

3329 W. Pinhook Rd.  
Lafayette, LA 70508-3506, USA  
Tel. 337-233-3982  
Fax 337-234-2988

**PATHFINDER**  
A Schlumberger Company

**HOBBS OCD**  
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## ***DIRECTIONAL SURVEY REPORT***

***DEVON ENERGY PRODUCTION CO., L.P.***

***REBEL 20 FEDERAL #1H***

***LEA COUNTY, NEW MEXICO***

**SCHLUMBERGER**

**PREPARED BY: DAVID PARISH**

3329 W. Pinhook Rd.  
Lafayette, LA 70508-3506, USA  
Tel. 337-233-3982  
Fax 337-234-2988



November 12, 2015

DEVON ENERGY CORPORATION  
Attn: Carl Bracklein  
333 West Sheridan  
Oklahoma City, OK 73102

RE: DEVON ENERGY PRODUCTION CO., L.P.  
Rebel 20 Federal #1H  
LEA COUNTY, NM  
RIG: Precision #601  
API NO.: 30-025-42515  
FILE NO.: 15LAF0324

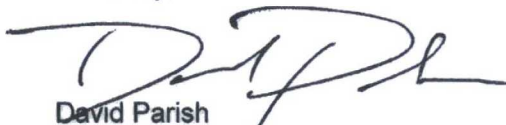
Dear Mr. Bracklein:

We hereby certify that the enclosed Original Field Survey Data contained in this report represents to the best of our knowledge, a true and accurate survey of the well at the time the survey was run.

DIRECTIONAL SURVEY DATA  
3 – Original Directional Survey Reports

We appreciate the opportunity to work with you and we look forward to your business support. If you have any questions, I can be reached at (337) 233-3982.

Sincerely,



David Parish  
M/LWD Service Coordinator  
Schlumberger

DP:tb

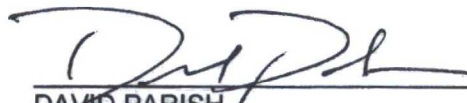
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**DIRECTIONAL SURVEY COMPANY REPORT:**

1. NAME OF SURVEYING COMPANY: SCHLUMBERGER
2. NAME OF PERSON(S) PERFORMING SURVEY:  
A) KEVIN BLANCHARD  
B) BLAIR BOUTTE
3. POSITION OF SAID PERSON(S): (A-B) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 10/19/15 TO 10/30/15
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: LEA COUNTY
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:  
  
DEVON ENERGY PRODUCTION CO., L.P.  
REBEL 20 FEDERAL #1H  
LEA COUNTY, NM  
RIG: PRECISION #601  
API NO.: 30-025-42515
9. SURVEY CERTIFIED FROM: 775 TO 12,749 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED 4625.68 FEET ON A BEARING OF 178.28 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED TO BIT DEPTH OF 12,749 FEET, ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

  
DAVID PARISH  
M/LWD SERVICE COORDINATOR

3329 W. Pinhook Rd.  
Lafayette, LA 70508-3506, USA  
Tel. 337-233-3982  
Fax 337-234-2988



STATE OF LOUISIANA  
PARISH OF LAFAYETTE

I, **Kevin Blanchard**, certify that; I am employed by Schlumberger; that I did on the day(s) of **10/19/15** through **10/30/15** conduct or supervise the taking of a **Measurement While Drilling** survey from a depth of **775 feet to a depth of 12,749 feet**; that the data is true, correct, complete and within the limitations of the tool as set forth by Schlumberger; that I am authorized and qualified to make this report; that this survey was conducted at the request of **DEVON ENERGY PRODUCTION CO., L.P.** for the **Rebel 20 Federal #1H Well API No. 30-025-42515** in **Lea County, New Mexico**; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Schlumberger.

  
\_\_\_\_\_  
**PathFinder Field Engineer**

# PathFinder – a Schlumberger company

## BHL Report

Page 01/01  
Tie-in Date: 10/19/2015  
Date Completed: 10/30/2015

DEVON ENERGY PRODUCTION COMPANY, L.P.  
REBEL 20 FEDERAL 1H  
LEA COUNTY, NM  
API#: 30-025-42515      Rig: PRECISION 601  
PathFinder Office Supervisor: DAVID LAMAR PARISH  
PathFinder Field Engineers: KEVIN BLANCHARD  
BLAIR BOUTTE

Survey Horiz. Reference: WELLHEAD  
Ref Coordinates: LAT: 32.12.33.3891 N LON: 103.42.12.9758 W  
GRID Reference: NAD83 new mexico east Transverse Mercator  
Ref GRID Coord: X: 736102.9800 Y: 440438.7700  
North Aligned To: GRID NORTH  
Total Magnetic Correction: 6.73° EAST TO GRID  
Vertical Section Plane: 177.74  
Survey Vert. Reference: 25.00' Rotary Table To Ground  
Altitude: 3571.00' Ground To MSL

|                       |                |             |
|-----------------------|----------------|-------------|
| Measured Depth        | 12749.00       | (feet)      |
| Inclination           | 89.52          | (deg)       |
| Azimuth               | 181.27         | (deg)       |
| True Vertical Depth   | 8396.72        | (feet)      |
| Vertical Section      | 4625.47        | (feet)      |
| Survey X cord         | 736242.02      | (feet)      |
| Survey Y cord         | 435815.18      | (feet)      |
| Survey Lat            | 32.19656343 N  | (deg)       |
| Survey Lon            | 103.70324247 W | (deg)       |
| Rectangular Corr. N/S | 4623.59 S      | (feet)      |
| Rectangular Corr. E/W | 139.04 E       | (feet)      |
| Closure Distance      | 4625.68        | (feet)      |
| Direction of Closure  | 178.28         | (deg)       |
| Dogleg Severity       | 0.00           | (deg/100ft) |



## PathFinder – a Schlumberger company

### Survey Report

DEVON ENERGY PRODUCTION COMPANY, L.P.  
REBEL 20 FEDERAL 1H  
LEA COUNTY, NM  
API#: 30-025-42515 Rig: PRECISION 601  
PathFinder Office Supervisor: DAVID LAMAR PARISH  
PathFinder Field Engineers: KEVIN BLANCHARD  
BLAIR BOUTTE

Survey Horiz. Reference: WELLHEAD  
Ref Coordinates: LAT: 32.12.33.3891 N LON: 103.42.12.9758 W  
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Vertical Section Plane: 177.74  
Survey Vert. Reference: 25.00' Rotary Table To Ground  
Altitude: 3571.00' Ground To MSL

Survey Calculations by PathCalc v2.05.00.00 using Minimum Curvature

| Measured Depth<br>(ft)                                    | Incl<br>(deg) | Drift Dir.<br>(deg) | TVD<br>(ft) | Course Length<br>(ft) | Vertical Section<br>(ft) | TOTAL<br>Rectangular Offsets<br>(ft) (ft) |        | Survey Latitude<br>(deg) | Survey Longitude<br>(deg) | Closure<br>Dist Dir<br>(ft) (deg) |        | DLS<br>(dg/100ft) |
|-----------------------------------------------------------|---------------|---------------------|-------------|-----------------------|--------------------------|-------------------------------------------|--------|--------------------------|---------------------------|-----------------------------------|--------|-------------------|
| THE FOLLOWING ARE EXTREME ENGINEERING GYRO SURVEYS.       |               |                     |             |                       |                          |                                           |        |                          |                           |                                   |        |                   |
| 171.00                                                    | 0.39          | 61.65               | 171.00      | 171.00                | -0.25                    | 0.27 N                                    | 0.51 E | 32.20927550 N            | 103.70360272 W            | 0.58@                             | 61.78  | 0.23              |
| 269.00                                                    | 0.31          | 92.57               | 268.99      | 98.00                 | -0.38                    | 0.42 N                                    | 1.07 E | 32.20927589 N            | 103.70360091 W            | 1.15@                             | 68.52  | 0.21              |
| 330.00                                                    | 0.20          | 111.07              | 329.99      | 61.00                 | -0.32                    | 0.38 N                                    | 1.33 E | 32.20927576 N            | 103.70360006 W            | 1.39@                             | 74.29  | 0.22              |
| 424.00                                                    | 0.31          | 68.53               | 423.99      | 94.00                 | -0.34                    | 0.41 N                                    | 1.72 E | 32.20927585 N            | 103.70359880 W            | 1.77@                             | 76.64  | 0.23              |
| 519.00                                                    | 0.09          | 59.26               | 518.99      | 95.00                 | -0.46                    | 0.54 N                                    | 2.03 E | 32.20927621 N            | 103.70359781 W            | 2.10@                             | 75.04  | 0.23              |
| 614.00                                                    | 0.09          | 246.24              | 613.99      | 95.00                 | -0.47                    | 0.55 N                                    | 2.02 E | 32.20927623 N            | 103.70359783 W            | 2.10@                             | 74.80  | 0.19              |
| 709.00                                                    | 0.22          | 154.75              | 708.99      | 95.00                 | -0.27                    | 0.35 N                                    | 2.03 E | 32.20927569 N            | 103.70359780 W            | 2.06@                             | 80.10  | 0.25              |
| ** TIED-IN TO EXTREME ENGINEERING GYRO SURVEYS AT 775'MD. |               |                     |             |                       |                          |                                           |        |                          |                           |                                   |        |                   |
| 775.00                                                    | 0.40          | 176.63              | 774.99      | 66.00                 | 0.07                     | 0.01 N                                    | 2.10 E | 32.20927474 N            | 103.70359759 W            | 2.10@                             | 89.73  | 0.32              |
| THE FOLLOWING ARE SCHLUMBERGER TELEPACER MWD SURVEYS.     |               |                     |             |                       |                          |                                           |        |                          |                           |                                   |        |                   |
| 905.00                                                    | 0.62          | 181.54              | 904.98      | 130.00                | 1.23                     | 1.15 S                                    | 2.11 E | 32.20927157 N            | 103.70359758 W            | 2.40@                             | 118.53 | 0.17              |
| 1000.00                                                   | 0.79          | 183.17              | 999.98      | 95.00                 | 2.39                     | 2.31 S                                    | 2.06 E | 32.20926836 N            | 103.70359777 W            | 3.10@                             | 138.35 | 0.18              |
| 1094.00                                                   | 0.88          | 181.87              | 1093.97     | 94.00                 | 3.76                     | 3.68 S                                    | 2.00 E | 32.20926460 N            | 103.70359798 W            | 4.19@                             | 151.51 | 0.10              |
| 1189.00                                                   | 0.97          | 159.72              | 1188.96     | 95.00                 | 5.25                     | 5.17 S                                    | 2.25 E | 32.20926052 N            | 103.70359719 W            | 5.64@                             | 156.43 | 0.39              |
| 1278.00                                                   | 1.06          | 171.16              | 1277.94     | 89.00                 | 6.78                     | 6.69 S                                    | 2.64 E | 32.20925633 N            | 103.70359596 W            | 7.19@                             | 158.45 | 0.25              |
| 1368.00                                                   | 0.88          | 157.22              | 1367.93     | 90.00                 | 8.26                     | 8.15 S                                    | 3.04 E | 32.20925231 N            | 103.70359471 W            | 8.69@                             | 159.56 | 0.33              |
| 1457.00                                                   | 1.06          | 162.10              | 1456.92     | 89.00                 | 9.69                     | 9.56 S                                    | 3.55 E | 32.20924842 N            | 103.70359307 W            | 10.20@                            | 159.60 | 0.22              |
| 1547.00                                                   | 0.88          | 154.83              | 1546.90     | 90.00                 | 11.13                    | 10.98 S                                   | 4.10 E | 32.20924451 N            | 103.70359132 W            | 11.72@                            | 159.50 | 0.24              |
| 1636.00                                                   | 0.79          | 160.03              | 1635.89     | 89.00                 | 12.34                    | 12.17 S                                   | 4.60 E | 32.20924122 N            | 103.70358972 W            | 13.01@                            | 159.28 | 0.13              |
| 1725.00                                                   | 0.88          | 155.56              | 1724.88     | 89.00                 | 13.56                    | 13.37 S                                   | 5.10 E | 32.20923792 N            | 103.70358815 W            | 14.31@                            | 159.14 | 0.12              |
| 1815.00                                                   | 0.70          | 158.43              | 1814.88     | 90.00                 | 14.72                    | 14.51 S                                   | 5.58 E | 32.20923477 N            | 103.70358660 W            | 15.55@                            | 158.95 | 0.20              |
| 1904.00                                                   | 0.70          | 131.83              | 1903.87     | 89.00                 | 15.61                    | 15.38 S                                   | 6.19 E | 32.20923238 N            | 103.70358466 W            | 16.58@                            | 158.08 | 0.36              |
| 1994.00                                                   | 0.79          | 141.05              | 1993.86     | 90.00                 | 16.49                    | 16.23 S                                   | 6.99 E | 32.20923003 N            | 103.70358209 W            | 17.67@                            | 156.70 | 0.17              |
| 2083.00                                                   | 0.53          | 125.58              | 2082.86     | 89.00                 | 17.24                    | 16.95 S                                   | 7.71 E | 32.20922805 N            | 103.70357977 W            | 18.62@                            | 155.54 | 0.35              |
| 2172.00                                                   | 0.53          | 109.94              | 2171.85     | 89.00                 | 17.64                    | 17.33 S                                   | 8.43 E | 32.20922699 N            | 103.70357744 W            | 19.27@                            | 154.05 | 0.16              |

## PathFinder – a Schlumberger company

### Survey Report

DEVON ENERGY PRODUCTION COMPANY, L.P.  
 REBEL 20 FEDERAL 1H  
 LEA COUNTY, NM  
 AP# 30-025-42515      Rig: PRECISION 601

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| Measured<br>Depth<br>(ft) | Incl<br>(deg) | Drift<br>Dir.<br>(deg) | TVD<br>(ft) | Course<br>Length<br>(ft) | Vertical<br>Section<br>(ft) | TOTAL<br>Rectangular Offsets<br>(ft) |         | Survey<br>Latitude<br>(deg) | Survey<br>Longitude<br>(deg) | Closure<br>Dist Dir<br>(ft) (deg) |        | DLS<br>(dg/100ft) |
|---------------------------|---------------|------------------------|-------------|--------------------------|-----------------------------|--------------------------------------|---------|-----------------------------|------------------------------|-----------------------------------|--------|-------------------|
| 2262.00                   | 0.70          | 106.48                 | 2261.85     | 90.00                    | 17.98                       | 17.62 S                              | 9.35 E  | 32.20922616 N               | 103.70357448 W               | 19.95@                            | 152.05 | 0.19              |
| 2351.00                   | 0.53          | 115.38                 | 2350.84     | 89.00                    | 18.34                       | 17.95 S                              | 10.24 E | 32.20922524 N               | 103.70357160 W               | 20.67@                            | 150.29 | 0.22              |
| 2440.00                   | 0.44          | 96.42                  | 2439.84     | 89.00                    | 18.59                       | 18.17 S                              | 10.95 E | 32.20922463 N               | 103.70356930 W               | 21.22@                            | 148.91 | 0.21              |
| 2530.00                   | 0.53          | 79.97                  | 2529.84     | 90.00                    | 18.58                       | 18.13 S                              | 11.71 E | 32.20922472 N               | 103.70356687 W               | 21.59@                            | 147.15 | 0.18              |
| 2619.00                   | 0.70          | 106.88                 | 2618.83     | 89.00                    | 18.70                       | 18.22 S                              | 12.63 E | 32.20922446 N               | 103.70356388 W               | 22.17@                            | 145.26 | 0.37              |
| 2709.00                   | 0.70          | 83.54                  | 2708.82     | 90.00                    | 18.84                       | 18.32 S                              | 13.71 E | 32.20922418 N               | 103.70356041 W               | 22.88@                            | 143.20 | 0.31              |
| 2798.00                   | 0.97          | 92.43                  | 2797.81     | 89.00                    | 18.87                       | 18.29 S                              | 15.00 E | 32.20922424 N               | 103.70355623 W               | 23.65@                            | 140.65 | 0.34              |
| 2887.00                   | 1.06          | 96.71                  | 2886.80     | 89.00                    | 19.06                       | 18.42 S                              | 16.57 E | 32.20922386 N               | 103.70355116 W               | 24.77@                            | 138.02 | 0.13              |
| 2977.00                   | 0.97          | 76.96                  | 2976.79     | 90.00                    | 19.04                       | 18.34 S                              | 18.14 E | 32.20922404 N               | 103.70354608 W               | 25.80@                            | 135.32 | 0.40              |
| 3066.00                   | 0.97          | 82.56                  | 3065.77     | 89.00                    | 18.83                       | 18.08 S                              | 19.62 E | 32.20922475 N               | 103.70354129 W               | 26.68@                            | 132.66 | 0.11              |
| 3155.00                   | 1.06          | 78.84                  | 3154.76     | 89.00                    | 18.64                       | 17.82 S                              | 21.17 E | 32.20922543 N               | 103.70353626 W               | 27.67@                            | 130.08 | 0.13              |
| 3245.00                   | 0.97          | 66.21                  | 3244.75     | 90.00                    | 18.23                       | 17.35 S                              | 22.69 E | 32.20922670 N               | 103.70353135 W               | 28.56@                            | 127.41 | 0.27              |
| 3334.00                   | 0.88          | 75.08                  | 3333.73     | 89.00                    | 17.80                       | 16.87 S                              | 24.04 E | 32.20922799 N               | 103.70352698 W               | 29.37@                            | 125.06 | 0.19              |
| 3423.00                   | 0.79          | 62.26                  | 3422.73     | 89.00                    | 17.39                       | 16.41 S                              | 25.24 E | 32.20922924 N               | 103.70352308 W               | 30.11@                            | 123.03 | 0.23              |
| 3513.00                   | 0.70          | 57.27                  | 3512.72     | 90.00                    | 16.85                       | 16.82 S                              | 26.25 E | 32.20923084 N               | 103.70351980 W               | 30.65@                            | 121.08 | 0.12              |
| 3602.00                   | 0.62          | 47.83                  | 3601.71     | 89.00                    | 16.26                       | 15.21 S                              | 27.07 E | 32.20923252 N               | 103.70351716 W               | 31.04@                            | 119.33 | 0.15              |
| 3692.00                   | 0.79          | 42.28                  | 3691.70     | 90.00                    | 15.51                       | 14.42 S                              | 27.84 E | 32.20923467 N               | 103.70351463 W               | 31.36@                            | 117.38 | 0.20              |
| 3781.00                   | 0.70          | 39.16                  | 3780.70     | 89.00                    | 14.66                       | 13.54 S                              | 28.60 E | 32.20923706 N               | 103.70351216 W               | 31.65@                            | 115.34 | 0.11              |
| 3871.00                   | 0.97          | 56.61                  | 3870.69     | 90.00                    | 13.86                       | 12.70 S                              | 29.58 E | 32.20923937 N               | 103.70350897 W               | 32.19@                            | 113.23 | 0.41              |
| 3960.00                   | 1.06          | 68.73                  | 3959.67     | 89.00                    | 13.20                       | 11.99 S                              | 30.98 E | 32.20924131 N               | 103.70350444 W               | 33.22@                            | 111.15 | 0.26              |
| 4049.00                   | 1.14          | 76.84                  | 4048.66     | 89.00                    | 12.76                       | 11.48 S                              | 32.61 E | 32.20924266 N               | 103.70349916 W               | 34.57@                            | 109.40 | 0.20              |
| 4139.00                   | 1.32          | 85.50                  | 4138.64     | 90.00                    | 12.55                       | 11.20 S                              | 34.51 E | 32.20924341 N               | 103.70349300 W               | 36.29@                            | 107.98 | 0.29              |
| 4228.00                   | 1.41          | 95.70                  | 4227.61     | 89.00                    | 12.66                       | 11.23 S                              | 36.63 E | 32.20924330 N               | 103.70348617 W               | 38.31@                            | 107.04 | 0.29              |
| 4318.00                   | 1.49          | 107.50                 | 4317.58     | 90.00                    | 13.21                       | 11.69 S                              | 38.84 E | 32.20924199 N               | 103.70347901 W               | 40.56@                            | 106.75 | 0.34              |
| 4407.00                   | 1.67          | 106.36                 | 4406.55     | 89.00                    | 14.02                       | 12.40 S                              | 41.19 E | 32.20923999 N               | 103.70347143 W               | 43.02@                            | 106.76 | 0.21              |
| 4496.00                   | 1.67          | 112.22                 | 4495.51     | 89.00                    | 14.97                       | 13.26 S                              | 43.64 E | 32.20923760 N               | 103.70346355 W               | 45.61@                            | 106.90 | 0.19              |
| 4515.00                   | 1.49          | 107.16                 | 4514.50     | 19.00                    | 15.17                       | 13.44 S                              | 44.13 E | 32.20923711 N               | 103.70346196 W               | 46.13@                            | 106.93 | 1.20              |
| 4656.00                   | 1.41          | 103.09                 | 4655.46     | 141.00                   | 16.23                       | 14.37 S                              | 47.57 E | 32.20923449 N               | 103.70345085 W               | 49.69@                            | 106.81 | 0.09              |

## PathFinder – a Schlumberger company

### Survey Report

DEVON ENERGY PRODUCTION COMPANY, L.P.  
 REBEL 20 FEDERAL 1H  
 LEA COUNTY, NM  
 AP# 30-025-42515      Rig: PRECISION 601

Page 03/06

| Measured<br>Depth<br>(ft) | Incl<br>(deg) | Drift<br>Dir.<br>(deg) | TVD<br>(ft) | Course<br>Length<br>(ft) | Vertical<br>Section<br>(ft) | TOTAL<br>Rectangular Offsets<br>(ft) |          | Survey<br>Latitude<br>(deg) | Survey<br>Longitude<br>(deg) | Closure<br>Dist<br>(ft) | Dir<br>(deg) | DLS<br>(dg/100ft) |
|---------------------------|---------------|------------------------|-------------|--------------------------|-----------------------------|--------------------------------------|----------|-----------------------------|------------------------------|-------------------------|--------------|-------------------|
| 4745.00                   | 1.14          | 85.26                  | 4744.44     | 89.00                    | 16.49                       | 14.55 S                              | 49.52 E  | 32.20923397 N               | 103.70344455 W               | 51.61@                  | 106.37       | 0.54              |
| 4835.00                   | 1.23          | 61.52                  | 4834.42     | 90.00                    | 16.02                       | 14.01 S                              | 51.26 E  | 32.20923541 N               | 103.70343891 W               | 53.14@                  | 105.29       | 0.55              |
| 4924.00                   | 1.76          | 42.39                  | 4923.39     | 89.00                    | 14.63                       | 12.55 S                              | 53.02 E  | 32.20923941 N               | 103.70343319 W               | 54.49@                  | 103.31       | 0.81              |
| 5013.00                   | 2.29          | 34.72                  | 5012.33     | 89.00                    | 12.23                       | 10.07 S                              | 54.96 E  | 32.20924617 N               | 103.70342689 W               | 55.87@                  | 100.39       | 0.67              |
| 5103.00                   | 3.25          | 34.50                  | 5102.23     | 90.00                    | 8.75                        | 6.49 S                               | 57.42 E  | 32.20925598 N               | 103.70341884 W               | 57.79@                  | 96.45        | 1.07              |
| 5192.00                   | 3.43          | 31.77                  | 5191.08     | 89.00                    | 4.53                        | 2.15 S                               | 60.26 E  | 32.20926787 N               | 103.70340960 W               | 60.29@                  | 92.04        | 0.27              |
| 5281.00                   | 4.22          | 35.87                  | 5279.88     | 89.00                    | -0.26                       | 2.77 N                               | 63.58 E  | 32.20928133 N               | 103.70339878 W               | 63.64@                  | 87.51        | 0.94              |
| 5370.00                   | 5.28          | 37.44                  | 5368.57     | 89.00                    | -5.98                       | 8.67 N                               | 67.98 E  | 32.20929749 N               | 103.70338441 W               | 68.54@                  | 82.73        | 1.20              |
| 5460.00                   | 5.19          | 37.51                  | 5458.19     | 90.00                    | -12.30                      | 15.19 N                              | 72.98 E  | 32.20931532 N               | 103.70336813 W               | 74.54@                  | 78.24        | 0.10              |
| 5549.00                   | 5.01          | 38.13                  | 5546.84     | 89.00                    | -18.35                      | 21.44 N                              | 77.83 E  | 32.20933242 N               | 103.70335233 W               | 80.73@                  | 74.60        | 0.21              |
| 5638.00                   | 4.84          | 36.04                  | 5635.51     | 89.00                    | -24.26                      | 27.53 N                              | 82.44 E  | 32.20934910 N               | 103.70333732 W               | 86.92@                  | 71.53        | 0.28              |
| 5728.00                   | 4.84          | 35.04                  | 5725.19     | 90.00                    | -30.26                      | 33.71 N                              | 86.85 E  | 32.20936601 N               | 103.70332293 W               | 93.17@                  | 68.79        | 0.09              |
| 5817.00                   | 4.75          | 35.53                  | 5813.88     | 89.00                    | -36.16                      | 39.78 N                              | 91.15 E  | 32.20938264 N               | 103.70330892 W               | 99.45@                  | 66.42        | 0.11              |
| 5906.00                   | 4.66          | 35.29                  | 5902.58     | 89.00                    | -41.94                      | 45.73 N                              | 95.38 E  | 32.20939892 N               | 103.70329513 W               | 105.78@                 | 64.38        | 0.10              |
| 5995.00                   | 4.66          | 35.87                  | 5991.29     | 89.00                    | -47.65                      | 51.61 N                              | 99.59 E  | 32.20941502 N               | 103.70328142 W               | 112.17@                 | 62.60        | 0.05              |
| 6085.00                   | 4.57          | 37.44                  | 6081.00     | 90.00                    | -53.28                      | 57.42 N                              | 103.91 E | 32.20943092 N               | 103.70326734 W               | 118.72@                 | 61.07        | 0.17              |
| 6174.00                   | 4.40          | 37.27                  | 6169.72     | 89.00                    | -58.64                      | 62.95 N                              | 108.13 E | 32.20944606 N               | 103.70325358 W               | 125.12@                 | 59.79        | 0.19              |
| 6263.00                   | 4.31          | 35.72                  | 6258.47     | 89.00                    | -63.91                      | 68.39 N                              | 112.15 E | 32.20946092 N               | 103.70324048 W               | 131.36@                 | 58.63        | 0.17              |
| 6353.00                   | 3.61          | 32.70                  | 6348.25     | 90.00                    | -68.90                      | 73.52 N                              | 115.66 E | 32.20947497 N               | 103.70322905 W               | 137.05@                 | 57.56        | 0.81              |
| 6442.00                   | 2.81          | 35.51                  | 6437.11     | 89.00                    | -72.92                      | 77.65 N                              | 118.44 E | 32.20948628 N               | 103.70321998 W               | 141.62@                 | 56.75        | 0.92              |
| 6532.00                   | 2.11          | 30.40                  | 6527.03     | 90.00                    | -76.06                      | 80.88 N                              | 120.56 E | 32.20949511 N               | 103.70321307 W               | 145.17@                 | 56.14        | 0.81              |
| 6621.00                   | 2.11          | 33.86                  | 6615.97     | 89.00                    | -78.76                      | 83.65 N                              | 122.30 E | 32.20950271 N               | 103.70320738 W               | 148.17@                 | 55.63        | 0.14              |
| 6710.00                   | 2.02          | 35.76                  | 6704.91     | 89.00                    | -81.32                      | 86.28 N                              | 124.13 E | 32.20950992 N               | 103.70320142 W               | 151.17@                 | 55.20        | 0.13              |
| 6800.00                   | 2.11          | 38.56                  | 6794.85     | 90.00                    | -83.82                      | 88.86 N                              | 126.09 E | 32.20951699 N               | 103.70319503 W               | 154.26@                 | 54.82        | 0.15              |
| 6889.00                   | 2.02          | 34.15                  | 6883.79     | 89.00                    | -86.33                      | 91.44 N                              | 127.99 E | 32.20952405 N               | 103.70318883 W               | 157.30@                 | 54.46        | 0.21              |
| 6978.00                   | 2.02          | 33.99                  | 6972.74     | 89.00                    | -88.85                      | 94.04 N                              | 129.75 E | 32.20953116 N               | 103.70318310 W               | 160.25@                 | 54.07        | 0.01              |
| 7068.00                   | 1.76          | 32.36                  | 7062.69     | 90.00                    | -91.27                      | 96.53 N                              | 131.38 E | 32.20953796 N               | 103.70317780 W               | 163.02@                 | 53.69        | 0.29              |
| 7157.00                   | 1.49          | 34.77                  | 7151.65     | 89.00                    | -93.32                      | 98.63 N                              | 132.77 E | 32.20954372 N               | 103.70317326 W               | 165.39@                 | 53.39        | 0.31              |



## PathFinder – a Schlumberger company

### Survey Report

DEVON ENERGY PRODUCTION COMPANY, L.P.  
 REBEL 20 FEDERAL 1H  
 LEA COUNTY, NM  
 API#: 30-025-42515      Rig: PRECISION 601

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| Measured<br>Depth<br>(ft) | Incl<br>(deg) | Drift<br>Dir.<br>(deg) | TVD<br>(ft) | Course<br>Length<br>(ft) | Vertical<br>Section<br>(ft) | TOTAL<br>Rectangular Offsets<br>(ft) |          | Survey<br>Latitude<br>(deg) | Survey<br>Longitude<br>(deg) | Closure<br>Dist Dir<br>(ft) (deg) |        | DLS<br>(dg/100ft) |
|---------------------------|---------------|------------------------|-------------|--------------------------|-----------------------------|--------------------------------------|----------|-----------------------------|------------------------------|-----------------------------------|--------|-------------------|
| 7246.00                   | 0.79          | 70.40                  | 7240.63     | 89.00                    | -94.42                      | 99.79 N                              | 134.00 E | 32.20954688 N               | 103.70316923 W               | 167.08@                           | 53.33  | 1.08              |
| 7336.00                   | 0.53          | 150.41                 | 7330.63     | 90.00                    | -94.24                      | 99.63 N                              | 134.79 E | 32.20954645 N               | 103.70316668 W               | 167.62@                           | 53.53  | 0.97              |
| 7425.00                   | 0.53          | 156.51                 | 7419.63     | 89.00                    | -93.49                      | 98.90 N                              | 135.16 E | 32.20954442 N               | 103.70316551 W               | 167.48@                           | 53.81  | 0.06              |
| 7515.00                   | 0.53          | 142.66                 | 7509.62     | 90.00                    | -92.76                      | 98.18 N                              | 135.58 E | 32.20954245 N               | 103.70316417 W               | 167.40@                           | 54.09  | 0.14              |
| 7604.00                   | 0.62          | 141.32                 | 7598.62     | 89.00                    | -92.04                      | 97.48 N                              | 136.13 E | 32.20954051 N               | 103.70316240 W               | 167.43@                           | 54.39  | 0.10              |
| 7647.00                   | 0.62          | 142.32                 | 7641.62     | 43.00                    | -91.66                      | 97.12 N                              | 136.42 E | 32.20953950 N               | 103.70316148 W               | 167.46@                           | 54.55  | 0.03              |
| 7721.00                   | 4.31          | 177.66                 | 7715.54     | 74.00                    | -88.55                      | 94.02 N                              | 136.78 E | 32.20953098 N               | 103.70316038 W               | 165.97@                           | 55.50  | 5.16              |
| 7764.00                   | 10.82         | 176.64                 | 7758.14     | 43.00                    | -82.90                      | 88.37 N                              | 137.08 E | 32.20951545 N               | 103.70315951 W               | 163.10@                           | 57.19  | 15.14             |
| 7809.00                   | 17.67         | 173.93                 | 7801.73     | 45.00                    | -71.84                      | 77.35 N                              | 138.05 E | 32.20948514 N               | 103.70315658 W               | 158.24@                           | 60.74  | 15.29             |
| 7854.00                   | 24.36         | 173.85                 | 7843.71     | 45.00                    | -55.75                      | 61.31 N                              | 139.77 E | 32.20944103 N               | 103.70315133 W               | 152.63@                           | 66.31  | 14.87             |
| 7898.00                   | 27.08         | 174.05                 | 7883.35     | 44.00                    | -36.70                      | 42.33 N                              | 141.78 E | 32.20938881 N               | 103.70314519 W               | 147.96@                           | 73.38  | 6.18              |
| 7943.00                   | 28.31         | 173.67                 | 7923.19     | 45.00                    | -15.84                      | 21.53 N                              | 144.02 E | 32.20933162 N               | 103.70313834 W               | 145.62@                           | 81.50  | 2.76              |
| 7988.00                   | 31.48         | 174.21                 | 7962.20     | 45.00                    | 6.54                        | 0.77 S                               | 146.38 E | 32.20927028 N               | 103.70313113 W               | 146.38@                           | 90.30  | 7.07              |
| 8032.00                   | 34.65         | 173.69                 | 7999.07     | 44.00                    | 30.49                       | 24.64 S                              | 148.91 E | 32.20920463 N               | 103.70312339 W               | 150.94@                           | 99.39  | 7.23              |
| 8077.00                   | 38.16         | 173.96                 | 8035.28     | 45.00                    | 57.13                       | 51.19 S                              | 151.78 E | 32.20913161 N               | 103.70311461 W               | 160.18@                           | 108.64 | 7.81              |
| 8122.00                   | 41.59         | 177.20                 | 8069.82     | 45.00                    | 85.95                       | 79.94 S                              | 153.98 E | 32.20905254 N               | 103.70310807 W               | 173.49@                           | 117.44 | 8.91              |
| 8166.00                   | 44.14         | 177.99                 | 8102.06     | 44.00                    | 115.88                      | 109.84 S                             | 155.23 E | 32.20897032 N               | 103.70310459 W               | 190.16@                           | 125.28 | 5.92              |
| 8211.00                   | 47.31         | 178.59                 | 8133.48     | 45.00                    | 148.09                      | 142.04 S                             | 156.19 E | 32.20888179 N               | 103.70310211 W               | 211.12@                           | 132.29 | 7.11              |
| 8256.00                   | 50.83         | 179.60                 | 8162.95     | 45.00                    | 182.07                      | 176.03 S                             | 156.71 E | 32.20878836 N               | 103.70310104 W               | 235.68@                           | 138.32 | 8.00              |
| 8300.00                   | 54.69         | 179.18                 | 8189.57     | 44.00                    | 217.08                      | 211.05 S                             | 157.09 E | 32.20869209 N               | 103.70310049 W               | 263.10@                           | 143.34 | 8.81              |
| 8345.00                   | 57.07         | 178.93                 | 8214.81     | 45.00                    | 254.32                      | 248.30 S                             | 157.71 E | 32.20858970 N               | 103.70309920 W               | 294.15@                           | 147.58 | 5.31              |
| 8390.00                   | 59.18         | 178.72                 | 8238.58     | 45.00                    | 292.53                      | 286.50 S                             | 158.49 E | 32.20848468 N               | 103.70309739 W               | 327.42@                           | 151.05 | 4.71              |
| 8434.00                   | 61.64         | 178.72                 | 8260.30     | 44.00                    | 330.78                      | 324.75 S                             | 159.35 E | 32.20837953 N               | 103.70309535 W               | 361.74@                           | 153.86 | 5.59              |
| 8479.00                   | 65.16         | 179.06                 | 8280.45     | 45.00                    | 371.00                      | 364.97 S                             | 160.12 E | 32.20826895 N               | 103.70309360 W               | 398.55@                           | 156.31 | 7.85              |
| 8524.00                   | 68.68         | 179.06                 | 8298.09     | 45.00                    | 412.38                      | 406.36 S                             | 160.80 E | 32.20815518 N               | 103.70309219 W               | 437.02@                           | 158.41 | 7.82              |
| 8568.00                   | 71.31         | 178.86                 | 8313.14     | 44.00                    | 453.72                      | 447.69 S                             | 161.55 E | 32.20804155 N               | 103.70309055 W               | 475.95@                           | 160.16 | 5.99              |
| 8613.00                   | 75.53         | 179.09                 | 8325.97     | 45.00                    | 496.83                      | 490.81 S                             | 162.32 E | 32.20792303 N               | 103.70308887 W               | 516.95@                           | 161.70 | 9.39              |
| 8658.00                   | 79.32         | 179.84                 | 8335.77     | 45.00                    | 540.72                      | 534.72 S                             | 162.73 E | 32.20780233 N               | 103.70308839 W               | 558.93@                           | 163.07 | 8.58              |

## PathFinder – a Schlumberger company

### Survey Report

DEVON ENERGY PRODUCTION COMPANY, L.P.  
 REBEL 20 FEDERAL 1H  
 LEA COUNTY, NM  
 API#: 30-025-42515      Rig: PRECISION 601

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| Measured<br>Depth<br>(ft) | Incl<br>(deg) | Drift<br>Dir.<br>(deg) | TVD<br>(ft) | Course<br>Length<br>(ft) | Vertical<br>Section<br>(ft) | TOTAL<br>Rectangular Offsets<br>(ft) |          | Survey<br>Latitude<br>(deg) | Survey<br>Longitude<br>(deg) | Closure<br>Dist Dir<br>(ft) (deg) |        | DLS<br>(dg/100ft) |
|---------------------------|---------------|------------------------|-------------|--------------------------|-----------------------------|--------------------------------------|----------|-----------------------------|------------------------------|-----------------------------------|--------|-------------------|
| 8699.00                   | 81.78         | 180.20                 | 8342.50     | 41.00                    | 581.13                      | 575.16 S                             | 162.72 E | 32.20769117 N               | 103.70308920 W               | 597.73@                           | 164.20 | 6.06              |
| 8746.00                   | 84.68         | 180.11                 | 8348.04     | 47.00                    | 627.75                      | 621.82 S                             | 162.59 E | 32.20756289 N               | 103.70309049 W               | 642.73@                           | 165.35 | 6.17              |
| 8787.00                   | 85.74         | 180.87                 | 8351.46     | 41.00                    | 668.56                      | 662.68 S                             | 162.24 E | 32.20745060 N               | 103.70309240 W               | 682.25@                           | 166.24 | 3.18              |
| 8832.00                   | 88.55         | 180.86                 | 8353.71     | 45.00                    | 713.43                      | 707.61 S                             | 161.56 E | 32.20732710 N               | 103.70309544 W               | 725.82@                           | 167.14 | 6.24              |
| 8877.00                   | 89.43         | 181.25                 | 8354.50     | 45.00                    | 758.35                      | 752.60 S                             | 160.73 E | 32.20720346 N               | 103.70309897 W               | 769.57@                           | 167.94 | 2.14              |
| 8966.00                   | 89.69         | 181.16                 | 8355.18     | 89.00                    | 847.19                      | 841.58 S                             | 158.86 E | 32.20695891 N               | 103.70310671 W               | 856.44@                           | 169.31 | 0.31              |
| 9055.00                   | 89.69         | 180.44                 | 8355.66     | 89.00                    | 936.06                      | 930.57 S                             | 157.62 E | 32.20671432 N               | 103.70311242 W               | 943.82@                           | 170.39 | 0.81              |
| 9145.00                   | 89.87         | 181.64                 | 8356.01     | 90.00                    | 1025.91                     | 1020.55 S                            | 155.99 E | 32.20646701 N               | 103.70311940 W               | 1032.40@                          | 171.31 | 1.35              |
| 9234.00                   | 90.31         | 180.88                 | 8355.87     | 89.00                    | 1114.74                     | 1109.53 S                            | 154.03 E | 32.20622246 N               | 103.70312742 W               | 1120.17@                          | 172.10 | 0.99              |
| 9324.00                   | 89.87         | 180.18                 | 8355.73     | 90.00                    | 1204.63                     | 1199.52 S                            | 153.20 E | 32.20597510 N               | 103.70313181 W               | 1209.26@                          | 172.72 | 0.92              |
| 9413.00                   | 90.84         | 180.35                 | 8355.18     | 89.00                    | 1293.54                     | 1288.52 S                            | 152.78 E | 32.20573048 N               | 103.70313483 W               | 1297.54@                          | 173.24 | 1.11              |
| 9502.00                   | 89.52         | 180.60                 | 8354.90     | 89.00                    | 1382.44                     | 1377.51 S                            | 152.05 E | 32.20548587 N               | 103.70313890 W               | 1385.88@                          | 173.70 | 1.51              |
| 9592.00                   | 89.78         | 180.92                 | 8355.45     | 90.00                    | 1472.31                     | 1467.50 S                            | 150.85 E | 32.20523853 N               | 103.70314447 W               | 1475.24@                          | 174.13 | 0.46              |
| 9681.00                   | 89.87         | 180.58                 | 8355.72     | 89.00                    | 1561.19                     | 1556.49 S                            | 149.69 E | 32.20499393 N               | 103.70314992 W               | 1563.68@                          | 174.51 | 0.40              |
| 9770.00                   | 87.93         | 179.84                 | 8357.43     | 89.00                    | 1650.08                     | 1645.47 S                            | 149.36 E | 32.20474936 N               | 103.70315266 W               | 1652.24@                          | 174.81 | 2.33              |
| 9860.00                   | 87.93         | 179.87                 | 8360.68     | 90.00                    | 1739.96                     | 1735.41 S                            | 149.59 E | 32.20450213 N               | 103.70315363 W               | 1741.85@                          | 175.07 | 0.03              |
| 9949.00                   | 88.29         | 180.07                 | 8363.61     | 89.00                    | 1828.85                     | 1824.36 S                            | 149.64 E | 32.20425762 N               | 103.70315516 W               | 1830.49@                          | 175.31 | 0.46              |
| 10038.00                  | 88.64         | 180.88                 | 8366.00     | 89.00                    | 1917.71                     | 1913.33 S                            | 148.90 E | 32.20401310 N               | 103.70315924 W               | 1919.11@                          | 175.55 | 0.99              |
| 10128.00                  | 88.64         | 181.03                 | 8368.13     | 90.00                    | 2007.54                     | 2003.29 S                            | 147.40 E | 32.20376584 N               | 103.70316579 W               | 2008.71@                          | 175.79 | 0.17              |
| 10217.00                  | 88.90         | 181.13                 | 8370.04     | 89.00                    | 2096.37                     | 2092.25 S                            | 145.72 E | 32.20352132 N               | 103.70317290 W               | 2097.32@                          | 176.02 | 0.31              |
| 10306.00                  | 89.43         | 181.62                 | 8371.34     | 89.00                    | 2185.18                     | 2181.22 S                            | 143.59 E | 32.20327682 N               | 103.70318149 W               | 2185.94@                          | 176.23 | 0.81              |
| 10395.00                  | 89.87         | 180.94                 | 8371.89     | 89.00                    | 2274.01                     | 2270.19 S                            | 141.60 E | 32.20303228 N               | 103.70318960 W               | 2274.61@                          | 176.43 | 0.91              |
| 10485.00                  | 88.90         | 178.39                 | 8372.85     | 90.00                    | 2363.95                     | 2360.18 S                            | 142.12 E | 32.20278493 N               | 103.70318960 W               | 2364.45@                          | 176.55 | 3.03              |
| 10574.00                  | 88.64         | 178.55                 | 8374.76     | 89.00                    | 2452.92                     | 2449.13 S                            | 144.50 E | 32.20254039 N               | 103.70318361 W               | 2453.39@                          | 176.62 | 0.34              |
| 10664.00                  | 89.16         | 178.78                 | 8376.49     | 90.00                    | 2542.89                     | 2539.08 S                            | 146.60 E | 32.20229308 N               | 103.70317854 W               | 2543.31@                          | 176.70 | 0.63              |
| 10753.00                  | 89.34         | 178.96                 | 8377.65     | 89.00                    | 2631.87                     | 2628.06 S                            | 148.35 E | 32.20204849 N               | 103.70317455 W               | 2632.24@                          | 176.77 | 0.29              |
| 10842.00                  | 89.96         | 179.65                 | 8378.20     | 89.00                    | 2720.83                     | 2717.05 S                            | 149.43 E | 32.20180386 N               | 103.70317274 W               | 2721.16@                          | 176.85 | 1.04              |
| 10932.00                  | 90.22         | 179.96                 | 8378.06     | 90.00                    | 2810.77                     | 2807.05 S                            | 149.74 E | 32.20155647 N               | 103.70317346 W               | 2811.04@                          | 176.95 | 0.45              |

## PathFinder – a Schlumberger company

### Survey Report

DEVON ENERGY PRODUCTION COMPANY, L.P.  
 REBEL 20 FEDERAL 1H  
 LEA COUNTY, NM  
 API#: 30-025-42515      Rig: PRECISION 601

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| Measured<br>Depth<br>(ft)                          | Incl<br>(deg) | Drift<br>Dir.<br>(deg) | TVD<br>(ft) | Course<br>Length<br>(ft) | Vertical<br>Section<br>(ft) | TOTAL<br>Rectangular Offsets<br>(ft) (ft) |          | Survey<br>Latitude<br>(deg) | Survey<br>Longitude<br>(deg) | Closure<br>Dist<br>(ft) | Dir<br>(deg) | DLS<br>(dg/100ft) |
|----------------------------------------------------|---------------|------------------------|-------------|--------------------------|-----------------------------|-------------------------------------------|----------|-----------------------------|------------------------------|-------------------------|--------------|-------------------|
| 11021.00                                           | 90.84         | 181.16                 | 8377.23     | 89.00                    | 2899.66                     | 2896.04 S                                 | 148.87 E | 32.20131187 N               | 103.70317796 W               | 2899.86@                | 177.06       | 1.52              |
| 11110.00                                           | 90.31         | 180.78                 | 8376.34     | 89.00                    | 2988.51                     | 2985.02 S                                 | 147.36 E | 32.20106730 N               | 103.70318451 W               | 2988.66@                | 177.17       | 0.73              |
| 11199.00                                           | 89.87         | 180.56                 | 8376.20     | 89.00                    | 3077.39                     | 3074.02 S                                 | 146.32 E | 32.20082270 N               | 103.70318956 W               | 3077.50@                | 177.27       | 0.55              |
| 11289.00                                           | 88.99         | 179.57                 | 8377.10     | 90.00                    | 3167.31                     | 3164.01 S                                 | 146.22 E | 32.20057533 N               | 103.70319160 W               | 3167.39@                | 177.35       | 1.47              |
| 11378.00                                           | 88.29         | 178.95                 | 8379.21     | 89.00                    | 3256.26                     | 3252.98 S                                 | 147.37 E | 32.20033077 N               | 103.70318957 W               | 3256.31@                | 177.41       | 1.05              |
| 11468.00                                           | 88.29         | 178.31                 | 8381.89     | 90.00                    | 3346.20                     | 3342.91 S                                 | 149.52 E | 32.20008353 N               | 103.70318432 W               | 3346.25@                | 177.44       | 0.71              |
| 11557.00                                           | 89.60         | 180.14                 | 8383.53     | 89.00                    | 3435.15                     | 3431.88 S                                 | 150.72 E | 32.19983895 N               | 103.70318212 W               | 3435.19@                | 177.49       | 2.53              |
| 11646.00                                           | 90.31         | 181.42                 | 8383.60     | 89.00                    | 3524.03                     | 3520.87 S                                 | 149.51 E | 32.19959436 N               | 103.70318772 W               | 3524.04@                | 177.57       | 1.64              |
| 11736.00                                           | 89.25         | 180.24                 | 8383.95     | 90.00                    | 3613.89                     | 3610.86 S                                 | 148.21 E | 32.19934703 N               | 103.70319364 W               | 3613.90@                | 177.65       | 1.76              |
| 11825.00                                           | 88.99         | 179.90                 | 8385.32     | 89.00                    | 3702.81                     | 3699.85 S                                 | 148.10 E | 32.19910242 N               | 103.70319568 W               | 3702.81@                | 177.71       | 0.48              |
| 11914.00                                           | 89.87         | 179.57                 | 8386.20     | 89.00                    | 3791.75                     | 3788.84 S                                 | 148.51 E | 32.19885779 N               | 103.70319603 W               | 3791.75@                | 177.76       | 1.06              |
| 12004.00                                           | 88.99         | 179.22                 | 8387.10     | 90.00                    | 3881.71                     | 3878.83 S                                 | 149.46 E | 32.19861042 N               | 103.70319467 W               | 3881.71@                | 177.79       | 1.05              |
| 12093.00                                           | 88.46         | 179.46                 | 8389.08     | 89.00                    | 3970.65                     | 3967.80 S                                 | 150.48 E | 32.19836584 N               | 103.70319304 W               | 3970.65@                | 177.83       | 0.65              |
| 12182.00                                           | 88.55         | 180.61                 | 8391.40     | 89.00                    | 4059.55                     | 4056.77 S                                 | 150.43 E | 32.19812129 N               | 103.70319490 W               | 4059.56@                | 177.88       | 1.30              |
| 12272.00                                           | 90.92         | 182.11                 | 8391.81     | 90.00                    | 4149.36                     | 4146.73 S                                 | 148.29 E | 32.19787403 N               | 103.70320351 W               | 4149.38@                | 177.95       | 3.12              |
| 12361.00                                           | 89.52         | 181.60                 | 8391.47     | 89.00                    | 4238.12                     | 4235.68 S                                 | 145.41 E | 32.19762958 N               | 103.70321451 W               | 4238.18@                | 178.03       | 1.67              |
| 12451.00                                           | 88.90         | 180.41                 | 8392.71     | 90.00                    | 4327.97                     | 4325.66 S                                 | 143.83 E | 32.19738228 N               | 103.70322131 W               | 4328.05@                | 178.10       | 1.49              |
| 12540.00                                           | 88.72         | 180.93                 | 8394.56     | 89.00                    | 4416.83                     | 4414.63 S                                 | 142.79 E | 32.19713773 N               | 103.70322636 W               | 4416.94@                | 178.15       | 0.62              |
| 12630.00                                           | 89.69         | 180.81                 | 8395.81     | 90.00                    | 4506.69                     | 4504.61 S                                 | 141.43 E | 32.19689042 N               | 103.70323248 W               | 4506.83@                | 178.20       | 1.09              |
| 12691.00                                           | 89.52         | 181.27                 | 8396.23     | 61.00                    | 4567.58                     | 4565.60 S                                 | 140.32 E | 32.19672280 N               | 103.70323722 W               | 4567.76@                | 178.24       | 0.80              |
| STRAIGHT LINE PROJECTION TO BIT DEPTH AT 12749'MD. |               |                        |             |                          |                             |                                           |          |                             |                              |                         |              |                   |
| 12749.00                                           | 89.52         | 181.27                 | 8396.72     | 58.00                    | 4625.47                     | 4623.59 S                                 | 139.04 E | 32.19656343 N               | 103.70324247 W               | 4625.68@                | 178.28       | 0.00              |

\*\* The survey data at tie-in point was furnished by a recognized survey company and entered as submitted. Survey stations above the tie-in point represent recalculated data by PathFinder – a Schlumberger company and may reflect minor changes due to rounding differences between survey programs. Only survey stations taken by qualified PathFinder personnel are subject to certification.