

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

AS DRILLED

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                         |                                                          |                                            |
|-----------------------------------------|----------------------------------------------------------|--------------------------------------------|
| <sup>1</sup> API Number<br>30-045-35726 | <sup>2</sup> Pool Code<br>98157                          | <sup>3</sup> Pool Name<br>LYBROOK MANCOS W |
| <sup>4</sup> Property Code<br>315250    | <sup>5</sup> Property Name<br>W LYBROOK UNIT             | <sup>6</sup> Well Number<br>702H           |
| <sup>7</sup> GRID No.<br>120782         | <sup>8</sup> Operator Name<br>WPX ENERGY PRODUCTION, LLC | <sup>9</sup> Elevation<br>6930'            |

<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   |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| M             | 9       | 23N      | 8W    |         | 371           | SOUTH            | 693           | WEST           | SAN JUAN |

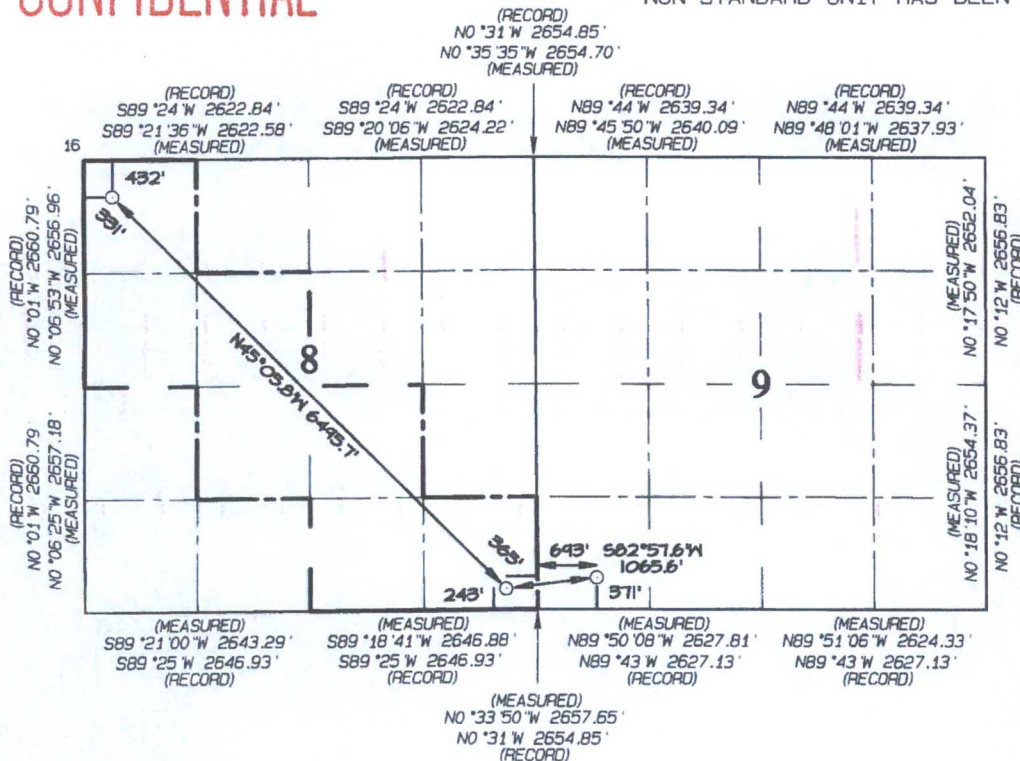
<sup>11</sup> Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County   |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| D             | 8       | 23N      | 8W    |         | 432           | NORTH            | 331           | WEST           | SAN JUAN |

|                                        |                                                                     |                               |                                  |                                                      |
|----------------------------------------|---------------------------------------------------------------------|-------------------------------|----------------------------------|------------------------------------------------------|
| <sup>12</sup> Dedicated Acres<br>280.0 | W/2 NW/4, SE/4 NW/4<br>NE/4 SW/4, W/2 SE/4<br>SE/4 SE/4 - Section 8 | <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

CONFIDENTIAL



END-OF-LATERAL  
432' FSL 331' FSL  
SECTION 8, T23N, R8W  
LAT: 36.247705°N  
LONG: 107.711829°W  
DATUM: NAD1927

RSI TOOL  
490' FSL 385' FSL  
SECTION 8, T23N, R8W  
LAT: 36.247547°N  
LONG: 107.711645°W  
DATUM: NAD1927

POINT-OF-ENTRY  
243' FSL 365' FSL  
SECTION 8, T23N, R8W  
LAT: 36.235092°N  
LONG: 107.696248°W  
DATUM: NAD1927

SURFACE LOCATION  
371' FSL 693' FSL  
SECTION 9, T23N, R8W  
LAT: 36.235446°N  
LONG: 107.692661°W  
DATUM: NAD1927

<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 hereinafter entered by the division.

Signature Lacey Granillo Date 3/27/17

Printed Name Lacey Granillo

E-mail Address lacey.granillo@wpxenergy.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: MARCH 23, 2017  
Date of Survey: AUGUST 25, 2015

Signature and Seal of Professional Surveyor



JASON C. EDWARDS  
Certificate Number 15269

# **WPX Energy**

**T23N R8W**

**W Lybrook 2308-09M**

**W Lybrook 2308-09M #702H - Slot A2**

**Wellbore #1**

**Design: Actual**

## **Survey Report - Geographic**

**15 March, 2017**

**CONFIDENTIAL**



**Scientific Drilling**

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





**W Lybrook 2308-09M #702H**  
**T23N R8W**  
**Northing: 1904974.16**  
**Easting: 541486.07**  
**Actual**

KB @ 6951.00usft (Cyclone 32)  
 GL @ 6930.00



**WELL DETAILS** W Lybrook 2308-09M #702H

|       |       | Ground Level: 6930.00 |           |            |              |
|-------|-------|-----------------------|-----------|------------|--------------|
| +N/-S | +E/-W | Northing              | Easting   | Latitude   | Longitude    |
| 0.00  | 0.00  | 1904974.16            | 541486.07 | 36.2354460 | -107.6926610 |

Azimuths to True North  
 Magnetic North: 9.02°  
 Magnetic Field  
 Strength: 49697.0snT  
 Dip Angle: 62.90°  
 Date: 2/25/2017  
 Model: HDGM

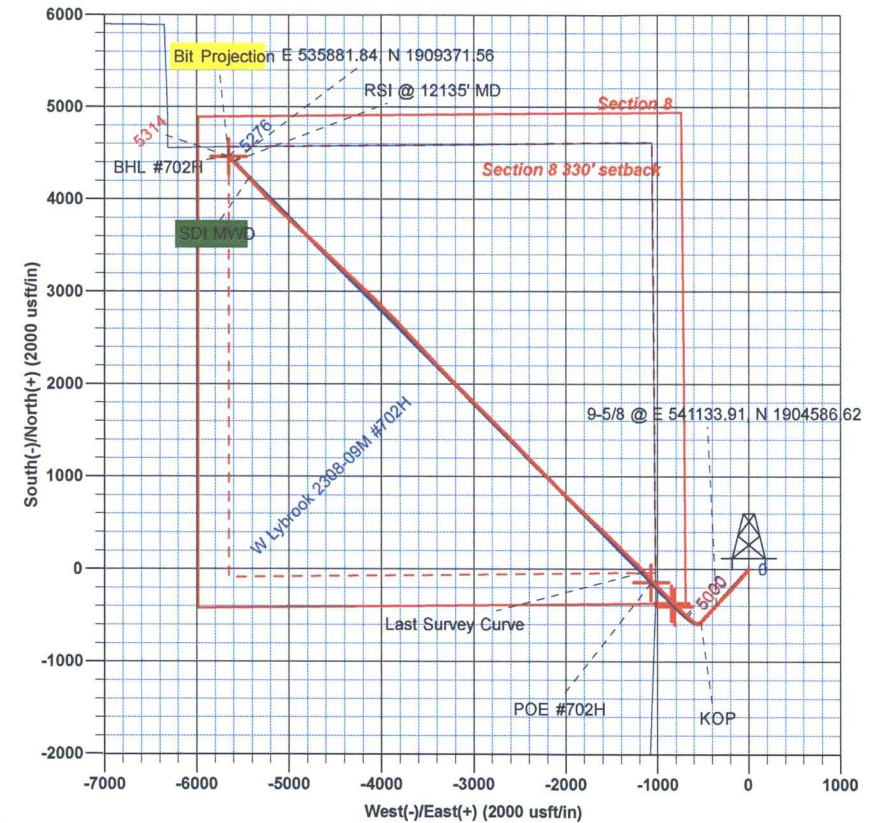
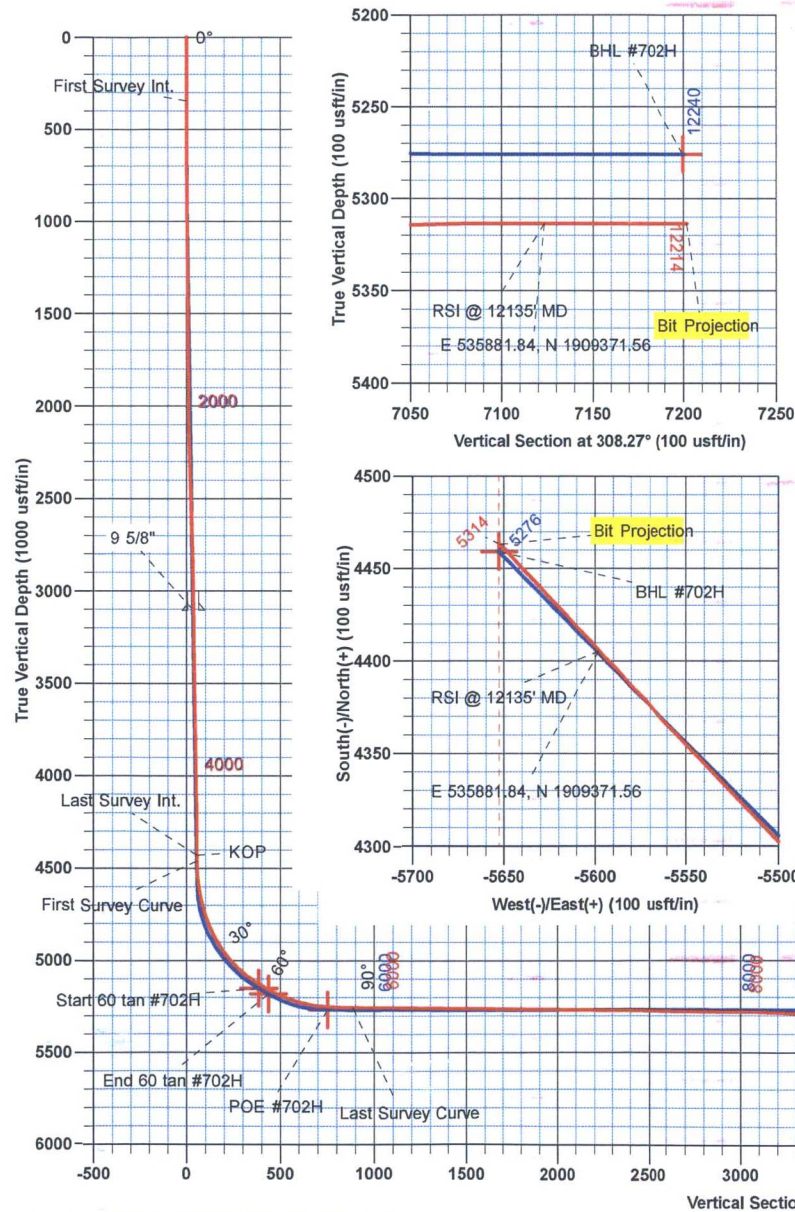
**ANNOTATIONS**

| TVD     | MD       | Annotation                        |
|---------|----------|-----------------------------------|
| 345.99  | 346.00   | First Survey Int.                 |
| 3106.87 | 3161.00  | 9-5/8 @ E 541133.91, N 1904586.62 |
| 4427.70 | 4506.00  | Last Survey Int.                  |
| 4427.70 | 4506.00  | KOP                               |
| 4459.31 | 4538.00  | First Survey Curve                |
| 5256.99 | 5853.00  | Last Survey Curve                 |
| 5318.77 | 11893.00 | SDI MWD                           |
| 5313.57 | 12135.00 | RSI @ 12135' MD                   |
| 5313.57 | 12135.00 | E 535881.84, N 1909371.56         |
| 5313.57 | 12214.00 | Bit Projection                    |

To convert Magnetic North to Grid, Add 8.93°  
 To convert True North to Grid, Subtract 0.08°

**LEGEND**

- W Lybrook 2308-09M #702H, Wellbore #1, Design #2 13F
- Actual



Bailey Fellows  
 10:33, March 15 2017

Scientific Drilling  
 325 S. Faudree Rd.  
 Odessa, TX 79765



# Scientific Drilling Int.

## Survey Report - Geographic

|                  |                          |                                     |                                         |
|------------------|--------------------------|-------------------------------------|-----------------------------------------|
| <b>Company:</b>  | WPX Energy               | <b>Local Co-ordinate Reference:</b> | Well W Lybrook 2308-09M #702H - Slot A2 |
| <b>Project:</b>  | T23N R8W                 | <b>TVD Reference:</b>               | KB @ 6951.00usft (Cyclone 32)           |
| <b>Site:</b>     | W Lybrook 2308-09M       | <b>MD Reference:</b>                | KB @ 6951.00usft (Cyclone 32)           |
| <b>Well:</b>     | W Lybrook 2308-09M #702H | <b>North Reference:</b>             | True                                    |
| <b>Wellbore:</b> | Wellbore #1              | <b>Survey Calculation Method:</b>   | Minimum Curvature                       |
| <b>Design:</b>   | Actual                   | <b>Database:</b>                    | Grand Junction District                 |

|                    |                                      |                      |                |
|--------------------|--------------------------------------|----------------------|----------------|
| <b>Project</b>     | T23N R8W                             |                      |                |
| <b>Map System:</b> | US State Plane 1927 (Exact solution) | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | NAD 1927 (NADCON CONUS)              |                      |                |
| <b>Map Zone:</b>   | New Mexico West 3003                 |                      |                |

|                              |                    |                          |                   |
|------------------------------|--------------------|--------------------------|-------------------|
| <b>Site</b>                  | W Lybrook 2308-09M |                          |                   |
| <b>Site Position:</b>        |                    | <b>Northing:</b>         | 1,904,995.32 usft |
| <b>From:</b>                 | Map                | <b>Easting:</b>          | 541,519.96 usft   |
| <b>Position Uncertainty:</b> | 0.00 usft          | <b>Slot Radius:</b>      | 13.20 in          |
|                              |                    | <b>Latitude:</b>         | 36.2355040        |
|                              |                    | <b>Longitude:</b>        | -107.6925460      |
|                              |                    | <b>Grid Convergence:</b> | 0.08 °            |

|                             |                                    |                            |                                    |
|-----------------------------|------------------------------------|----------------------------|------------------------------------|
| <b>Well</b>                 | W Lybrook 2308-09M #702H - Slot A2 |                            |                                    |
| <b>Well Position</b>        | <b>+N/-S</b>                       | 0.00 usft                  | <b>Northing:</b> 1,904,974.16 usft |
|                             | <b>+E/-W</b>                       | 0.00 usft                  | <b>Easting:</b> 541,486.07 usft    |
| <b>Position Uncertainty</b> | 0.00 usft                          | <b>Wellhead Elevation:</b> | 0.00 usft                          |
|                             |                                    | <b>Latitude:</b>           | 36.2354460                         |
|                             |                                    | <b>Longitude:</b>          | -107.6926610                       |
|                             |                                    | <b>Ground Level:</b>       | 6,930.00 usft                      |

|                  |                   |                    |                                   |
|------------------|-------------------|--------------------|-----------------------------------|
| <b>Wellbore</b>  | Wellbore #1       |                    |                                   |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b>            |
|                  | HDGM              | 2/25/2017          | 9.02                              |
|                  |                   |                    | <b>Dip Angle (°)</b> 62.90        |
|                  |                   |                    | <b>Field Strength (nT)</b> 49,697 |

|                          |                                |                      |                             |
|--------------------------|--------------------------------|----------------------|-----------------------------|
| <b>Design</b>            | Actual                         |                      |                             |
| <b>Audit Notes:</b>      |                                |                      |                             |
| <b>Version:</b>          | 1.0                            | <b>Phase:</b>        | ACTUAL                      |
|                          |                                | <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>         |
|                          | 0.00                           | 0.00                 | 0.00                        |
|                          |                                |                      | <b>Direction (°)</b> 308.27 |

|                       |                  |                               |                  |                                  |
|-----------------------|------------------|-------------------------------|------------------|----------------------------------|
| <b>Survey Program</b> | <b>Date</b>      | 3/15/2017                     |                  |                                  |
| <b>From (usft)</b>    | <b>To (usft)</b> | <b>Survey (Wellbore)</b>      | <b>Tool Name</b> | <b>Description</b>               |
| 51.00                 | 207.00           | Surface Gyro (Wellbore #1)    | NS-GYRO-MS       | North sensing gyrocompassing m/s |
| 346.00                | 3,115.00         | SDI MWD Int. (Wellbore #1)    | SDI MWD          | SDI MWD - Standard ver 1.0.1     |
| 3,190.00              | 7,538.00         | SDI MWD Curve (Wellbore #1)   | SDI MWD          | SDI MWD - Standard ver 1.0.1     |
| 7,663.00              | 12,214.00        | SDI MWD Lateral (Wellbore #1) | SDI MWD          | SDI MWD - Standard ver 1.0.1     |

|                              |                        |                    |                              |                     |                     |                            |                           |                 |                  |
|------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|----------------------------|---------------------------|-----------------|------------------|
| <b>Survey</b>                |                        |                    |                              |                     |                     |                            |                           |                 |                  |
| <b>Measured Depth (usft)</b> | <b>Inclination (°)</b> | <b>Azimuth (°)</b> | <b>Vertical Depth (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b> | <b>Map Northing (usft)</b> | <b>Map Easting (usft)</b> | <b>Latitude</b> | <b>Longitude</b> |
| 0.00                         | 0.00                   | 0.00               | 0.00                         | 0.00                | 0.00                | 1,904,974.16               | 541,486.07                | 36.2354460      | -107.6926610     |
| 51.00                        | 0.27                   | 85.85              | 51.00                        | 0.01                | 0.12                | 1,904,974.17               | 541,486.19                | 36.2354460      | -107.6926606     |
| 81.00                        | 0.25                   | 66.52              | 81.00                        | 0.04                | 0.25                | 1,904,974.20               | 541,486.32                | 36.2354461      | -107.6926602     |
| 111.00                       | 0.12                   | 184.87             | 111.00                       | 0.03                | 0.31                | 1,904,974.20               | 541,486.38                | 36.2354461      | -107.6926600     |
| 141.00                       | 0.18                   | 217.07             | 141.00                       | -0.03               | 0.28                | 1,904,974.13               | 541,486.35                | 36.2354459      | -107.6926601     |
| 171.00                       | 0.37                   | 239.42             | 171.00                       | -0.12               | 0.16                | 1,904,974.04               | 541,486.24                | 36.2354456      | -107.6926605     |
| 201.00                       | 0.20                   | 237.55             | 201.00                       | -0.20               | 0.04                | 1,904,973.96               | 541,486.11                | 36.2354454      | -107.6926609     |
| 207.00                       | 0.21                   | 238.65             | 207.00                       | -0.21               | 0.02                | 1,904,973.95               | 541,486.09                | 36.2354454      | -107.6926610     |



**Scientific Drilling Int.**  
Survey Report - Geographic

|                  |                          |                                     |                                         |
|------------------|--------------------------|-------------------------------------|-----------------------------------------|
| <b>Company:</b>  | WPX Energy               | <b>Local Co-ordinate Reference:</b> | Well W Lybrook 2308-09M #702H - Slot A2 |
| <b>Project:</b>  | T23N R8W                 | <b>TVD Reference:</b>               | KB @ 6951.00usft (Cyclone 32)           |
| <b>Site:</b>     | W Lybrook 2308-09M       | <b>MD Reference:</b>                | KB @ 6951.00usft (Cyclone 32)           |
| <b>Well:</b>     | W Lybrook 2308-09M #702H | <b>North Reference:</b>             | True                                    |
| <b>Wellbore:</b> | Wellbore #1              | <b>Survey Calculation Method:</b>   | Minimum Curvature                       |
| <b>Design:</b>   | Actual                   | <b>Database:</b>                    | Grand Junction District                 |

| Survey                                            |                 |             |                       |              |              |                     |                    |            |              |
|---------------------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|---------------------|--------------------|------------|--------------|
| Measured Depth (usft)                             | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (usft) | Map Easting (usft) | Latitude   | Longitude    |
| 346.00                                            | 0.88            | 190.64      | 345.99                | -1.39        | -0.40        | 1,904,972.77        | 541,485.68         | 36.2354422 | -107.6926624 |
| <b>First Survey Int.</b>                          |                 |             |                       |              |              |                     |                    |            |              |
| 439.00                                            | 2.01            | 218.86      | 438.96                | -3.36        | -1.55        | 1,904,970.80        | 541,484.53         | 36.2354367 | -107.6926663 |
| 531.00                                            | 3.10            | 226.65      | 530.87                | -6.33        | -4.37        | 1,904,967.83        | 541,481.71         | 36.2354286 | -107.6926759 |
| 623.00                                            | 4.40            | 223.86      | 622.67                | -10.58       | -8.63        | 1,904,963.57        | 541,477.46         | 36.2354169 | -107.6926903 |
| 715.00                                            | 5.52            | 224.74      | 714.32                | -16.27       | -14.19       | 1,904,957.87        | 541,471.91         | 36.2354013 | -107.6927091 |
| 807.00                                            | 6.84            | 222.08      | 805.79                | -23.48       | -20.97       | 1,904,950.65        | 541,465.13         | 36.2353815 | -107.6927322 |
| 899.00                                            | 8.14            | 221.34      | 897.00                | -32.43       | -28.95       | 1,904,941.69        | 541,457.17         | 36.2353569 | -107.6927592 |
| 992.00                                            | 9.72            | 221.68      | 988.87                | -43.24       | -38.52       | 1,904,930.87        | 541,447.62         | 36.2353272 | -107.6927916 |
| 1,085.00                                          | 11.57           | 221.68      | 1,080.27              | -56.07       | -49.94       | 1,904,918.02        | 541,436.21         | 36.2352919 | -107.6928304 |
| 1,176.00                                          | 12.60           | 220.19      | 1,169.25              | -70.47       | -62.41       | 1,904,903.60        | 541,423.76         | 36.2352524 | -107.6928727 |
| 1,268.00                                          | 13.46           | 218.52      | 1,258.88              | -86.51       | -75.56       | 1,904,887.54        | 541,410.64         | 36.2352083 | -107.6929172 |
| 1,363.00                                          | 12.77           | 220.31      | 1,351.40              | -103.17      | -89.24       | 1,904,870.86        | 541,396.99         | 36.2351626 | -107.6929636 |
| 1,457.00                                          | 12.96           | 220.56      | 1,443.04              | -119.10      | -102.81      | 1,904,854.91        | 541,383.43         | 36.2351188 | -107.6930097 |
| 1,551.00                                          | 11.85           | 220.95      | 1,534.85              | -134.40      | -115.99      | 1,904,839.60        | 541,370.28         | 36.2350768 | -107.6930543 |
| 1,645.00                                          | 12.36           | 219.66      | 1,626.76              | -149.43      | -128.74      | 1,904,824.54        | 541,357.55         | 36.2350355 | -107.6930976 |
| 1,739.00                                          | 12.47           | 217.78      | 1,718.56              | -165.20      | -141.38      | 1,904,808.76        | 541,344.94         | 36.2349922 | -107.6931404 |
| 1,833.00                                          | 12.01           | 220.92      | 1,810.42              | -180.61      | -154.00      | 1,904,793.33        | 541,332.33         | 36.2349498 | -107.6931832 |
| 1,927.00                                          | 11.50           | 219.61      | 1,902.45              | -195.22      | -166.38      | 1,904,778.70        | 541,319.98         | 36.2349097 | -107.6932252 |
| 2,021.00                                          | 11.99           | 222.85      | 1,994.48              | -209.60      | -178.99      | 1,904,764.31        | 541,307.38         | 36.2348702 | -107.6932680 |
| 2,115.00                                          | 12.21           | 224.80      | 2,086.39              | -223.81      | -192.64      | 1,904,750.07        | 541,293.76         | 36.2348311 | -107.6933142 |
| 2,209.00                                          | 12.42           | 224.29      | 2,178.23              | -238.10      | -206.70      | 1,904,735.77        | 541,279.72         | 36.2347919 | -107.6933619 |
| 2,303.00                                          | 12.88           | 224.81      | 2,269.95              | -252.77      | -221.14      | 1,904,721.08        | 541,265.29         | 36.2347516 | -107.6934109 |
| 2,397.00                                          | 13.68           | 224.41      | 2,361.44              | -268.14      | -236.31      | 1,904,705.68        | 541,250.15         | 36.2347094 | -107.6934623 |
| 2,492.00                                          | 14.71           | 224.45      | 2,453.53              | -284.78      | -252.61      | 1,904,689.02        | 541,233.87         | 36.2346637 | -107.6935176 |
| 2,585.00                                          | 14.14           | 227.21      | 2,543.60              | -300.92      | -269.22      | 1,904,672.85        | 541,217.29         | 36.2346193 | -107.6935739 |
| 2,679.00                                          | 13.32           | 226.34      | 2,634.92              | -316.20      | -285.48      | 1,904,657.55        | 541,201.05         | 36.2345773 | -107.6936290 |
| 2,773.00                                          | 12.41           | 226.08      | 2,726.56              | -330.68      | -300.59      | 1,904,643.05        | 541,185.96         | 36.2345376 | -107.6936803 |
| 2,868.00                                          | 11.89           | 223.04      | 2,819.43              | -344.91      | -314.62      | 1,904,628.79        | 541,171.95         | 36.2344984 | -107.6937279 |
| 2,962.00                                          | 11.04           | 222.72      | 2,911.55              | -358.60      | -327.34      | 1,904,615.08        | 541,159.26         | 36.2344608 | -107.6937710 |
| 3,056.00                                          | 10.97           | 221.34      | 3,003.82              | -371.93      | -339.35      | 1,904,601.74        | 541,147.26         | 36.2344242 | -107.6938117 |
| 3,115.00                                          | 11.02           | 221.30      | 3,061.74              | -380.38      | -346.78      | 1,904,593.28        | 541,139.84         | 36.2344010 | -107.6938369 |
| 3,161.00                                          | 11.34           | 222.26      | 3,106.87              | -387.03      | -352.72      | 1,904,586.62        | 541,133.91         | 36.2343827 | -107.6938571 |
| <b>9-5/8 @ E 541133.91, N 1904586.62 - 9 5/8"</b> |                 |             |                       |              |              |                     |                    |            |              |
| 3,190.00                                          | 11.54           | 222.84      | 3,135.29              | -391.27      | -356.61      | 1,904,582.38        | 541,130.03         | 36.2343711 | -107.6938702 |
| 3,284.00                                          | 11.24           | 220.04      | 3,227.44              | -405.18      | -368.90      | 1,904,568.45        | 541,117.76         | 36.2343329 | -107.6939119 |
| 3,378.00                                          | 10.59           | 221.28      | 3,319.74              | -418.68      | -380.49      | 1,904,554.93        | 541,106.19         | 36.2342958 | -107.6939512 |
| 3,472.00                                          | 10.16           | 220.64      | 3,412.20              | -431.46      | -391.59      | 1,904,542.13        | 541,095.11         | 36.2342607 | -107.6939888 |
| 3,566.00                                          | 11.40           | 224.81      | 3,504.54              | -444.35      | -403.54      | 1,904,529.23        | 541,083.18         | 36.2342253 | -107.6940294 |
| 3,660.00                                          | 11.05           | 223.70      | 3,596.74              | -457.45      | -416.31      | 1,904,516.11        | 541,070.43         | 36.2341893 | -107.6940727 |
| 3,754.00                                          | 10.65           | 223.24      | 3,689.06              | -470.29      | -428.48      | 1,904,503.25        | 541,058.27         | 36.2341540 | -107.6941139 |
| 3,848.00                                          | 10.03           | 222.49      | 3,781.54              | -482.65      | -439.96      | 1,904,490.87        | 541,046.81         | 36.2341200 | -107.6941529 |
| 3,942.00                                          | 10.98           | 223.90      | 3,873.96              | -495.14      | -451.70      | 1,904,478.37        | 541,035.09         | 36.2340857 | -107.6941927 |
| 4,036.00                                          | 12.34           | 223.94      | 3,966.02              | -508.82      | -464.88      | 1,904,464.66        | 541,021.93         | 36.2340482 | -107.6942373 |
| 4,130.00                                          | 12.59           | 224.23      | 4,057.80              | -523.40      | -478.99      | 1,904,450.07        | 541,007.84         | 36.2340081 | -107.6942852 |
| 4,224.00                                          | 11.30           | 219.68      | 4,149.77              | -537.83      | -492.02      | 1,904,435.62        | 540,994.83         | 36.2339685 | -107.6943294 |
| 4,318.00                                          | 9.99            | 216.89      | 4,242.15              | -551.44      | -502.80      | 1,904,422.00        | 540,984.08         | 36.2339311 | -107.6943659 |
| 4,412.00                                          | 8.84            | 220.99      | 4,334.88              | -563.41      | -512.43      | 1,904,410.01        | 540,974.46         | 36.2338982 | -107.6943986 |
| 4,506.00                                          | 9.34            | 224.16      | 4,427.70              | -574.33      | -522.48      | 1,904,399.07        | 540,964.43         | 36.2338682 | -107.6944326 |
| <b>Last Survey Int. - KOP</b>                     |                 |             |                       |              |              |                     |                    |            |              |
| 4,538.00                                          | 8.55            | 223.62      | 4,459.31              | -577.92      | -525.93      | 1,904,395.48        | 540,960.98         | 36.2338583 | -107.6944443 |
| <b>First Survey Curve</b>                         |                 |             |                       |              |              |                     |                    |            |              |
| 4,569.00                                          | 9.62            | 224.44      | 4,489.92              | -581.44      | -529.33      | 1,904,391.96        | 540,957.58         | 36.2338487 | -107.6944559 |
| 4,600.00                                          | 10.79           | 232.69      | 4,520.43              | -585.05      | -533.46      | 1,904,388.34        | 540,953.47         | 36.2338388 | -107.6944699 |



**Scientific Drilling Int.**  
Survey Report - Geographic

|                  |                          |                                     |                                         |
|------------------|--------------------------|-------------------------------------|-----------------------------------------|
| <b>Company:</b>  | WPX Energy               | <b>Local Co-ordinate Reference:</b> | Well W Lybrook 2308-09M #702H - Slot A2 |
| <b>Project:</b>  | T23N R8W                 | <b>TVD Reference:</b>               | KB @ 6951.00usft (Cyclone 32)           |
| <b>Site:</b>     | W Lybrook 2308-09M       | <b>MD Reference:</b>                | KB @ 6951.00usft (Cyclone 32)           |
| <b>Well:</b>     | W Lybrook 2308-09M #702H | <b>North Reference:</b>             | True                                    |
| <b>Wellbore:</b> | Wellbore #1              | <b>Survey Calculation Method:</b>   | Minimum Curvature                       |
| <b>Design:</b>   | Actual                   | <b>Database:</b>                    | Grand Junction District                 |

**Survey**

| Measured<br>Depth<br>(usft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Map<br>Northing<br>(usft) | Map<br>Easting<br>(usft) | Latitude   | Longitude    |
|-----------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|---------------------------|--------------------------|------------|--------------|
| 4,631.00                    | 11.43              | 246.05         | 4,550.86                    | -588.05         | -538.57         | 1,904,385.33              | 540,948.36               | 36.2338305 | -107.6944872 |
| 4,663.00                    | 12.23              | 255.65         | 4,582.18                    | -590.18         | -544.75         | 1,904,383.19              | 540,942.18               | 36.2338247 | -107.6945082 |
| 4,694.00                    | 12.72              | 264.86         | 4,612.45                    | -591.30         | -551.33         | 1,904,382.06              | 540,935.60               | 36.2338216 | -107.6945305 |
| 4,725.00                    | 12.94              | 274.63         | 4,642.68                    | -591.32         | -558.19         | 1,904,382.03              | 540,928.74               | 36.2338215 | -107.6945537 |
| 4,757.00                    | 13.81              | 284.97         | 4,673.82                    | -590.05         | -565.46         | 1,904,383.29              | 540,921.47               | 36.2338250 | -107.6945784 |
| 4,788.00                    | 14.67              | 293.59         | 4,703.87                    | -587.52         | -572.63         | 1,904,385.81              | 540,914.30               | 36.2338320 | -107.6946027 |
| 4,820.00                    | 16.27              | 299.37         | 4,734.71                    | -583.70         | -580.25         | 1,904,389.62              | 540,906.67               | 36.2338424 | -107.6946285 |
| 4,851.00                    | 18.18              | 302.12         | 4,764.32                    | -579.00         | -588.13         | 1,904,394.31              | 540,898.78               | 36.2338554 | -107.6946553 |
| 4,883.00                    | 20.68              | 302.72         | 4,794.49                    | -573.29         | -597.11         | 1,904,400.01              | 540,889.79               | 36.2338710 | -107.6946857 |
| 4,914.00                    | 23.28              | 304.18         | 4,823.24                    | -566.89         | -606.79         | 1,904,406.39              | 540,880.11               | 36.2338886 | -107.6947185 |
| 4,945.00                    | 25.66              | 306.07         | 4,851.45                    | -559.49         | -617.28         | 1,904,413.77              | 540,869.60               | 36.2339089 | -107.6947541 |
| 4,976.00                    | 27.76              | 306.91         | 4,879.14                    | -551.21         | -628.48         | 1,904,422.05              | 540,858.39               | 36.2339317 | -107.6947921 |
| 5,008.00                    | 29.98              | 308.42         | 4,907.16                    | -541.76         | -640.71         | 1,904,431.47              | 540,846.15               | 36.2339577 | -107.6948335 |
| 5,039.00                    | 33.28              | 309.71         | 4,933.56                    | -531.51         | -653.32         | 1,904,441.70              | 540,833.52               | 36.2339858 | -107.6948763 |
| 5,070.00                    | 35.73              | 311.31         | 4,959.10                    | -520.10         | -666.67         | 1,904,453.10              | 540,820.16               | 36.2340172 | -107.6949216 |
| 5,102.00                    | 38.84              | 312.21         | 4,984.56                    | -507.19         | -681.12         | 1,904,465.99              | 540,805.69               | 36.2340526 | -107.6949706 |
| 5,133.00                    | 42.15              | 312.44         | 5,008.13                    | -493.63         | -696.00         | 1,904,479.52              | 540,790.79               | 36.2340899 | -107.6950210 |
| 5,165.00                    | 44.93              | 313.09         | 5,031.32                    | -478.66         | -712.18         | 1,904,494.47              | 540,774.59               | 36.2341310 | -107.6950759 |
| 5,196.00                    | 48.07              | 313.28         | 5,052.66                    | -463.28         | -728.57         | 1,904,509.83              | 540,758.17               | 36.2341733 | -107.6951315 |
| 5,227.00                    | 50.34              | 314.14         | 5,072.91                    | -447.06         | -745.53         | 1,904,526.02              | 540,741.19               | 36.2342178 | -107.6951890 |
| 5,259.00                    | 52.84              | 314.72         | 5,092.79                    | -429.51         | -763.44         | 1,904,543.55              | 540,723.26               | 36.2342660 | -107.6952497 |
| 5,290.00                    | 55.65              | 315.49         | 5,110.91                    | -411.68         | -781.19         | 1,904,561.35              | 540,705.48               | 36.2343150 | -107.6953099 |
| 5,321.00                    | 58.85              | 316.08         | 5,127.67                    | -393.00         | -799.37         | 1,904,580.00              | 540,687.28               | 36.2343663 | -107.6953715 |
| 5,332.23                    | 59.50              | 315.88         | 5,133.43                    | -386.06         | -806.07         | 1,904,586.93              | 540,680.57               | 36.2343854 | -107.6953942 |
| <b>Start 60 tan #702H</b>   |                    |                |                             |                 |                 |                           |                          |            |              |
| 5,353.00                    | 60.70              | 315.53         | 5,143.78                    | -373.18         | -818.64         | 1,904,599.80              | 540,667.97               | 36.2344208 | -107.6954369 |
| 5,384.00                    | 61.05              | 315.24         | 5,158.87                    | -353.90         | -837.66         | 1,904,619.05              | 540,648.93               | 36.2344737 | -107.6955014 |
| 5,391.62                    | 61.44              | 315.22         | 5,162.53                    | -349.16         | -842.36         | 1,904,623.78              | 540,644.22               | 36.2344868 | -107.6955173 |
| <b>End 60 tan #702H</b>     |                    |                |                             |                 |                 |                           |                          |            |              |
| 5,415.00                    | 62.62              | 315.14         | 5,173.50                    | -334.51         | -856.92         | 1,904,638.41              | 540,629.64               | 36.2345270 | -107.6955667 |
| 5,447.00                    | 65.00              | 315.44         | 5,187.62                    | -314.10         | -877.12         | 1,904,658.78              | 540,609.41               | 36.2345830 | -107.6956352 |
| 5,478.00                    | 67.94              | 315.78         | 5,200.00                    | -293.80         | -897.00         | 1,904,679.06              | 540,589.50               | 36.2346388 | -107.6957026 |
| 5,510.00                    | 70.82              | 315.49         | 5,211.27                    | -272.39         | -917.94         | 1,904,700.44              | 540,568.53               | 36.2346976 | -107.6957736 |
| 5,541.00                    | 72.97              | 315.70         | 5,220.90                    | -251.34         | -938.56         | 1,904,721.46              | 540,547.88               | 36.2347555 | -107.6958435 |
| 5,572.00                    | 75.43              | 315.60         | 5,229.34                    | -230.01         | -959.41         | 1,904,742.76              | 540,527.00               | 36.2348141 | -107.6959142 |
| 5,604.00                    | 77.79              | 315.66         | 5,236.75                    | -207.76         | -981.17         | 1,904,764.98              | 540,505.20               | 36.2348752 | -107.6959880 |
| 5,635.00                    | 79.98              | 315.55         | 5,242.73                    | -186.02         | -1,002.45       | 1,904,786.68              | 540,483.89               | 36.2349349 | -107.6960602 |
| 5,666.00                    | 82.45              | 316.12         | 5,247.46                    | -164.05         | -1,023.80       | 1,904,808.63              | 540,462.52               | 36.2349953 | -107.6961325 |
| 5,698.00                    | 84.45              | 315.67         | 5,251.11                    | -141.22         | -1,045.92       | 1,904,831.42              | 540,440.36               | 36.2350580 | -107.6962076 |
| 5,715.17                    | 85.46              | 315.88         | 5,252.62                    | -128.96         | -1,057.85       | 1,904,843.66              | 540,428.41               | 36.2350916 | -107.6962480 |
| <b>POE #702H</b>            |                    |                |                             |                 |                 |                           |                          |            |              |
| 5,729.00                    | 86.27              | 316.05         | 5,253.62                    | -119.05         | -1,067.44       | 1,904,853.56              | 540,418.81               | 36.2351189 | -107.6962805 |
| 5,760.00                    | 88.15              | 315.90         | 5,255.13                    | -96.79          | -1,088.96       | 1,904,875.79              | 540,397.26               | 36.2351800 | -107.6963535 |
| 5,823.00                    | 89.09              | 315.43         | 5,256.64                    | -51.74          | -1,132.97       | 1,904,920.78              | 540,353.18               | 36.2353038 | -107.6965027 |
| 5,853.00                    | 89.58              | 315.36         | 5,256.99                    | -30.38          | -1,154.03       | 1,904,942.11              | 540,332.08               | 36.2353625 | -107.6965742 |
| <b>Last Survey Curve</b>    |                    |                |                             |                 |                 |                           |                          |            |              |
| 5,917.00                    | 90.64              | 315.22         | 5,256.86                    | 15.10           | -1,199.06       | 1,904,987.52              | 540,286.99               | 36.2354874 | -107.6967268 |
| 6,011.00                    | 88.72              | 314.97         | 5,257.39                    | 81.68           | -1,265.41       | 1,905,054.00              | 540,220.54               | 36.2356703 | -107.6969518 |
| 6,105.00                    | 90.57              | 314.92         | 5,257.97                    | 148.08          | -1,331.94       | 1,905,120.31              | 540,153.92               | 36.2358527 | -107.6971774 |
| 6,199.00                    | 88.72              | 315.12         | 5,258.55                    | 214.56          | -1,398.38       | 1,905,186.70              | 540,087.38               | 36.2360353 | -107.6974027 |
| 6,293.00                    | 89.13              | 314.11         | 5,260.32                    | 280.57          | -1,465.28       | 1,905,252.61              | 540,020.39               | 36.2362166 | -107.6976296 |
| 6,387.00                    | 90.07              | 313.60         | 5,260.97                    | 345.69          | -1,533.06       | 1,905,317.63              | 539,952.51               | 36.2363955 | -107.6978594 |
| 6,482.00                    | 88.79              | 314.45         | 5,261.92                    | 411.71          | -1,601.36       | 1,905,383.55              | 539,884.11               | 36.2365769 | -107.6980911 |
| 6,576.00                    | 89.13              | 313.83         | 5,263.63                    | 477.16          | -1,668.81       | 1,905,448.90              | 539,816.57               | 36.2367567 | -107.6983198 |



**Scientific Drilling Int.**  
Survey Report - Geographic

|                  |                          |                                     |                                         |
|------------------|--------------------------|-------------------------------------|-----------------------------------------|
| <b>Company:</b>  | WPX Energy               | <b>Local Co-ordinate Reference:</b> | Well W Lybrook 2308-09M #702H - Slot A2 |
| <b>Project:</b>  | T23N R8W                 | <b>TVD Reference:</b>               | KB @ 6951.00usft (Cyclone 32)           |
| <b>Site:</b>     | W Lybrook 2308-09M       | <b>MD Reference:</b>                | KB @ 6951.00usft (Cyclone 32)           |
| <b>Well:</b>     | W Lybrook 2308-09M #702H | <b>North Reference:</b>             | True                                    |
| <b>Wellbore:</b> | Wellbore #1              | <b>Survey Calculation Method:</b>   | Minimum Curvature                       |
| <b>Design:</b>   | Actual                   | <b>Database:</b>                    | Grand Junction District                 |

| Survey                |                 |             |                       |              |              |                     |                    |            |              |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|---------------------|--------------------|------------|--------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (usft) | Map Easting (usft) | Latitude   | Longitude    |
| 6,670.00              | 89.06           | 312.92      | 5,265.11              | 541.71       | -1,737.13    | 1,905,513.35        | 539,748.16         | 36.2369340 | -107.6985515 |
| 6,763.00              | 90.03           | 312.79      | 5,265.85              | 604.96       | -1,805.30    | 1,905,576.50        | 539,679.90         | 36.2371077 | -107.6987826 |
| 6,884.00              | 88.76           | 313.71      | 5,267.13              | 687.86       | -1,893.43    | 1,905,659.28        | 539,591.65         | 36.2373355 | -107.6990815 |
| 6,978.00              | 88.56           | 314.78      | 5,269.32              | 753.43       | -1,960.74    | 1,905,724.75        | 539,524.24         | 36.2375156 | -107.6993098 |
| 7,072.00              | 90.03           | 314.66      | 5,270.48              | 819.56       | -2,027.53    | 1,905,790.78        | 539,457.36         | 36.2376972 | -107.6995362 |
| 7,166.00              | 90.27           | 313.76      | 5,270.24              | 885.11       | -2,094.91    | 1,905,856.23        | 539,389.88         | 36.2378773 | -107.6997647 |
| 7,261.00              | 89.60           | 316.24      | 5,270.34              | 952.28       | -2,162.08    | 1,905,923.30        | 539,322.62         | 36.2380618 | -107.6999925 |
| 7,353.00              | 89.23           | 316.29      | 5,271.28              | 1,018.75     | -2,225.67    | 1,905,989.68        | 539,258.92         | 36.2382444 | -107.7002082 |
| 7,446.00              | 89.03           | 316.02      | 5,272.69              | 1,085.81     | -2,290.09    | 1,906,056.65        | 539,194.41         | 36.2384286 | -107.7004266 |
| 7,538.00              | 88.32           | 315.74      | 5,274.82              | 1,151.84     | -2,354.12    | 1,906,122.59        | 539,130.28         | 36.2386100 | -107.7006438 |
| 7,663.00              | 89.80           | 316.68      | 5,276.87              | 1,242.06     | -2,440.61    | 1,906,212.68        | 539,043.67         | 36.2388578 | -107.7009371 |
| 7,756.00              | 88.93           | 316.13      | 5,277.90              | 1,309.41     | -2,504.73    | 1,906,279.94        | 538,979.45         | 36.2390428 | -107.7011545 |
| 7,848.00              | 89.46           | 314.76      | 5,279.20              | 1,374.96     | -2,569.27    | 1,906,345.39        | 538,914.81         | 36.2392229 | -107.7013734 |
| 7,940.00              | 90.13           | 315.43      | 5,279.53              | 1,440.12     | -2,634.21    | 1,906,410.46        | 538,849.77         | 36.2394019 | -107.7015937 |
| 8,032.00              | 88.22           | 315.73      | 5,280.85              | 1,505.82     | -2,698.59    | 1,906,476.06        | 538,785.29         | 36.2395823 | -107.7018120 |
| 8,124.00              | 88.22           | 314.67      | 5,283.71              | 1,571.07     | -2,763.39    | 1,906,541.22        | 538,720.41         | 36.2397616 | -107.7020317 |
| 8,218.00              | 87.04           | 314.87      | 5,287.59              | 1,637.21     | -2,830.06    | 1,906,607.26        | 538,653.63         | 36.2399433 | -107.7022579 |
| 8,309.00              | 87.04           | 313.49      | 5,292.29              | 1,700.54     | -2,895.24    | 1,906,670.50        | 538,588.37         | 36.2401172 | -107.7024789 |
| 8,403.00              | 87.28           | 314.90      | 5,296.95              | 1,765.99     | -2,962.55    | 1,906,735.85        | 538,520.96         | 36.2402970 | -107.7027072 |
| 8,498.00              | 89.19           | 314.54      | 5,299.88              | 1,832.80     | -3,030.02    | 1,906,802.56        | 538,453.40         | 36.2404805 | -107.7029360 |
| 8,593.00              | 89.66           | 313.96      | 5,300.83              | 1,899.08     | -3,098.06    | 1,906,868.75        | 538,385.26         | 36.2406626 | -107.7031667 |
| 8,687.00              | 88.93           | 315.67      | 5,301.99              | 1,965.33     | -3,164.73    | 1,906,934.90        | 538,318.49         | 36.2408446 | -107.7033929 |
| 8,781.00              | 89.56           | 314.99      | 5,303.23              | 2,032.17     | -3,230.81    | 1,907,001.64        | 538,252.31         | 36.2410282 | -107.7036170 |
| 8,875.00              | 88.12           | 316.74      | 5,305.13              | 2,099.62     | -3,296.25    | 1,907,068.99        | 538,186.78         | 36.2412134 | -107.7038389 |
| 8,969.00              | 88.25           | 315.69      | 5,308.11              | 2,167.45     | -3,361.26    | 1,907,136.73        | 538,121.67         | 36.2413997 | -107.7040594 |
| 9,062.00              | 90.03           | 317.91      | 5,309.50              | 2,235.23     | -3,424.91    | 1,907,204.42        | 538,057.92         | 36.2415859 | -107.7042752 |
| 9,156.00              | 90.57           | 317.51      | 5,309.01              | 2,304.76     | -3,488.16    | 1,907,273.86        | 537,994.57         | 36.2417769 | -107.7044897 |
| 9,249.00              | 89.43           | 317.42      | 5,309.01              | 2,373.29     | -3,551.03    | 1,907,342.29        | 537,931.60         | 36.2419651 | -107.7047030 |
| 9,343.00              | 89.46           | 316.88      | 5,309.92              | 2,442.20     | -3,614.96    | 1,907,411.11        | 537,867.58         | 36.2421544 | -107.7049198 |
| 9,437.00              | 88.52           | 316.03      | 5,311.58              | 2,510.32     | -3,679.70    | 1,907,479.14        | 537,802.73         | 36.2423416 | -107.7051394 |
| 9,531.00              | 89.40           | 315.44      | 5,313.28              | 2,577.62     | -3,745.30    | 1,907,546.35        | 537,737.03         | 36.2425264 | -107.7053619 |
| 9,624.00              | 89.23           | 316.52      | 5,314.40              | 2,644.50     | -3,809.92    | 1,907,613.13        | 537,672.32         | 36.2427101 | -107.7055810 |
| 9,718.00              | 90.30           | 316.39      | 5,314.78              | 2,712.63     | -3,874.68    | 1,907,681.16        | 537,607.46         | 36.2428973 | -107.7058007 |
| 9,812.00              | 88.55           | 315.75      | 5,315.72              | 2,780.32     | -3,939.89    | 1,907,748.76        | 537,542.15         | 36.2430832 | -107.7060218 |
| 9,906.00              | 89.76           | 315.55      | 5,317.11              | 2,847.53     | -4,005.59    | 1,907,815.87        | 537,476.35         | 36.2432678 | -107.7062447 |
| 9,999.00              | 88.69           | 315.09      | 5,318.37              | 2,913.65     | -4,070.98    | 1,907,881.90        | 537,410.87         | 36.2434494 | -107.7064664 |
| 10,136.00             | 89.96           | 313.29      | 5,319.98              | 3,009.13     | -4,169.20    | 1,907,977.24        | 537,312.51         | 36.2437117 | -107.7067996 |
| 10,230.00             | 88.99           | 313.20      | 5,320.84              | 3,073.53     | -4,237.67    | 1,908,041.54        | 537,243.95         | 36.2438886 | -107.7070318 |
| 10,324.00             | 89.08           | 313.90      | 5,322.43              | 3,138.28     | -4,305.78    | 1,908,106.19        | 537,175.74         | 36.2440664 | -107.7072628 |
| 10,418.00             | 87.41           | 313.29      | 5,325.31              | 3,203.07     | -4,373.83    | 1,908,170.88        | 537,107.60         | 36.2442444 | -107.7074936 |
| 10,512.00             | 88.46           | 313.38      | 5,328.69              | 3,267.53     | -4,442.15    | 1,908,235.25        | 537,039.18         | 36.2444214 | -107.7077253 |
| 10,606.00             | 89.52           | 313.64      | 5,330.35              | 3,332.24     | -4,510.31    | 1,908,299.85        | 536,970.93         | 36.2445992 | -107.7079565 |
| 10,700.00             | 90.13           | 313.38      | 5,330.64              | 3,396.96     | -4,578.49    | 1,908,364.47        | 536,902.66         | 36.2447769 | -107.7081878 |
| 10,793.00             | 90.40           | 312.85      | 5,330.21              | 3,460.52     | -4,646.38    | 1,908,427.93        | 536,834.68         | 36.2449515 | -107.7084180 |
| 10,887.00             | 91.36           | 312.59      | 5,328.76              | 3,524.28     | -4,715.43    | 1,908,491.60        | 536,765.54         | 36.2451266 | -107.7086522 |
| 10,981.00             | 90.84           | 313.11      | 5,326.96              | 3,588.20     | -4,784.33    | 1,908,555.41        | 536,696.54         | 36.2453022 | -107.7088859 |
| 11,073.00             | 91.19           | 312.94      | 5,325.33              | 3,650.96     | -4,851.57    | 1,908,618.08        | 536,629.20         | 36.2454746 | -107.7091140 |
| 11,167.00             | 89.26           | 312.81      | 5,324.96              | 3,714.91     | -4,920.46    | 1,908,681.93        | 536,560.23         | 36.2456502 | -107.7093476 |
| 11,261.00             | 89.43           | 313.20      | 5,326.03              | 3,779.02     | -4,989.19    | 1,908,745.94        | 536,491.40         | 36.2458263 | -107.7095808 |
| 11,355.00             | 89.78           | 312.76      | 5,326.68              | 3,843.11     | -5,057.96    | 1,908,809.92        | 536,422.54         | 36.2460023 | -107.7098140 |
| 11,422.00             | 89.87           | 313.64      | 5,326.89              | 3,888.97     | -5,106.80    | 1,908,855.72        | 536,373.63         | 36.2461283 | -107.7099797 |
| 11,516.00             | 89.16           | 316.80      | 5,327.68              | 3,955.68     | -5,173.00    | 1,908,922.33        | 536,307.33         | 36.2463115 | -107.7102042 |
| 11,610.00             | 90.84           | 316.80      | 5,327.68              | 4,024.20     | -5,237.35    | 1,908,990.76        | 536,242.89         | 36.2464997 | -107.7104225 |
| 11,704.00             | 91.28           | 316.89      | 5,325.94              | 4,092.76     | -5,301.63    | 1,909,059.23        | 536,178.51         | 36.2466881 | -107.7106405 |
| 11,799.00             | 92.24           | 316.72      | 5,323.03              | 4,161.99     | -5,366.63    | 1,909,128.36        | 536,113.41         | 36.2468782 | -107.7108610 |



# Scientific Drilling Int.

## Survey Report - Geographic

|                  |                          |                                     |                                         |
|------------------|--------------------------|-------------------------------------|-----------------------------------------|
| <b>Company:</b>  | WPX Energy               | <b>Local Co-ordinate Reference:</b> | Well W Lybrook 2308-09M #702H - Slot A2 |
| <b>Project:</b>  | T23N R8W                 | <b>TVD Reference:</b>               | KB @ 6951.00usft (Cyclone 32)           |
| <b>Site:</b>     | W Lybrook 2308-09M       | <b>MD Reference:</b>                | KB @ 6951.00usft (Cyclone 32)           |
| <b>Well:</b>     | W Lybrook 2308-09M #702H | <b>North Reference:</b>             | True                                    |
| <b>Wellbore:</b> | Wellbore #1              | <b>Survey Calculation Method:</b>   | Minimum Curvature                       |
| <b>Design:</b>   | Actual                   | <b>Database:</b>                    | Grand Junction District                 |

### Survey

| Measured Depth (usft)                              | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (usft) | Map Easting (usft) | Latitude   | Longitude    |
|----------------------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|---------------------|--------------------|------------|--------------|
| 11,893.00                                          | 92.95           | 316.19      | 5,318.77              | 4,230.05     | -5,431.32    | 1,909,196.33        | 536,048.62         | 36.2470651 | -107.7110804 |
| <b>SDI MWD</b>                                     |                 |             |                       |              |              |                     |                    |            |              |
| 12,095.00                                          | 90.00           | 316.72      | 5,313.57              | 4,376.40     | -5,570.42    | 1,909,342.48        | 535,909.31         | 36.2474671 | -107.7115523 |
| 12,135.00                                          | 90.00           | 316.72      | 5,313.57              | 4,405.52     | -5,597.84    | 1,909,371.56        | 535,881.84         | 36.2475471 | -107.7116453 |
| <b>RSI @ 12135' MD - E 535881.84, N 1909371.56</b> |                 |             |                       |              |              |                     |                    |            |              |
| 12,211.54                                          | 90.00           | 316.72      | 5,313.57              | 4,461.25     | -5,650.31    | 1,909,427.20        | 535,829.29         | 36.2477001 | -107.7118233 |
| <b>BHL #702H</b>                                   |                 |             |                       |              |              |                     |                    |            |              |
| 12,214.00                                          | 90.00           | 316.72      | 5,313.57              | 4,463.04     | -5,652.00    | 1,909,428.99        | 535,827.60         | 36.2477051 | -107.7118290 |
| <b>Bit Projection</b>                              |                 |             |                       |              |              |                     |                    |            |              |

### Casing Points

| Measured Depth (usft) | Vertical Depth (usft) | Name   | Casing Diameter (in) | Hole Diameter (in) |
|-----------------------|-----------------------|--------|----------------------|--------------------|
| 3,161.00              | 3,106.87              | 9 5/8" | 9.62                 | 12.25              |

### Design Annotations

| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              | Comment                           |
|-----------------------|-----------------------|-------------------|--------------|-----------------------------------|
|                       |                       | +N/-S (usft)      | +E/-W (usft) |                                   |
| 346.00                | 345.99                | -1.39             | -0.40        | First Survey Int.                 |
| 3,161.00              | 3,106.87              | -387.03           | -352.72      | 9-5/8 @ E 541133.91, N 1904586.62 |
| 4,506.00              | 4,427.70              | -574.33           | -522.48      | Last Survey Int.                  |
| 4,506.00              | 4,427.70              | -574.33           | -522.48      | KOP                               |
| 4,538.00              | 4,459.31              | -577.92           | -525.93      | First Survey Curve                |
| 5,853.00              | 5,256.99              | -30.38            | -1,154.03    | Last Survey Curve                 |
| 11,893.00             | 5,318.77              | 4,230.05          | -5,431.32    | SDI MWD                           |
| 12,135.00             | 5,313.57              | 4,405.52          | -5,597.84    | RSI @ 12135' MD                   |
| 12,135.00             | 5,313.57              | 4,405.52          | -5,597.84    | E 535881.84, N 1909371.56         |
| 12,214.00             | 5,313.57              | 4,463.04          | -5,652.00    | Bit Projection                    |

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_