  | 241.31 | -2.59    | -1.90   | 0.50    | Start Drop -2.00                 |  |  |
| 343.97      | 344.00   |       | 0.00   | -2.71    | -2.11   | 0.44    | Start 156.03 hold at 344.00 MD   |  |  |
| 500.00      | 500.03   | 0.00  | 0.00   | -2.71    | -2.11   | 0.44    | Start Build 2.00                 |  |  |
| 1181.57     | 1188.19  | 13.76 | 292.31 | 28.52    | -78.21  | -75.32  | Start 2906.32 hold at 1188.19 MD |  |  |
| 4004.43     | 4094.51  | 13.76 | 292.31 | 291.04   | -717.88 | -712.09 | Start DLS 9.00 TFO -156.44       |  |  |
| 4004.43     | 4094.51  | 13.76 | 292.31 | 291.04   | -717.88 | -712.09 | KOP                              |  |  |
| 4777.00     | 5237.16  | 90.18 | 135.25 | -203.61  | -331.69 | -88.91  | Start DLS 3.00 TFO -90.01        |  |  |
| 4769.25     | 7682.97  | 90.18 | 127.68 | -1822.00 | 1499.72 | 2349.78 | Start DLS 2.00 TFO 89.96         |  |  |
| 4767.79     | 8142.75  | 90.18 | 136.88 | -2131.00 | 1839.52 | 2808.45 | Start 6495.00 hold at 8142.75 MD |  |  |
| 4747.00     | 14637.76 | 90.18 | 136.88 | -6871.86 | 6278.99 | 9300.79 | TD at 14637.76                   |  |  |



Bailey Fellows  
13:53, July 27 2017  
Scientific Drilling  
325 S Faudree Rd.  
Odessa, TX 79765

# Scientific Drilling Int.

## Planning Report

|           |                         |                              |                                              |
|-----------|-------------------------|------------------------------|----------------------------------------------|
| Database: | Grand Junction District | Local Co-ordinate Reference: | Well W Lybrook UT 754H                       |
| Company:  | WPX Energy              | TVD Reference:               | GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32) |
| Project:  | T23N R9W                | MD Reference:                | GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32) |
| Site:     | W Lybrook UT 716 Pad    | North Reference:             | True                                         |
| Well:     | W Lybrook UT 754H       | Survey Calculation Method:   | Minimum Curvature                            |
| Wellbore: | Wellbore #1             |                              |                                              |
| Design:   | Plan #1                 |                              |                                              |

|             |                                      |               |                |
|-------------|--------------------------------------|---------------|----------------|
| Project     | T23N R9W                             |               |                |
| Map System: | US State Plane 1927 (Exact solution) | System Datum: | Mean Sea Level |
| Geo Datum:  | NAD 1927 (NADCON CONUS)              |               |                |
| Map Zone:   | New Mexico West 3003                 |               |                |

|                       |                      |              |                   |                   |             |
|-----------------------|----------------------|--------------|-------------------|-------------------|-------------|
| Site                  | W Lybrook UT 716 Pad |              |                   |                   |             |
| Site Position:        |                      | Northing:    | 1,901,036.93 usft | Latitude:         | 36.224684   |
| From:                 | Lat/Long             | Easting:     | 524,357.92 usft   | Longitude:        | -107.750751 |
| Position Uncertainty: | 0.00 usft            | Slot Radius: | 13-3/16 "         | Grid Convergence: | 0.05 °      |

|                      |                   |             |                     |                   |               |               |
|----------------------|-------------------|-------------|---------------------|-------------------|---------------|---------------|
| Well                 | W Lybrook UT 754H |             |                     |                   |               |               |
| Well Position        | +N/-S             | 54.24 usft  | Northing:           | 1,901,091.09 usft | Latitude:     | 36.224833     |
|                      | +E/-W             | -84.06 usft | Easting:            | 524,273.81 usft   | Longitude:    | -107.751036   |
| Position Uncertainty |                   | 0.00 usft   | Wellhead Elevation: | 0.00 usft         | Ground Level: | 6,719.00 usft |

|           |             |             |                 |               |                     |
|-----------|-------------|-------------|-----------------|---------------|---------------------|
| Wellbore  | Wellbore #1 |             |                 |               |                     |
| Magnetics | Model Name  | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
|           | HDGM        | 6/13/2017   | 9.03            | 62.85         | 49,661              |

|                   |                         |              |               |               |
|-------------------|-------------------------|--------------|---------------|---------------|
| Design            | Plan #1                 |              |               |               |
| Audit Notes:      |                         |              |               |               |
| Version:          | Phase:                  | PLAN         | Tie On Depth: | 307.00        |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft)  | Direction (°) |
|                   | 0.00                    | 0.00         | 0.00          | 135.25        |

| 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   |
| 307.00                | 0.74            | 241.31      | 306.97                | -2.59        | -1.90        | 0.00                    | 0.00                   | 0.00                  | 0.00    |          |
| 344.00                | 0.00            | 0.00        | 343.97                | -2.71        | -2.11        | 2.00                    | -2.00                  | 0.00                  | 180.00  |          |
| 500.03                | 0.00            | 0.00        | 500.00                | -2.71        | -2.11        | 0.00                    | 0.00                   | 0.00                  | 0.00    |          |
| 1,188.19              | 13.76           | 292.31      | 1,181.57              | 28.52        | -78.21       | 2.00                    | 2.00                   | 0.00                  | 292.31  |          |
| 4,094.51              | 13.76           | 292.31      | 4,004.43              | 291.04       | -717.88      | 0.00                    | 0.00                   | 0.00                  | 0.00    |          |
| 5,237.16              | 90.18           | 135.25      | 4,777.00              | -203.61      | -331.69      | 9.00                    | 6.69                   | -13.75                | -156.44 |          |
| 7,682.97              | 90.18           | 127.68      | 4,769.25              | -1,822.00    | 1,499.72     | 0.31                    | 0.00                   | -0.31                 | -90.01  |          |
| 8,142.75              | 90.18           | 136.88      | 4,767.79              | -2,131.00    | 1,839.52     | 2.00                    | 0.00                   | 2.00                  | 89.96   |          |
| 14,637.76             | 90.18           | 136.88      | 4,747.00              | -6,871.86    | 6,278.99     | 0.00                    | 0.00                   | 0.00                  | 0.00    | 754H BHL |

# Scientific Drilling Int.

## Planning Report

|           |                         |                              |                                              |
|-----------|-------------------------|------------------------------|----------------------------------------------|
| Database: | Grand Junction District | Local Co-ordinate Reference: | Well W Lybrook UT 754H                       |
| Company:  | WPX Energy              | TVD Reference:               | GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32) |
| Project:  | T23N R9W                | MD Reference:                | GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32) |
| Site:     | W Lybrook UT 716 Pad    | North Reference:             | True                                         |
| Well:     | W Lybrook UT 754H       | Survey Calculation Method:   | Minimum Curvature                            |
| Wellbore: | Wellbore #1             |                              |                                              |
| Design:   | Plan #1                 |                              |                                              |

### 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                  |
| 21.00                                   | 0.00            | 0.00        | 21.00                 | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 51.00                                   | 0.18            | 347.63      | 51.00                 | 0.05         | -0.01        | -0.04                   | 0.60                    | 0.60                   | 0.00                  |
| 81.00                                   | 0.45            | 212.58      | 81.00                 | -0.01        | -0.08        | -0.05                   | 1.97                    | 0.90                   | -450.17               |
| 111.00                                  | 0.89            | 188.40      | 111.00                | -0.34        | -0.18        | 0.11                    | 1.71                    | 1.47                   | -80.60                |
| 141.00                                  | 0.88            | 202.26      | 140.99                | -0.78        | -0.30        | 0.34                    | 0.71                    | -0.03                  | 46.20                 |
| 171.00                                  | 0.82            | 204.33      | 170.99                | -1.19        | -0.48        | 0.51                    | 0.22                    | -0.20                  | 6.90                  |
| 201.00                                  | 0.89            | 203.28      | 200.99                | -1.60        | -0.66        | 0.67                    | 0.24                    | 0.23                   | -3.50                 |
| 231.00                                  | 1.14            | 222.07      | 230.98                | -2.03        | -0.95        | 0.78                    | 1.38                    | 0.83                   | 62.63                 |
| 261.00                                  | 0.74            | 245.65      | 260.98                | -2.34        | -1.33        | 0.72                    | 1.83                    | -1.33                  | 78.60                 |
| 291.00                                  | 0.82            | 247.57      | 290.98                | -2.50        | -1.70        | 0.58                    | 0.28                    | 0.27                   | 6.40                  |
| 307.00                                  | 0.74            | 241.31      | 306.97                | -2.59        | -1.90        | 0.50                    | 0.73                    | -0.50                  | -39.13                |
| <b>Start Drop -2.00</b>                 |                 |             |                       |              |              |                         |                         |                        |                       |
| 344.00                                  | 0.00            | 0.00        | 343.97                | -2.71        | -2.11        | 0.44                    | 2.00                    | -2.00                  | 0.00                  |
| <b>Start 156.03 hold at 344.00 MD</b>   |                 |             |                       |              |              |                         |                         |                        |                       |
| 400.00                                  | 0.00            | 0.00        | 399.97                | -2.71        | -2.11        | 0.44                    | 0.00                    | 0.00                   | 0.00                  |
| 500.03                                  | 0.00            | 0.00        | 500.00                | -2.71        | -2.11        | 0.44                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Start Build 2.00</b>                 |                 |             |                       |              |              |                         |                         |                        |                       |
| 600.00                                  | 2.00            | 292.31      | 599.95                | -2.04        | -3.72        | -1.17                   | 2.00                    | 2.00                   | 0.00                  |
| 700.00                                  | 4.00            | 292.31      | 699.81                | -0.06        | -8.56        | -5.99                   | 2.00                    | 2.00                   | 0.00                  |
| 800.00                                  | 6.00            | 292.31      | 799.43                | 3.25         | -16.62       | -14.01                  | 2.00                    | 2.00                   | 0.00                  |
| 900.00                                  | 8.00            | 292.31      | 898.68                | 7.88         | -27.90       | -25.23                  | 2.00                    | 2.00                   | 0.00                  |
| 1,000.00                                | 10.00           | 292.31      | 997.44                | 13.82        | -42.37       | -39.64                  | 2.00                    | 2.00                   | 0.00                  |
| 1,100.00                                | 12.00           | 292.31      | 1,095.60              | 21.06        | -60.02       | -57.21                  | 2.00                    | 2.00                   | 0.00                  |
| 1,188.19                                | 13.76           | 292.31      | 1,181.57              | 28.52        | -78.21       | -75.32                  | 2.00                    | 2.00                   | 0.00                  |
| <b>Start 2906.32 hold at 1188.19 MD</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,200.00                                | 13.76           | 292.31      | 1,193.04              | 29.59        | -80.81       | -77.90                  | 0.00                    | 0.00                   | 0.00                  |
| 1,300.00                                | 13.76           | 292.31      | 1,290.16              | 38.62        | -102.81      | -99.81                  | 0.00                    | 0.00                   | 0.00                  |
| 1,400.00                                | 13.76           | 292.31      | 1,387.29              | 47.66        | -124.82      | -121.72                 | 0.00                    | 0.00                   | 0.00                  |
| 1,500.00                                | 13.76           | 292.31      | 1,484.42              | 56.69        | -146.83      | -143.63                 | 0.00                    | 0.00                   | 0.00                  |
| 1,600.00                                | 13.76           | 292.31      | 1,581.55              | 65.72        | -168.84      | -165.54                 | 0.00                    | 0.00                   | 0.00                  |
| 1,700.00                                | 13.76           | 292.31      | 1,678.68              | 74.75        | -190.85      | -187.45                 | 0.00                    | 0.00                   | 0.00                  |
| 1,800.00                                | 13.76           | 292.31      | 1,775.81              | 83.79        | -212.86      | -209.36                 | 0.00                    | 0.00                   | 0.00                  |
| 1,900.00                                | 13.76           | 292.31      | 1,872.94              | 92.82        | -234.87      | -231.27                 | 0.00                    | 0.00                   | 0.00                  |
| 2,000.00                                | 13.76           | 292.31      | 1,970.06              | 101.85       | -256.88      | -253.18                 | 0.00                    | 0.00                   | 0.00                  |
| 2,100.00                                | 13.76           | 292.31      | 2,067.19              | 110.88       | -278.89      | -275.09                 | 0.00                    | 0.00                   | 0.00                  |
| 2,200.00                                | 13.76           | 292.31      | 2,164.32              | 119.92       | -300.90      | -297.00                 | 0.00                    | 0.00                   | 0.00                  |
| 2,300.00                                | 13.76           | 292.31      | 2,261.45              | 128.95       | -322.91      | -318.91                 | 0.00                    | 0.00                   | 0.00                  |
| 2,400.00                                | 13.76           | 292.31      | 2,358.58              | 137.98       | -344.92      | -340.82                 | 0.00                    | 0.00                   | 0.00                  |
| 2,500.00                                | 13.76           | 292.31      | 2,455.71              | 147.02       | -366.93      | -362.73                 | 0.00                    | 0.00                   | 0.00                  |
| 2,600.00                                | 13.76           | 292.31      | 2,552.84              | 156.05       | -388.94      | -384.64                 | 0.00                    | 0.00                   | 0.00                  |
| 2,700.00                                | 13.76           | 292.31      | 2,649.97              | 165.08       | -410.95      | -406.55                 | 0.00                    | 0.00                   | 0.00                  |
| 2,800.00                                | 13.76           | 292.31      | 2,747.09              | 174.11       | -432.96      | -428.46                 | 0.00                    | 0.00                   | 0.00                  |
| 2,900.00                                | 13.76           | 292.31      | 2,844.22              | 183.15       | -454.97      | -450.37                 | 0.00                    | 0.00                   | 0.00                  |
| 3,000.00                                | 13.76           | 292.31      | 2,941.35              | 192.18       | -476.98      | -472.28                 | 0.00                    | 0.00                   | 0.00                  |
| 3,100.00                                | 13.76           | 292.31      | 3,038.48              | 201.21       | -498.99      | -494.19                 | 0.00                    | 0.00                   | 0.00                  |
| 3,200.00                                | 13.76           | 292.31      | 3,135.61              | 210.24       | -521.00      | -516.10                 | 0.00                    | 0.00                   | 0.00                  |
| 3,300.00                                | 13.76           | 292.31      | 3,232.74              | 219.28       | -543.01      | -538.01                 | 0.00                    | 0.00                   | 0.00                  |
| 3,400.00                                | 13.76           | 292.31      | 3,329.87              | 228.31       | -565.02      | -559.92                 | 0.00                    | 0.00                   | 0.00                  |
| 3,500.00                                | 13.76           | 292.31      | 3,427.00              | 237.34       | -587.03      | -581.83                 | 0.00                    | 0.00                   | 0.00                  |
| 3,600.00                                | 13.76           | 292.31      | 3,524.12              | 246.37       | -609.04      | -603.74                 | 0.00                    | 0.00                   | 0.00                  |
| 3,700.00                                | 13.76           | 292.31      | 3,621.25              | 255.41       | -631.05      | -625.65                 | 0.00                    | 0.00                   | 0.00                  |

# Scientific Drilling Int.

## Planning Report

|           |                         |                              |                                              |
|-----------|-------------------------|------------------------------|----------------------------------------------|
| Database: | Grand Junction District | Local Co-ordinate Reference: | Well W Lybrook UT 754H                       |
| Company:  | WPX Energy              | TVD Reference:               | GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32) |
| Project:  | T23N R9W                | MD Reference:                | GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32) |
| Site:     | W Lybrook UT 716 Pad    | North Reference:             | True                                         |
| Well:     | W Lybrook UT 754H       | Survey Calculation Method:   | Minimum Curvature                            |
| Wellbore: | Wellbore #1             |                              |                                              |
| Design:   | Plan #1                 |                              |                                              |

| Planned Survey                   |                 |             |                       |              |              |                         |                         |                        |                       |
|----------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)            | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 3,800.00                         | 13.76           | 292.31      | 3,718.38              | 264.44       | -653.06      | -647.56                 | 0.00                    | 0.00                   | 0.00                  |
| 3,900.00                         | 13.76           | 292.31      | 3,815.51              | 273.47       | -675.07      | -669.47                 | 0.00                    | 0.00                   | 0.00                  |
| 4,000.00                         | 13.76           | 292.31      | 3,912.64              | 282.51       | -697.08      | -691.38                 | 0.00                    | 0.00                   | 0.00                  |
| 4,094.51                         | 13.76           | 292.31      | 4,004.43              | 291.04       | -717.88      | -712.09                 | 0.00                    | 0.00                   | 0.00                  |
| Start DLS 9.00 TFO -156.44 - KOP |                 |             |                       |              |              |                         |                         |                        |                       |
| 4,100.00                         | 13.31           | 291.45      | 4,009.77              | 291.52       | -719.07      | -713.27                 | 9.00                    | -8.23                  | -15.63                |
| 4,150.00                         | 9.40            | 280.01      | 4,058.79              | 294.34       | -728.45      | -721.88                 | 9.00                    | -7.83                  | -22.90                |
| 4,200.00                         | 6.30            | 255.41      | 4,108.33              | 294.35       | -735.13      | -726.59                 | 9.00                    | -6.18                  | -49.20                |
| 4,250.00                         | 5.62            | 211.45      | 4,158.08              | 291.57       | -739.07      | -727.39                 | 9.00                    | -1.37                  | -87.92                |
| 4,300.00                         | 7.99            | 178.18      | 4,207.75              | 286.01       | -740.24      | -724.26                 | 9.00                    | 4.74                   | -66.54                |
| 4,350.00                         | 11.68           | 162.79      | 4,257.01              | 277.70       | -738.63      | -717.23                 | 9.00                    | 7.38                   | -30.77                |
| 4,400.00                         | 15.79           | 155.01      | 4,305.58              | 266.70       | -734.26      | -706.33                 | 9.00                    | 8.23                   | -15.57                |
| 4,450.00                         | 20.07           | 150.43      | 4,353.14              | 253.06       | -727.14      | -691.64                 | 9.00                    | 8.55                   | -9.17                 |
| 4,500.00                         | 24.42           | 147.41      | 4,399.41              | 236.89       | -717.34      | -673.25                 | 9.00                    | 8.71                   | -6.03                 |
| 4,550.00                         | 28.82           | 145.27      | 4,444.10              | 218.27       | -704.90      | -651.27                 | 9.00                    | 8.79                   | -4.29                 |
| 4,600.00                         | 33.24           | 143.65      | 4,486.94              | 197.32       | -689.90      | -625.83                 | 9.00                    | 8.84                   | -3.24                 |
| 4,650.00                         | 37.68           | 142.37      | 4,527.65              | 174.17       | -672.44      | -597.10                 | 9.00                    | 8.88                   | -2.55                 |
| 4,700.00                         | 42.13           | 141.33      | 4,566.00              | 148.96       | -652.62      | -565.24                 | 9.00                    | 8.90                   | -2.09                 |
| 4,750.00                         | 46.59           | 140.45      | 4,601.74              | 121.85       | -630.57      | -530.46                 | 9.00                    | 8.92                   | -1.75                 |
| 4,800.00                         | 51.05           | 139.69      | 4,634.65              | 93.00        | -606.42      | -492.98                 | 9.00                    | 8.93                   | -1.51                 |
| 4,850.00                         | 55.52           | 139.03      | 4,664.54              | 62.60        | -580.31      | -453.01                 | 9.00                    | 8.94                   | -1.33                 |
| 4,900.00                         | 59.99           | 138.43      | 4,691.21              | 30.83        | -552.42      | -410.81                 | 9.00                    | 8.94                   | -1.20                 |
| 4,950.00                         | 64.46           | 137.88      | 4,714.50              | -2.12        | -522.91      | -366.64                 | 9.00                    | 8.95                   | -1.09                 |
| 5,000.00                         | 68.94           | 137.37      | 4,734.27              | -36.03       | -491.97      | -320.76                 | 9.00                    | 8.95                   | -1.02                 |
| 5,050.00                         | 73.42           | 136.90      | 4,750.40              | -70.71       | -459.78      | -273.47                 | 9.00                    | 8.95                   | -0.96                 |
| 5,100.00                         | 77.90           | 136.44      | 4,762.78              | -105.94      | -426.55      | -225.06                 | 9.00                    | 8.96                   | -0.91                 |
| 5,150.00                         | 82.37           | 136.00      | 4,771.35              | -141.49      | -392.47      | -175.82                 | 9.00                    | 8.96                   | -0.88                 |
| 5,200.00                         | 86.85           | 135.57      | 4,776.04              | -177.16      | -357.76      | -126.06                 | 9.00                    | 8.96                   | -0.86                 |
| 5,237.16                         | 90.18           | 135.25      | 4,777.00              | -203.61      | -331.69      | -88.91                  | 9.00                    | 8.96                   | -0.86                 |
| Start DLS 0.31 TFO -90.01        |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,300.00                         | 90.18           | 135.05      | 4,776.80              | -248.16      | -287.37      | -26.07                  | 0.31                    | 0.00                   | -0.31                 |
| 5,388.29                         | 90.18           | 134.78      | 4,776.52              | -310.50      | -224.85      | 62.21                   | 0.31                    | 0.00                   | -0.31                 |
| 7"                               |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,400.00                         | 90.18           | 134.74      | 4,776.48              | -318.75      | -216.54      | 73.92                   | 0.31                    | 0.00                   | -0.31                 |
| 5,500.00                         | 90.18           | 134.44      | 4,776.16              | -388.95      | -145.32      | 173.92                  | 0.31                    | 0.00                   | -0.31                 |
| 5,600.00                         | 90.18           | 134.13      | 4,775.84              | -458.77      | -73.73       | 273.90                  | 0.31                    | 0.00                   | -0.31                 |
| 5,700.00                         | 90.18           | 133.82      | 4,775.52              | -528.20      | -1.76        | 373.88                  | 0.31                    | 0.00                   | -0.31                 |
| 5,800.00                         | 90.18           | 133.51      | 4,775.20              | -597.24      | 70.58        | 473.84                  | 0.31                    | 0.00                   | -0.31                 |
| 5,900.00                         | 90.18           | 133.20      | 4,774.89              | -665.89      | 143.29       | 573.78                  | 0.31                    | 0.00                   | -0.31                 |
| 6,000.00                         | 90.18           | 132.89      | 4,774.57              | -734.14      | 216.37       | 673.71                  | 0.31                    | 0.00                   | -0.31                 |
| 6,100.00                         | 90.18           | 132.58      | 4,774.25              | -802.00      | 289.82       | 773.61                  | 0.31                    | 0.00                   | -0.31                 |
| 6,200.00                         | 90.18           | 132.27      | 4,773.93              | -869.46      | 363.64       | 873.49                  | 0.31                    | 0.00                   | -0.31                 |
| 6,300.00                         | 90.18           | 131.96      | 4,773.61              | -936.53      | 437.82       | 973.34                  | 0.31                    | 0.00                   | -0.31                 |
| 6,400.00                         | 90.18           | 131.65      | 4,773.30              | -1,003.19    | 512.36       | 1,073.16                | 0.31                    | 0.00                   | -0.31                 |
| 6,500.00                         | 90.18           | 131.34      | 4,772.98              | -1,069.45    | 587.25       | 1,172.94                | 0.31                    | 0.00                   | -0.31                 |
| 6,600.00                         | 90.18           | 131.03      | 4,772.66              | -1,135.30    | 662.51       | 1,272.69                | 0.31                    | 0.00                   | -0.31                 |
| 6,700.00                         | 90.18           | 130.72      | 4,772.35              | -1,200.75    | 738.12       | 1,372.40                | 0.31                    | 0.00                   | -0.31                 |
| 6,800.00                         | 90.18           | 130.42      | 4,772.03              | -1,265.79    | 814.08       | 1,472.06                | 0.31                    | 0.00                   | -0.31                 |
| 6,900.00                         | 90.18           | 130.11      | 4,771.71              | -1,330.41    | 890.39       | 1,571.68                | 0.31                    | 0.00                   | -0.31                 |
| 7,000.00                         | 90.18           | 129.80      | 4,771.40              | -1,394.63    | 967.05       | 1,671.26                | 0.31                    | 0.00                   | -0.31                 |
| 7,100.00                         | 90.18           | 129.49      | 4,771.08              | -1,458.42    | 1,044.05     | 1,770.78                | 0.31                    | 0.00                   | -0.31                 |

# Scientific Drilling Int.

## Planning Report

|           |                         |                              |                                              |
|-----------|-------------------------|------------------------------|----------------------------------------------|
| Database: | Grand Junction District | Local Co-ordinate Reference: | Well W Lybrook UT 754H                       |
| Company:  | WPX Energy              | TVD Reference:               | GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32) |
| Project:  | T23N R9W                | MD Reference:                | GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32) |
| Site:     | W Lybrook UT 716 Pad    | North Reference:             | True                                         |
| Well:     | W Lybrook UT 754H       | Survey Calculation Method:   | Minimum Curvature                            |
| Wellbore: | Wellbore #1             |                              |                                              |
| Design:   | Plan #1                 |                              |                                              |

| 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) |
| 7,200.00                         | 90.18           | 129.18      | 4,770.77              | -1,521.81    | 1,121.40     | 1,870.24                | 0.31                    | 0.00                   | -0.31                 |
| 7,300.00                         | 90.18           | 128.87      | 4,770.45              | -1,584.77    | 1,199.08     | 1,969.65                | 0.31                    | 0.00                   | -0.31                 |
| 7,400.00                         | 90.18           | 128.56      | 4,770.14              | -1,647.31    | 1,277.11     | 2,069.00                | 0.31                    | 0.00                   | -0.31                 |
| 7,500.00                         | 90.18           | 128.25      | 4,769.82              | -1,709.43    | 1,355.47     | 2,168.29                | 0.31                    | 0.00                   | -0.31                 |
| 7,600.00                         | 90.18           | 127.94      | 4,769.51              | -1,771.13    | 1,434.17     | 2,267.51                | 0.31                    | 0.00                   | -0.31                 |
| 7,682.97                         | 90.18           | 127.68      | 4,769.25              | -1,822.00    | 1,499.72     | 2,349.78                | 0.31                    | 0.00                   | -0.31                 |
| Start DLS 2.00 TFO 89.96         |                 |             |                       |              |              |                         |                         |                        |                       |
| 7,700.00                         | 90.18           | 128.03      | 4,769.20              | -1,832.45    | 1,513.17     | 2,366.67                | 2.00                    | 0.00                   | 2.00                  |
| 7,800.00                         | 90.18           | 130.03      | 4,768.88              | -1,895.41    | 1,590.85     | 2,466.08                | 2.00                    | 0.00                   | 2.00                  |
| 7,900.00                         | 90.18           | 132.03      | 4,768.57              | -1,961.05    | 1,666.29     | 2,565.80                | 2.00                    | 0.00                   | 2.00                  |
| 8,000.00                         | 90.18           | 134.03      | 4,768.25              | -2,029.28    | 1,739.39     | 2,665.72                | 2.00                    | 0.00                   | 2.00                  |
| 8,100.00                         | 90.18           | 136.03      | 4,767.93              | -2,100.01    | 1,810.06     | 2,765.71                | 2.00                    | 0.00                   | 2.00                  |
| 8,142.75                         | 90.18           | 136.88      | 4,767.79              | -2,131.00    | 1,839.52     | 2,808.45                | 2.00                    | 0.00                   | 2.00                  |
| Start 6495.00 hold at 8142.75 MD |                 |             |                       |              |              |                         |                         |                        |                       |
| 8,200.00                         | 90.18           | 136.88      | 4,767.61              | -2,172.79    | 1,878.65     | 2,865.68                | 0.00                    | 0.00                   | 0.00                  |
| 8,300.00                         | 90.18           | 136.88      | 4,767.29              | -2,245.78    | 1,947.00     | 2,965.64                | 0.00                    | 0.00                   | 0.00                  |
| 8,400.00                         | 90.18           | 136.88      | 4,766.97              | -2,318.77    | 2,015.35     | 3,065.60                | 0.00                    | 0.00                   | 0.00                  |
| 8,500.00                         | 90.18           | 136.88      | 4,766.65              | -2,391.77    | 2,083.70     | 3,165.55                | 0.00                    | 0.00                   | 0.00                  |
| 8,600.00                         | 90.18           | 136.88      | 4,766.33              | -2,464.76    | 2,152.06     | 3,265.51                | 0.00                    | 0.00                   | 0.00                  |
| 8,700.00                         | 90.18           | 136.88      | 4,766.01              | -2,537.75    | 2,220.41     | 3,365.47                | 0.00                    | 0.00                   | 0.00                  |
| 8,800.00                         | 90.18           | 136.88      | 4,765.69              | -2,610.74    | 2,288.76     | 3,465.43                | 0.00                    | 0.00                   | 0.00                  |
| 8,900.00                         | 90.18           | 136.88      | 4,765.37              | -2,683.73    | 2,357.11     | 3,565.39                | 0.00                    | 0.00                   | 0.00                  |
| 9,000.00                         | 90.18           | 136.88      | 4,765.05              | -2,756.73    | 2,425.46     | 3,665.35                | 0.00                    | 0.00                   | 0.00                  |
| 9,100.00                         | 90.18           | 136.88      | 4,764.73              | -2,829.72    | 2,493.82     | 3,765.31                | 0.00                    | 0.00                   | 0.00                  |
| 9,200.00                         | 90.18           | 136.88      | 4,764.41              | -2,902.71    | 2,562.17     | 3,865.27                | 0.00                    | 0.00                   | 0.00                  |
| 9,300.00                         | 90.18           | 136.88      | 4,764.09              | -2,975.70    | 2,630.52     | 3,965.23                | 0.00                    | 0.00                   | 0.00                  |
| 9,400.00                         | 90.18           | 136.88      | 4,763.77              | -3,048.70    | 2,698.87     | 4,065.19                | 0.00                    | 0.00                   | 0.00                  |
| 9,500.00                         | 90.18           | 136.88      | 4,763.45              | -3,121.69    | 2,767.22     | 4,165.14                | 0.00                    | 0.00                   | 0.00                  |
| 9,600.00                         | 90.18           | 136.88      | 4,763.13              | -3,194.68    | 2,835.58     | 4,265.10                | 0.00                    | 0.00                   | 0.00                  |
| 9,700.00                         | 90.18           | 136.88      | 4,762.81              | -3,267.67    | 2,903.93     | 4,365.06                | 0.00                    | 0.00                   | 0.00                  |
| 9,800.00                         | 90.18           | 136.88      | 4,762.49              | -3,340.67    | 2,972.28     | 4,465.02                | 0.00                    | 0.00                   | 0.00                  |
| 9,900.00                         | 90.18           | 136.88      | 4,762.17              | -3,413.66    | 3,040.63     | 4,564.98                | 0.00                    | 0.00                   | 0.00                  |
| 10,000.00                        | 90.18           | 136.88      | 4,761.85              | -3,486.65    | 3,108.98     | 4,664.94                | 0.00                    | 0.00                   | 0.00                  |
| 10,100.00                        | 90.18           | 136.88      | 4,761.53              | -3,559.64    | 3,177.34     | 4,764.90                | 0.00                    | 0.00                   | 0.00                  |
| 10,200.00                        | 90.18           | 136.88      | 4,761.21              | -3,632.64    | 3,245.69     | 4,864.86                | 0.00                    | 0.00                   | 0.00                  |
| 10,300.00                        | 90.18           | 136.88      | 4,760.89              | -3,705.63    | 3,314.04     | 4,964.82                | 0.00                    | 0.00                   | 0.00                  |
| 10,400.00                        | 90.18           | 136.88      | 4,760.57              | -3,778.62    | 3,382.39     | 5,064.78                | 0.00                    | 0.00                   | 0.00                  |
| 10,500.00                        | 90.18           | 136.88      | 4,760.25              | -3,851.61    | 3,450.75     | 5,164.73                | 0.00                    | 0.00                   | 0.00                  |
| 10,600.00                        | 90.18           | 136.88      | 4,759.93              | -3,924.61    | 3,519.10     | 5,264.69                | 0.00                    | 0.00                   | 0.00                  |
| 10,700.00                        | 90.18           | 136.88      | 4,759.60              | -3,997.60    | 3,587.45     | 5,364.65                | 0.00                    | 0.00                   | 0.00                  |
| 10,800.00                        | 90.18           | 136.88      | 4,759.28              | -4,070.59    | 3,655.80     | 5,464.61                | 0.00                    | 0.00                   | 0.00                  |
| 10,900.00                        | 90.18           | 136.88      | 4,758.96              | -4,143.58    | 3,724.15     | 5,564.57                | 0.00                    | 0.00                   | 0.00                  |
| 11,000.00                        | 90.18           | 136.88      | 4,758.64              | -4,216.57    | 3,792.51     | 5,664.53                | 0.00                    | 0.00                   | 0.00                  |
| 11,100.00                        | 90.18           | 136.88      | 4,758.32              | -4,289.57    | 3,860.86     | 5,764.49                | 0.00                    | 0.00                   | 0.00                  |
| 11,200.00                        | 90.18           | 136.88      | 4,758.00              | -4,362.56    | 3,929.21     | 5,864.45                | 0.00                    | 0.00                   | 0.00                  |
| 11,300.00                        | 90.18           | 136.88      | 4,757.68              | -4,435.55    | 3,997.56     | 5,964.41                | 0.00                    | 0.00                   | 0.00                  |
| 11,400.00                        | 90.18           | 136.88      | 4,757.36              | -4,508.54    | 4,065.91     | 6,064.37                | 0.00                    | 0.00                   | 0.00                  |
| 11,500.00                        | 90.18           | 136.88      | 4,757.04              | -4,581.54    | 4,134.27     | 6,164.32                | 0.00                    | 0.00                   | 0.00                  |
| 11,600.00                        | 90.18           | 136.88      | 4,756.72              | -4,654.53    | 4,202.62     | 6,264.28                | 0.00                    | 0.00                   | 0.00                  |
| 11,700.00                        | 90.18           | 136.88      | 4,756.40              | -4,727.52    | 4,270.97     | 6,364.24                | 0.00                    | 0.00                   | 0.00                  |
| 11,800.00                        | 90.18           | 136.88      | 4,756.08              | -4,800.51    | 4,339.32     | 6,464.20                | 0.00                    | 0.00                   | 0.00                  |
| 11,900.00                        | 90.18           | 136.88      | 4,755.76              | -4,873.51    | 4,407.67     | 6,564.16                | 0.00                    | 0.00                   | 0.00                  |

# Scientific Drilling Int.

## Planning Report

|                  |                         |                                     |                                              |
|------------------|-------------------------|-------------------------------------|----------------------------------------------|
| <b>Database:</b> | Grand Junction District | <b>Local Co-ordinate Reference:</b> | Well W Lybrook UT 754H                       |
| <b>Company:</b>  | WPX Energy              | <b>TVD Reference:</b>               | GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32) |
| <b>Project:</b>  | T23N R9W                | <b>MD Reference:</b>                | GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32) |
| <b>Site:</b>     | W Lybrook UT 716 Pad    | <b>North Reference:</b>             | True                                         |
| <b>Well:</b>     | W Lybrook UT 754H       | <b>Survey Calculation Method:</b>   | Minimum Curvature                            |
| <b>Wellbore:</b> | Wellbore #1             |                                     |                                              |
| <b>Design:</b>   | Plan #1                 |                                     |                                              |

### 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) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 12,000.00             | 90.18           | 136.88      | 4,755.44              | -4,946.50    | 4,476.03     | 6,664.12                | 0.00                    | 0.00                   | 0.00                  |
| 12,100.00             | 90.18           | 136.88      | 4,755.12              | -5,019.49    | 4,544.38     | 6,764.08                | 0.00                    | 0.00                   | 0.00                  |
| 12,200.00             | 90.18           | 136.88      | 4,754.80              | -5,092.48    | 4,612.73     | 6,864.04                | 0.00                    | 0.00                   | 0.00                  |
| 12,300.00             | 90.18           | 136.88      | 4,754.48              | -5,165.48    | 4,681.08     | 6,964.00                | 0.00                    | 0.00                   | 0.00                  |
| 12,400.00             | 90.18           | 136.88      | 4,754.16              | -5,238.47    | 4,749.43     | 7,063.96                | 0.00                    | 0.00                   | 0.00                  |
| 12,500.00             | 90.18           | 136.88      | 4,753.84              | -5,311.46    | 4,817.79     | 7,163.91                | 0.00                    | 0.00                   | 0.00                  |
| 12,600.00             | 90.18           | 136.88      | 4,753.52              | -5,384.45    | 4,886.14     | 7,263.87                | 0.00                    | 0.00                   | 0.00                  |
| 12,700.00             | 90.18           | 136.88      | 4,753.20              | -5,457.45    | 4,954.49     | 7,363.83                | 0.00                    | 0.00                   | 0.00                  |
| 12,800.00             | 90.18           | 136.88      | 4,752.88              | -5,530.44    | 5,022.84     | 7,463.79                | 0.00                    | 0.00                   | 0.00                  |
| 12,900.00             | 90.18           | 136.88      | 4,752.56              | -5,603.43    | 5,091.20     | 7,563.75                | 0.00                    | 0.00                   | 0.00                  |
| 13,000.00             | 90.18           | 136.88      | 4,752.24              | -5,676.42    | 5,159.55     | 7,663.71                | 0.00                    | 0.00                   | 0.00                  |
| 13,100.00             | 90.18           | 136.88      | 4,751.92              | -5,749.42    | 5,227.90     | 7,763.67                | 0.00                    | 0.00                   | 0.00                  |
| 13,200.00             | 90.18           | 136.88      | 4,751.60              | -5,822.41    | 5,296.25     | 7,863.63                | 0.00                    | 0.00                   | 0.00                  |
| 13,300.00             | 90.18           | 136.88      | 4,751.28              | -5,895.40    | 5,364.60     | 7,963.59                | 0.00                    | 0.00                   | 0.00                  |
| 13,400.00             | 90.18           | 136.88      | 4,750.96              | -5,968.39    | 5,432.96     | 8,063.55                | 0.00                    | 0.00                   | 0.00                  |
| 13,500.00             | 90.18           | 136.88      | 4,750.64              | -6,041.38    | 5,501.31     | 8,163.50                | 0.00                    | 0.00                   | 0.00                  |
| 13,600.00             | 90.18           | 136.88      | 4,750.32              | -6,114.38    | 5,569.66     | 8,263.46                | 0.00                    | 0.00                   | 0.00                  |
| 13,700.00             | 90.18           | 136.88      | 4,750.00              | -6,187.37    | 5,638.01     | 8,363.42                | 0.00                    | 0.00                   | 0.00                  |
| 13,800.00             | 90.18           | 136.88      | 4,749.68              | -6,260.36    | 5,706.36     | 8,463.38                | 0.00                    | 0.00                   | 0.00                  |
| 13,900.00             | 90.18           | 136.88      | 4,749.36              | -6,333.35    | 5,774.72     | 8,563.34                | 0.00                    | 0.00                   | 0.00                  |
| 14,000.00             | 90.18           | 136.88      | 4,749.04              | -6,406.35    | 5,843.07     | 8,663.30                | 0.00                    | 0.00                   | 0.00                  |
| 14,100.00             | 90.18           | 136.88      | 4,748.72              | -6,479.34    | 5,911.42     | 8,763.26                | 0.00                    | 0.00                   | 0.00                  |
| 14,200.00             | 90.18           | 136.88      | 4,748.40              | -6,552.33    | 5,979.77     | 8,863.22                | 0.00                    | 0.00                   | 0.00                  |
| 14,300.00             | 90.18           | 136.88      | 4,748.08              | -6,625.32    | 6,048.12     | 8,963.18                | 0.00                    | 0.00                   | 0.00                  |
| 14,400.00             | 90.18           | 136.88      | 4,747.76              | -6,698.32    | 6,116.48     | 9,063.14                | 0.00                    | 0.00                   | 0.00                  |
| 14,500.00             | 90.18           | 136.88      | 4,747.44              | -6,771.31    | 6,184.83     | 9,163.09                | 0.00                    | 0.00                   | 0.00                  |
| 14,600.00             | 90.18           | 136.88      | 4,747.12              | -6,844.30    | 6,253.18     | 9,263.05                | 0.00                    | 0.00                   | 0.00                  |
| 14,637.76             | 90.18           | 136.88      | 4,747.00              | -6,871.86    | 6,278.99     | 9,300.79                | 0.00                    | 0.00                   | 0.00                  |
| TD at 14637.76        |                 |             |                       |              |              |                         |                         |                        |                       |

### 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                                                                                       |               |              |            |              |              |                 |                |           |             |
| 754H BHL                                                                                      | 0.00          | 0.00         | 4,747.00   | -6,871.86    | 6,278.99     | 1,894,224.57    | 530,558.63     | 36.205953 | -107.729753 |
| - plan hits target center                                                                     |               |              |            |              |              |                 |                |           |             |
| - Point                                                                                       |               |              |            |              |              |                 |                |           |             |
| 754H POE                                                                                      | 0.00          | 0.00         | 4,777.00   | -310.50      | -228.00      | 1,900,780.40    | 524,046.08     | 36.223980 | -107.751809 |
| - plan misses target center by 2.27usft at 5386.06usft MD (4776.52 TVD, -308.93 N, -226.43 E) |               |              |            |              |              |                 |                |           |             |
| - Point                                                                                       |               |              |            |              |              |                 |                |           |             |

### Casing Points

| Measured Depth (usft) | Vertical Depth (usft) | Name | Casing Diameter (") | Hole Diameter (") |
|-----------------------|-----------------------|------|---------------------|-------------------|
| 5,388.29              | 4,776.52              | 7"   | 7                   | 8-3/4             |

# Scientific Drilling Int.

## Planning Report

|           |                         |                              |                                              |
|-----------|-------------------------|------------------------------|----------------------------------------------|
| Database: | Grand Junction District | Local Co-ordinate Reference: | Well W Lybrook UT 754H                       |
| Company:  | WPX Energy              | TVD Reference:               | GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32) |
| Project:  | T23N R9W                | MD Reference:                | GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32) |
| Site:     | W Lybrook UT 716 Pad    | North Reference:             | True                                         |
| Well:     | W Lybrook UT 754H       | Survey Calculation Method:   | Minimum Curvature                            |
| Wellbore: | Wellbore #1             |                              |                                              |
| Design:   | Plan #1                 |                              |                                              |

| Plan Annotations      |                       |                   |              |                                  |
|-----------------------|-----------------------|-------------------|--------------|----------------------------------|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              | Comment                          |
|                       |                       | +N/-S (usft)      | +E/-W (usft) |                                  |
| 307.00                | 306.97                | -2.59             | -1.90        | Start Drop -2.00                 |
| 344.00                | 343.97                | -2.71             | -2.11        | Start 156.03 hold at 344.00 MD   |
| 500.03                | 500.00                | -2.71             | -2.11        | Start Build 2.00                 |
| 1,188.19              | 1,181.57              | 28.52             | -78.21       | Start 2906.32 hold at 1188.19 MD |
| 4,094.51              | 4,004.43              | 291.04            | -717.88      | Start DLS 9.00 TFO -156.44       |
| 4,094.51              | 4,004.43              | 291.04            | -717.88      | KOP                              |
| 5,237.16              | 4,777.00              | -203.61           | -331.69      | Start DLS 0.31 TFO -90.01        |
| 7,682.97              | 4,769.25              | -1,822.00         | 1,499.72     | Start DLS 2.00 TFO 89.96         |
| 8,142.75              | 4,767.79              | -2,131.00         | 1,839.52     | Start 6495.00 hold at 8142.75 MD |
| 14,637.76             | 4,747.00              | -6,871.86         | 6,278.99     | TD at 14637.76                   |

**Directions from the Intersection of US Hwy 550 & US Hwy 64**  
**in Bloomfield, NM to WPX Energy Production, LLC W Lybrook Unit #754H**  
**1889' FSL & 708' FEL, Section 14, T23N, R9W, N.M.P.M., San Juan County, NM**

**Latitude: 36.224846°N Longitude: 107.751650°W Datum: NAD1983**

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, travel Southerly on US Hwy 550 for 37.8 miles to Mile Marker 113.4;

Go Right (South-westerly) on County Road #7890 for 0.8 miles to fork in roadway;

Go Left (Southerly) remaining on County Road #7890 for 1.3 miles to begin WPX W Lybrook Unit #710H proposed access on right-hand side;

Go Right (North-westerly) along WPX W Lybrook Unit #710H proposed access for 3412.5' to fork in proposed access;

Go Left (South-westerly) continuing for 1344.8' to staked WPX W Lybrook Unit #754H location.