

Operator: XTO Energy  
Well/Lease: Nash 50H  
County: Eddy

REC'D/MIDLAND  
FEB 23 2012

STATE OF NEW MEXICO  
DEVIATION REPORT

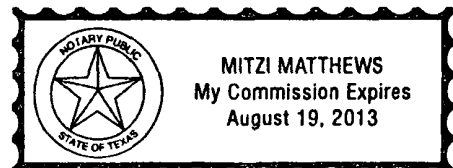
30-015-38991

| <u>Footage</u> | <u>Degree</u> |
|----------------|---------------|
| 215            | 0.50          |
| 740            | 1.00          |
| 830            | 0.75          |
| 1015           | 0.50          |
| 1202           | 1.25          |
| 1392           | 1.00          |
| 1485           | 1.25          |
| 1579           | 0.50          |
| 1765           | 1.00          |
| 2229           | 1.00          |
| 2416           | 0.75          |
| 2881           | 1.50          |
| 3337           | 0.75          |
| 3616           | 1.00          |
| 3803           | 1.00          |
| 3989           | 0.75          |
| 4175           | 0.50          |
| 4360           | 1.25          |
| 4483           | 0.75          |
| 4639           | 1.00          |
| 4825           | 0.75          |
| 5010           | 0.50          |
| 5475           | 0.75          |

Signed By: Roger Dyer  
Roger Dyer, Drilling Superintendent  
Pioneer Drilling Company

Appeared before me this February 21<sup>st</sup>, 2012, Roger Dyer.

Mitzi Matthews





**A Schlumberger Company**

***DIRECTIONAL SURVEY REPORT***

**XTO ENERGY**

***NASH UNIT #50H***

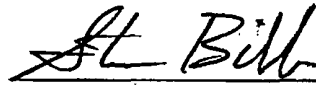
***EDDY COUNTY, NEW MEXICO***

**PREPARED BY: STEVE BIBB**

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:  
A) PRITHWISH DAS
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 01-19-12 TO 02-07-12
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: EDDY COUNTY
7. TYPE OF SURVEY(S) PERFORMED: GAMMA-RAY
8. COMPLETE IDENTIFICATION OF WELL:  
  
XTO ENERGY INC.  
NASH UNIT #50H  
EDDY COUNTY, NM  
RIG: PIONEER 33
9. SURVEY CERTIFIED FROM: 6048 TO 11727 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE  
DISPLACED AT 5218.23 FEET ON A BEARING OF 89.89 DEGREES FROM THE  
CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 11795 FEET,  
ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

  
\_\_\_\_\_  
STEVE BIBB  
MWD COORDINATOR

# PathFinder Energy Services, Inc.

## BHL Report

Page 01/01  
Tie-in Date: 01/19/2012  
Date Completed: 02/07/2012

XTO ENERGY  
NASH UNIT #50H  
EDDY COUNTY, NEW MEXICO  
Rig:PIONEER # 33  
PathFinder Office Supervisor: STEVE BIBB  
PathFinder Field Engineers:P.DAS  
B.KITCHENS

Survey Horiz. Reference:WELLHEAD  
Ref Coordinates: LAT:32.18.11.0276 N LON:103.55.47.3224 W  
GRID Reference:NAD27 new mexico east Transverse Mercator  
Ref GRID Coord: X: 624676.8000 Y: 474205.8000  
North Aligned To:GRID NORTH  
Total Magnetic Correction: 7.47° EAST TO GRID  
Vertical Section Plane: 89.88  
Survey Vert. Reference: 19.00' Rotary Table To Ground  
Altitude:3018.00' Ground To MSL

|                       |                |             |
|-----------------------|----------------|-------------|
| Measured Depth        | 11795.00       | (feet)      |
| Inclination           | 84.68          | (deg)       |
| Azimuth               | 87.65          | (deg)       |
| True Vertical Depth   | 7042.53        | (feet)      |
| Vertical Section      | 5218.23        | (feet)      |
| Survey X cord         | 629895.02      | (feet)      |
| Survey Y cord         | 474215.64      | (feet)      |
| Survey Lat            | 32.30303515 N  | (deg)       |
| Survey Lon            | 103.91292306 W | (deg)       |
| Rectangular Corr. N/S | 9.84 N         | (feet)      |
| Rectangular Corr. E/W | 5218.22 E      | (feet)      |
| Closure Distance      | 5218.23        | (feet)      |
| Direction of Closure  | 89.89          | (deg)       |
| Dogleg Severity       | 0.00           | (deg/100ft) |

# PathFinder Energy Services, Inc.

## Survey Report

Page 01/05

Tie-in Date: 01/19/2012

Date Completed: 02/07/2012

XTO ENERGY  
NASH UNIT #50H  
EDDY COUNTY, NEW MEXICO  
Rig: PIONEER # 33  
PathFinder Office Supervisor: STEVE BIBB  
PathFinder Field Engineers: P.DAS  
B.KITCHENS

Survey Horiz. Reference: WELLHEAD  
Ref Coordinates: LAT: 32.18.11.0276 N LON: 103.55.47.3224 W  
GRID Reference: NAD27 new mexico east Transverse Mercator  
Ref GRID Coord: X: 624676.8000 Y: 474205.8000  
North Aligned To: GRID NORTH  
Total Magnetic Correction: 7.47° EAST TO GRID  
Vertical Section Plane: 89.88  
Survey Vert. Reference: 19.00' Rotary Table To Ground  
Altitude: 3018.00' Ground To MSL

Survey Calculations by RX5 V6.03E using Minimum Curvature

| 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) |          | Closure<br>Dist Dir<br>(ft) (deg) |        | DLS<br>(dg/100ft) |
|------------------------------------------------------|---------------|------------------------|-------------|--------------------------|-----------------------------|-------------------------------------------|----------|-----------------------------------|--------|-------------------|
| TIED INTO SCIENTIFIC DRILLING GYRO SURVEY @ 6024'MD. |               |                        |             |                          |                             |                                           |          |                                   |        |                   |
| 6024.00                                              | 0.62          | 246.31                 | 6023.36     | 0.00                     | 27.99                       | 29.26 S                                   | 28.05 E  | 40.53@                            | 136.21 | 0.00              |
| THE FOLLOWING ARE PATHFINDER MWD SURVEYS.            |               |                        |             |                          |                             |                                           |          |                                   |        |                   |
| 6048.00                                              | 0.70          | 233.44                 | 6047.36     | 24.00                    | 27.75                       | 29.40 S                                   | 27.81 E  | 40.47@                            | 136.59 | 0.70              |
| 6079.00                                              | 0.62          | 141.67                 | 6078.36     | 31.00                    | 27.70                       | 29.64 S                                   | 27.77 E  | 40.62@                            | 136.87 | 3.06              |
| 6110.00                                              | 1.85          | 112.52                 | 6109.35     | 31.00                    | 28.27                       | 29.97 S                                   | 28.33 E  | 41.24@                            | 136.61 | 4.33              |
| 6141.00                                              | 3.69          | 103.88                 | 6140.31     | 31.00                    | 29.70                       | 30.40 S                                   | 29.76 E  | 42.54@                            | 135.61 | 6.07              |
| 6172.00                                              | 6.07          | 98.65                  | 6171.20     | 31.00                    | 32.29                       | 30.88 S                                   | 32.35 E  | 44.73@                            | 133.67 | 7.80              |
| 6202.00                                              | 8.62          | 96.14                  | 6200.95     | 30.00                    | 36.09                       | 31.36 S                                   | 36.16 E  | 47.86@                            | 130.94 | 8.56              |
| 6233.00                                              | 10.90         | 93.78                  | 6231.50     | 31.00                    | 41.32                       | 31.80 S                                   | 41.39 E  | 52.20@                            | 127.54 | 7.47              |
| 6264.00                                              | 12.93         | 92.60                  | 6261.83     | 31.00                    | 47.71                       | 32.16 S                                   | 47.78 E  | 57.59@                            | 123.94 | 6.59              |
| 6295.00                                              | 14.68         | 91.53                  | 6291.93     | 31.00                    | 55.10                       | 32.42 S                                   | 55.17 E  | 63.99@                            | 120.44 | 5.71              |
| 6326.00                                              | 16.62         | 91.31                  | 6321.78     | 31.00                    | 63.46                       | 32.62 S                                   | 63.53 E  | 71.42@                            | 117.18 | 6.26              |
| 6357.00                                              | 18.82         | 91.28                  | 6351.31     | 31.00                    | 72.90                       | 32.84 S                                   | 72.96 E  | 80.01@                            | 114.23 | 7.10              |
| 6388.00                                              | 20.40         | 90.66                  | 6380.51     | 31.00                    | 83.30                       | 33.01 S                                   | 83.37 E  | 89.66@                            | 111.60 | 5.14              |
| 6420.00                                              | 21.98         | 89.43                  | 6410.35     | 32.00                    | 94.86                       | 33.02 S                                   | 94.93 E  | 100.51@                           | 109.18 | 5.13              |
| 6451.00                                              | 23.57         | 88.98                  | 6438.93     | 31.00                    | 106.86                      | 32.85 S                                   | 106.93 E | 111.86@                           | 107.08 | 5.16              |
| 6482.00                                              | 25.68         | 88.93                  | 6467.11     | 31.00                    | 119.78                      | 32.61 S                                   | 119.85 E | 124.20@                           | 105.22 | 6.81              |
| 6512.00                                              | 28.40         | 88.97                  | 6493.82     | 30.00                    | 133.41                      | 32.36 S                                   | 133.48 E | 137.35@                           | 103.63 | 9.07              |
| 6543.00                                              | 30.78         | 88.84                  | 6520.78     | 31.00                    | 148.72                      | 32.07 S                                   | 148.78 E | 152.20@                           | 102.16 | 7.68              |
| 6575.00                                              | 32.45         | 88.45                  | 6548.03     | 32.00                    | 165.49                      | 31.67 S                                   | 165.55 E | 168.56@                           | 100.83 | 5.26              |
| 6605.00                                              | 34.12         | 88.34                  | 6573.11     | 30.00                    | 181.94                      | 31.21 S                                   | 182.01 E | 184.67@                           | 99.73  | 5.57              |
| 6637.00                                              | 35.53         | 88.38                  | 6599.38     | 32.00                    | 200.21                      | 30.69 S                                   | 200.28 E | 202.61@                           | 98.71  | 4.41              |
| 6668.00                                              | 37.46         | 89.23                  | 6624.30     | 31.00                    | 218.64                      | 30.31 S                                   | 218.71 E | 220.80@                           | 97.89  | 6.44              |
| 6699.00                                              | 39.22         | 89.21                  | 6648.61     | 31.00                    | 237.87                      | 30.04 S                                   | 237.94 E | 239.83@                           | 97.20  | 5.68              |
| 6730.00                                              | 41.15         | 89.49                  | 6672.29     | 31.00                    | 257.87                      | 29.82 S                                   | 257.94 E | 259.65@                           | 96.59  | 6.25              |

# PathFinder Energy Services, Inc.

## Survey Report

XTO ENERGY  
NASH UNIT #50H  
EDDY COUNTY, NEW MEXICO  
RIG: PIONEER # 33

Page 02/05

| 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) |           | Closure<br>Dist Dir<br>(ft) (deg) |       | DLS<br>(dg/100ft) |
|---------------------------|---------------|------------------------|-------------|--------------------------|-----------------------------|-------------------------------------------|-----------|-----------------------------------|-------|-------------------|
| 6761.00                   | 42.65         | 89.34                  | 6695.36     | 31.00                    | 278.58                      | 29.61 S                                   | 278.64 E  | 280.21@                           | 96.07 | 4.85              |
| 6792.00                   | 44.41         | 89.36                  | 6717.84     | 31.00                    | 299.92                      | 29.36 S                                   | 299.99 E  | 301.42@                           | 95.59 | 5.68              |
| 6823.00                   | 45.37         | 89.01                  | 6739.80     | 31.00                    | 321.80                      | 29.05 S                                   | 321.86 E  | 323.17@                           | 95.16 | 3.20              |
| 6854.00                   | 46.25         | 88.28                  | 6761.41     | 31.00                    | 344.02                      | 28.53 S                                   | 344.08 E  | 345.26@                           | 94.74 | 3.30              |
| 6885.00                   | 47.48         | 88.07                  | 6782.60     | 31.00                    | 366.63                      | 27.80 S                                   | 366.69 E  | 367.75@                           | 94.34 | 4.00              |
| 6916.00                   | 49.51         | 88.21                  | 6803.15     | 31.00                    | 389.84                      | 27.05 S                                   | 389.90 E  | 390.83@                           | 93.97 | 6.56              |
| 6947.00                   | 51.97         | 88.16                  | 6822.76     | 31.00                    | 413.83                      | 26.29 S                                   | 413.88 E  | 414.72@                           | 93.63 | 7.94              |
| 6978.00                   | 54.61         | 88.63                  | 6841.29     | 31.00                    | 438.67                      | 25.60 S                                   | 438.72 E  | 439.47@                           | 93.34 | 8.60              |
| 7009.00                   | 55.66         | 88.52                  | 6859.01     | 31.00                    | 464.10                      | 24.96 S                                   | 464.15 E  | 464.82@                           | 93.08 | 3.40              |
| 7040.00                   | 57.68         | 88.41                  | 6876.05     | 31.00                    | 489.99                      | 24.27 S                                   | 490.04 E  | 490.64@                           | 92.84 | 6.52              |
| 7071.00                   | 59.62         | 88.76                  | 6892.17     | 31.00                    | 516.46                      | 23.62 S                                   | 516.51 E  | 517.05@                           | 92.62 | 6.33              |
| 7102.00                   | 61.91         | 89.10                  | 6907.31     | 31.00                    | 543.50                      | 23.11 S                                   | 543.55 E  | 544.04@                           | 92.43 | 7.45              |
| 7133.00                   | 64.63         | 89.47                  | 6921.25     | 31.00                    | 571.19                      | 22.77 S                                   | 571.23 E  | 571.69@                           | 92.28 | 8.84              |
| 7164.00                   | 67.09         | 89.80                  | 6933.93     | 31.00                    | 599.47                      | 22.59 S                                   | 599.52 E  | 599.95@                           | 92.16 | 7.99              |
| 7195.00                   | 70.43         | 89.98                  | 6945.16     | 31.00                    | 628.36                      | 22.53 S                                   | 628.41 E  | 628.81@                           | 92.05 | 10.79             |
| 7227.00                   | 73.95         | 90.00                  | 6954.95     | 32.00                    | 658.82                      | 22.53 S                                   | 658.87 E  | 659.26@                           | 91.96 | 11.00             |
| 7258.00                   | 76.59         | 90.08                  | 6962.83     | 31.00                    | 688.80                      | 22.55 S                                   | 688.85 E  | 689.22@                           | 91.87 | 8.52              |
| 7289.00                   | 79.49         | 90.31                  | 6969.25     | 31.00                    | 719.13                      | 22.65 S                                   | 719.17 E  | 719.53@                           | 91.80 | 9.38              |
| 7320.00                   | 82.22         | 90.35                  | 6974.18     | 31.00                    | 749.73                      | 22.83 S                                   | 749.78 E  | 750.12@                           | 91.74 | 8.81              |
| 7343.00                   | 84.42         | 90.06                  | 6976.85     | 23.00                    | 772.57                      | 22.91 S                                   | 772.62 E  | 772.96@                           | 91.70 | 9.65              |
| 7447.00                   | 88.55         | 87.60                  | 6983.23     | 104.00                   | 876.33                      | 20.79 S                                   | 876.37 E  | 876.62@                           | 91.36 | 4.62              |
| 7478.00                   | 89.16         | 89.42                  | 6983.85     | 31.00                    | 907.31                      | 19.98 S                                   | 907.35 E  | 907.57@                           | 91.26 | 6.19              |
| 7541.00                   | 91.28         | 91.25                  | 6983.61     | 63.00                    | 970.30                      | 20.35 S                                   | 970.35 E  | 970.56@                           | 91.20 | 4.44              |
| 7573.00                   | 91.36         | 90.91                  | 6982.87     | 32.00                    | 1002.29                     | 20.95 S                                   | 1002.33 E | 1002.55@                          | 91.20 | 1.09              |
| 7605.00                   | 91.71         | 90.68                  | 6982.01     | 32.00                    | 1034.27                     | 21.40 S                                   | 1034.32 E | 1034.54@                          | 91.19 | 1.31              |
| 7636.00                   | 92.07         | 91.16                  | 6980.99     | 31.00                    | 1065.25                     | 21.89 S                                   | 1065.30 E | 1065.52@                          | 91.18 | 1.93              |
| 7731.00                   | 91.63         | 89.85                  | 6977.92     | 95.00                    | 1160.19                     | 22.73 S                                   | 1160.24 E | 1160.46@                          | 91.12 | 1.45              |
| 7826.00                   | 91.89         | 89.43                  | 6975.00     | 95.00                    | 1255.14                     | 22.13 S                                   | 1255.19 E | 1255.39@                          | 91.01 | 0.52              |

# PathFinder Energy Services, Inc.

## Survey Report

XTO ENERGY  
NASH UNIT #50H  
EDDY COUNTY, NEW MEXICO  
RIG: PIONEER # 33

Page 03/05

| 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) |           | Closure<br>Dist Dir<br>(ft) (deg) |       | DLS<br>(dg/100ft) |
|---------------------------|---------------|------------------------|-------------|--------------------------|-----------------------------|-------------------------------------------|-----------|-----------------------------------|-------|-------------------|
| 7921.00                   | 91.01         | 87.54                  | 6972.60     | 95.00                    | 1350.08                     | 19.62 S                                   | 1350.12 E | 1350.27@                          | 90.83 | 2.19              |
| 8016.00                   | 89.52         | 86.70                  | 6972.16     | 95.00                    | 1444.97                     | 14.85 S                                   | 1445.00 E | 1445.08@                          | 90.59 | 1.80              |
| 8111.00                   | 89.25         | 86.59                  | 6973.18     | 95.00                    | 1539.81                     | 9.29 S                                    | 1539.83 E | 1539.86@                          | 90.35 | 0.31              |
| 8206.00                   | 87.41         | 84.78                  | 6975.95     | 95.00                    | 1634.51                     | 2.15 S                                    | 1634.51 E | 1634.52@                          | 90.08 | 2.72              |
| 8237.00                   | 88.29         | 85.46                  | 6977.11     | 31.00                    | 1665.38                     | 0.49 N                                    | 1665.38 E | 1665.38@                          | 89.98 | 3.59              |
| 8269.00                   | 89.78         | 86.44                  | 6977.65     | 32.00                    | 1697.30                     | 2.75 N                                    | 1697.29 E | 1697.30@                          | 89.91 | 5.57              |
| 8301.00                   | 90.48         | 86.44                  | 6977.58     | 32.00                    | 1729.24                     | 4.73 N                                    | 1729.23 E | 1729.24@                          | 89.84 | 2.19              |
| 8333.00                   | 91.28         | 87.36                  | 6977.09     | 32.00                    | 1761.19                     | 6.46 N                                    | 1761.18 E | 1761.19@                          | 89.79 | 3.81              |
| 8354.00                   | 91.01         | 87.54                  | 6976.67     | 21.00                    | 1782.17                     | 7.40 N                                    | 1782.16 E | 1782.17@                          | 89.76 | 1.55              |
| 8386.00                   | 91.71         | 89.12                  | 6975.91     | 32.00                    | 1814.14                     | 8.33 N                                    | 1814.13 E | 1814.15@                          | 89.74 | 5.40              |
| 8417.00                   | 92.51         | 89.82                  | 6974.77     | 31.00                    | 1845.12                     | 8.62 N                                    | 1845.11 E | 1845.13@                          | 89.73 | 3.43              |
| 8512.00                   | 93.21         | 90.88                  | 6970.03     | 95.00                    | 1940.00                     | 8.04 N                                    | 1939.99 E | 1940.00@                          | 89.76 | 1.34              |
| 8607.00                   | 89.25         | 90.09                  | 6967.99     | 95.00                    | 2034.95                     | 7.24 N                                    | 2034.94 E | 2034.95@                          | 89.80 | 4.25              |
| 8701.00                   | 88.72         | 90.53                  | 6969.65     | 94.00                    | 2128.93                     | 6.73 N                                    | 2128.92 E | 2128.94@                          | 89.82 | 0.73              |
| 8797.00                   | 88.29         | 90.09                  | 6972.16     | 96.00                    | 2224.90                     | 6.21 N                                    | 2224.89 E | 2224.90@                          | 89.84 | 0.64              |
| 8892.00                   | 89.60         | 91.23                  | 6973.91     | 95.00                    | 2319.87                     | 5.11 N                                    | 2319.86 E | 2319.87@                          | 89.87 | 1.83              |
| 8987.00                   | 90.84         | 95.18                  | 6973.54     | 95.00                    | 2414.69                     | 0.20 S                                    | 2414.69 E | 2414.69@                          | 90.00 | 4.36              |
| 9081.00                   | 89.25         | 92.99                  | 6973.47     | 94.00                    | 2508.43                     | 6.89 S                                    | 2508.45 E | 2508.46@                          | 90.16 | 2.88              |
| 9176.00                   | 90.13         | 92.55                  | 6973.98     | 95.00                    | 2603.30                     | 11.48 S                                   | 2603.33 E | 2603.36@                          | 90.25 | 1.04              |
| 9271.00                   | 88.55         | 89.38                  | 6975.08     | 95.00                    | 2698.27                     | 13.08 S                                   | 2698.30 E | 2698.33@                          | 90.28 | 3.73              |
| 9366.00                   | 90.04         | 88.94                  | 6976.25     | 95.00                    | 2793.25                     | 11.69 S                                   | 2793.28 E | 2793.30@                          | 90.24 | 1.63              |
| 9463.00                   | 90.04         | 89.38                  | 6976.18     | 97.00                    | 2890.24                     | 10.27 S                                   | 2890.27 E | 2890.29@                          | 90.20 | 0.45              |
| 9557.00                   | 90.57         | 90.53                  | 6975.68     | 94.00                    | 2984.24                     | 10.19 S                                   | 2984.26 E | 2984.28@                          | 90.20 | 1.35              |
| 9651.00                   | 88.99         | 88.68                  | 6976.04     | 94.00                    | 3078.23                     | 9.55 S                                    | 3078.25 E | 3078.27@                          | 90.18 | 2.59              |
| 9746.00                   | 89.96         | 88.07                  | 6976.91     | 95.00                    | 3173.19                     | 6.85 S                                    | 3173.21 E | 3173.22@                          | 90.12 | 1.21              |
| 9841.00                   | 88.37         | 87.01                  | 6978.29     | 95.00                    | 3268.10                     | 2.78 S                                    | 3268.11 E | 3268.11@                          | 90.05 | 2.01              |
| 9936.00                   | 90.31         | 89.38                  | 6979.39     | 95.00                    | 3363.04                     | 0.22 N                                    | 3363.04 E | 3363.04@                          | 90.00 | 3.22              |
| 10031.00                  | 91.36         | 90.46                  | 6978.00     | 95.00                    | 3458.02                     | 0.35 N                                    | 3458.03 E | 3458.03@                          | 89.99 | 1.59              |

# PathFinder Energy Services, Inc.

## Survey Report

XTO ENERGY  
NASH UNIT #50H  
EDDY COUNTY, NEW MEXICO  
RIG: PIONEER # 33

Page 04/05

| 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) |           | Closure<br>Dist Dir<br>(ft) (deg) |       | DLS<br>(dg/100ft) |
|---------------------------|---------------|------------------------|-------------|--------------------------|-----------------------------|-------------------------------------------|-----------|-----------------------------------|-------|-------------------|
| 10126.00                  | 90.40         | 91.00                  | 6976.54     | 95.00                    | 3553.00                     | 0.86 S                                    | 3553.01 E | 3553.01@                          | 90.01 | 1.16              |
| 10221.00                  | 88.90         | 92.72                  | 6977.12     | 95.00                    | 3647.94                     | 3.95 S                                    | 3647.95 E | 3647.95@                          | 90.06 | 2.40              |
| 10316.00                  | 91.71         | 94.07                  | 6976.62     | 95.00                    | 3742.74                     | 9.57 S                                    | 3742.77 E | 3742.79@                          | 90.15 | 3.28              |
| 10411.00                  | 91.19         | 92.85                  | 6974.21     | 95.00                    | 3837.53                     | 15.30 S                                   | 3837.57 E | 3837.60@                          | 90.23 | 1.40              |
| 10506.00                  | 90.04         | 92.03                  | 6973.19     | 95.00                    | 3932.42                     | 19.35 S                                   | 3932.47 E | 3932.52@                          | 90.28 | 1.49              |
| 10601.00                  | 88.55         | 88.97                  | 6974.36     | 95.00                    | 4027.40                     | 20.17 S                                   | 4027.45 E | 4027.50@                          | 90.29 | 3.58              |
| 10695.00                  | 89.16         | 88.31                  | 6976.24     | 94.00                    | 4121.36                     | 17.94 S                                   | 4121.40 E | 4121.44@                          | 90.25 | 0.96              |
| 10790.00                  | 88.99         | 87.83                  | 6977.78     | 95.00                    | 4216.30                     | 14.75 S                                   | 4216.34 E | 4216.36@                          | 90.20 | 0.54              |
| 10821.00                  | 87.49         | 88.26                  | 6978.73     | 31.00                    | 4247.26                     | 13.69 S                                   | 4247.30 E | 4247.32@                          | 90.18 | 5.03              |
| 10852.00                  | 87.32         | 88.57                  | 6980.13     | 31.00                    | 4278.22                     | 12.83 S                                   | 4278.26 E | 4278.28@                          | 90.17 | 1.14              |
| 10884.00                  | 87.14         | 87.86                  | 6981.68     | 32.00                    | 4310.17                     | 11.84 S                                   | 4310.21 E | 4310.22@                          | 90.16 | 2.29              |
| 10916.00                  | 87.41         | 87.71                  | 6983.20     | 32.00                    | 4342.11                     | 10.60 S                                   | 4342.14 E | 4342.16@                          | 90.14 | 0.97              |
| 10947.00                  | 87.41         | 87.71                  | 6984.60     | 31.00                    | 4373.06                     | 9.36 S                                    | 4373.09 E | 4373.10@                          | 90.12 | 0.00              |
| 10978.00                  | 86.00         | 86.88                  | 6986.38     | 31.00                    | 4403.98                     | 7.90 S                                    | 4404.00 E | 4404.01@                          | 90.10 | 5.28              |
| 11009.00                  | 85.56         | 86.42                  | 6988.66     | 31.00                    | 4434.84                     | 6.10 S                                    | 4434.87 E | 4434.87@                          | 90.08 | 2.05              |
| 11040.00                  | 85.82         | 87.09                  | 6990.99     | 31.00                    | 4465.71                     | 4.35 S                                    | 4465.73 E | 4465.73@                          | 90.06 | 2.31              |
| 11072.00                  | 85.82         | 87.63                  | 6993.33     | 32.00                    | 4497.59                     | 2.88 S                                    | 4497.61 E | 4497.61@                          | 90.04 | 1.68              |
| 11104.00                  | 86.09         | 87.09                  | 6995.58     | 32.00                    | 4529.48                     | 1.41 S                                    | 4529.49 E | 4529.50@                          | 90.02 | 1.88              |
| 11136.00                  | 86.88         | 87.82                  | 6997.54     | 32.00                    | 4561.39                     | 0.01 N                                    | 4561.40 E | 4561.40@                          | 90.00 | 3.36              |
| 11167.00                  | 87.49         | 89.64                  | 6999.07     | 31.00                    | 4592.35                     | 0.70 N                                    | 4592.36 E | 4592.36@                          | 89.99 | 6.19              |
| 11199.00                  | 88.37         | 90.54                  | 7000.22     | 32.00                    | 4624.33                     | 0.65 N                                    | 4624.33 E | 4624.33@                          | 89.99 | 3.93              |
| 11231.00                  | 88.20         | 89.80                  | 7001.18     | 32.00                    | 4656.31                     | 0.55 N                                    | 4656.32 E | 4656.32@                          | 89.99 | 2.37              |
| 11262.00                  | 88.72         | 88.69                  | 7002.01     | 31.00                    | 4687.30                     | 0.96 N                                    | 4687.30 E | 4687.30@                          | 89.99 | 3.95              |
| 11293.00                  | 89.96         | 89.77                  | 7002.37     | 31.00                    | 4718.29                     | 1.38 N                                    | 4718.30 E | 4718.30@                          | 89.98 | 5.30              |
| 11325.00                  | 89.78         | 90.15                  | 7002.44     | 32.00                    | 4750.29                     | 1.40 N                                    | 4750.30 E | 4750.30@                          | 89.98 | 1.31              |
| 11357.00                  | 88.55         | 90.73                  | 7002.91     | 32.00                    | 4782.29                     | 1.15 N                                    | 4782.29 E | 4782.29@                          | 89.99 | 4.25              |
| 11389.00                  | 87.85         | 91.19                  | 7003.92     | 32.00                    | 4814.26                     | 0.62 N                                    | 4814.27 E | 4814.27@                          | 89.99 | 2.62              |
| 11420.00                  | 86.97         | 90.23                  | 7005.32     | 31.00                    | 4845.23                     | 0.23 N                                    | 4845.24 E | 4845.24@                          | 90.00 | 4.20              |

# PathFinder Energy Services, Inc.

## Survey Report

XTO ENERGY  
NASH UNIT #50H  
EDDY COUNTY, NEW MEXICO  
RIG: PIONEER # 33

Page 05/05

| 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) |           | Closure<br>Dist Dir<br>(ft) (deg) |       | DLS<br>(dg/100ft) |
|----------------------------------------------|---------------|------------------------|-------------|--------------------------|-----------------------------|-------------------------------------------|-----------|-----------------------------------|-------|-------------------|
| 11451.00                                     | 85.12         | 89.36                  | 7007.45     | 31.00                    | 4876.15                     | 0.35 N                                    | 4876.16 E | 4876.16@                          | 90.00 | 6.59              |
| 11482.00                                     | 83.54         | 88.78                  | 7010.52     | 31.00                    | 4907.00                     | 0.85 N                                    | 4907.01 E | 4907.01@                          | 89.99 | 5.43              |
| 11514.00                                     | 83.45         | 88.86                  | 7014.14     | 32.00                    | 4938.79                     | 1.50 N                                    | 4938.79 E | 4938.79@                          | 89.98 | 0.38              |
| 11546.00                                     | 83.80         | 88.67                  | 7017.70     | 32.00                    | 4970.58                     | 2.19 N                                    | 4970.59 E | 4970.59@                          | 89.97 | 1.24              |
| 11577.00                                     | 84.06         | 88.99                  | 7020.97     | 31.00                    | 5001.40                     | 2.82 N                                    | 5001.41 E | 5001.41@                          | 89.97 | 1.33              |
| 11608.00                                     | 83.89         | 88.48                  | 7024.23     | 31.00                    | 5032.23                     | 3.50 N                                    | 5032.23 E | 5032.23@                          | 89.96 | 1.73              |
| 11639.00                                     | 83.98         | 88.81                  | 7027.50     | 31.00                    | 5063.04                     | 4.22 N                                    | 5063.05 E | 5063.05@                          | 89.95 | 1.10              |
| 11671.00                                     | 84.24         | 87.99                  | 7030.79     | 32.00                    | 5094.86                     | 5.11 N                                    | 5094.87 E | 5094.87@                          | 89.94 | 2.68              |
| 11703.00                                     | 84.42         | 88.15                  | 7033.95     | 32.00                    | 5126.69                     | 6.19 N                                    | 5126.69 E | 5126.69@                          | 89.93 | 0.75              |
| 11727.00                                     | 84.68         | 87.65                  | 7036.23     | 24.00                    | 5150.57                     | 7.06 N                                    | 5150.57 E | 5150.57@                          | 89.92 | 2.34              |
| STRAIGHT-LINE PROJECTION TO BIT @ 11795' MD. |               |                        |             |                          |                             |                                           |           |                                   |       |                   |
| 11795.00                                     | 84.68         | 87.65                  | 7042.53     | 68.00                    | 5218.23                     | 9.84 N                                    | 5218.22 E | 5218.23@                          | 89.89 | 0.00              |



A Schlumberger Company

**TIE-IN SURVEY INFORMATION SHEET****CLIENT INFORMATION**

|                           |                 |            |     |
|---------------------------|-----------------|------------|-----|
| CLIENT:                   | XTO ENERGY      |            |     |
| LEASE / WELL No.:         | NASH UNIT       | # 50H      |     |
| WELL LOCATION:            | EDDY COUNTY     |            |     |
| COUNTY / STATE / COUNTRY: | EDDY            | NEW MEXICO | USA |
| RIG:                      | PIONEER 33      |            |     |
| API WELL No:              | 30-015-38991    |            |     |
| JOB No:                   | 700005101-WT-WT |            |     |
| P.O. / AFE No.            |                 |            |     |
| DIRECTIONAL COMPANY:      | PES             |            |     |

**WELL SITE INFORMATION**

|                                  |                                                                                                        |                 |                   |
|----------------------------------|--------------------------------------------------------------------------------------------------------|-----------------|-------------------|
| TOTAL MAGNETIC CORRECTION (TMC): |                                                                                                        |                 |                   |
| On Wall Plat:                    | 7.47                                                                                                   | LWD Calculated: | 7.467             |
|                                  |                                                                                                        | Agreed Upon:    | 7.47              |
| X =                              | 624676.800000                                                                                          | Feet            | Y = 474205.800000 |
|                                  |                                                                                                        |                 | Feet              |
| SITE LATITUDE:                   | 32.303063 N                                                                                            | SITE LONGITUDE: | 103.929812 W      |
| GRID SYSTEM:                     | TRUE <input type="checkbox"/> UTM <input type="checkbox"/> LAMBERT <input checked="" type="checkbox"/> | ZONE:           | NEW MEXICO EAST   |
| PROPOSED DRIFT DIRECTION:        | 89.88                                                                                                  |                 |                   |
| KELLY BUSHING ELEVATION:         | 19                                                                                                     |                 |                   |
| ALTITUDE:                        | 3018                                                                                                   | Feet            | WATER DEPTH: N/A  |
|                                  |                                                                                                        |                 | Feet              |

**TIE-IN SURVEY**

|                                    |                                                                     |                                        |                                                         |
|------------------------------------|---------------------------------------------------------------------|----------------------------------------|---------------------------------------------------------|
| MEASURED DEPTH:                    | 6024                                                                |                                        |                                                         |
| DRIFT ANGLE:                       | 0.62                                                                |                                        |                                                         |
| DRIFT DIRECTION:                   | 246.31                                                              |                                        |                                                         |
| TRUE VERTICAL DEPTH:               | 6023.36                                                             |                                        |                                                         |
| VERTICAL SECTION:                  | 27.99                                                               |                                        |                                                         |
| RECTANGULAR COORDINATE ( N / S ) : | -29.26                                                              |                                        |                                                         |
| RECTANGULAR COORDINATE ( E / W ) : | 28.05                                                               |                                        |                                                         |
| CLOSURE DISTANCE / DIRECTION:      | 40.53                                                               | 136.21                                 |                                                         |
| SURVEY CALCULATION METHOD:         | AA <input type="checkbox"/>                                         | MC <input checked="" type="checkbox"/> | RC <input type="checkbox"/> BT <input type="checkbox"/> |
| SOURCE OF TIE-IN DATA ( COMPANY ): | SCIENTIFIC DRILLING                                                 |                                        |                                                         |
| COPY OF TIE-IN SURVEY REPORT       | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO |                                        |                                                         |

**WELL PLAN**

|                |      |              |       |
|----------------|------|--------------|-------|
| KICKOFF DEPTH: | 6076 | TOTAL DEPTH: | 11810 |
| KICKOFF ANGLE: | 0    | MAX ANGLE:   | 88.6  |

PES Engineers:

P. DASB. KITCHENS

\*\*Signature of both field engineers required if applicable

Directional Driller:

W. L. T. H.DATE: 1/5/12

# Scientific Drilling

## Gyroscopic Survey Report for XTO

|                           |                                         |
|---------------------------|-----------------------------------------|
| <b>Well Location</b>      | EDDY COUNTY, NEW MEXICO                 |
| <b>Well Name</b>          | NASH #50H                               |
| <b>Rig Name</b>           | PIONEER #33                             |
| <b>Survey Date</b>        | 1/19/2012                               |
| <b>Latitude</b>           | 32.3030000°N                            |
| <b>North Reference</b>    | Grid North                              |
| <b>Grid Correction</b>    | -0.22 deg                               |
| <b>Depth Reference</b>    | RKB (19.00 ft)                          |
| <b>Calculation Method</b> | Minimum Curvature                       |
| <b>Section (VS) Ref</b>   | 0.00N (ft), 0.00E (ft), 89.88Azim (deg) |
| <b>Definitive Survey</b>  | FINAL GYRO SURVEY                       |
| <b>Operator(s)</b>        | CHASE BARON, LEO GARZA                  |

### Well Notes

# Scientific Drilling

# Survey Report

| Survey:      |      | FINAL GYRO SURVEY |         |       |        |       |                   |                 |                  |  |
|--------------|------|-------------------|---------|-------|--------|-------|-------------------|-----------------|------------------|--|
| Survey Date: |      | 1/19/2012         |         |       |        |       |                   |                 |                  |  |
| MD           | Inc  | Azim              | TVD     | VS    | +N/-S  | +E/-W | Closure Direction | Dogleg Severity | Closure Distance |  |
| ft           | deg  | deg               | ft      | ft    | ft     | ft    | deg               | 7100ft          | ft               |  |
| 0.00         | 0.00 | 0.00              | 0.00    | 0.00  | 0.00   | 0.00  | 0.00              | Invalid         | 0.00             |  |
| 100.00       | 0.20 | 22.61             | 100.00  | 0.07  | 0.16   | 0.07  | 22.61             | 0.20            | 0.18             |  |
| 200.00       | 0.11 | 324.36            | 200.00  | 0.08  | 0.41   | 0.08  | 11.04             | 0.17            | 0.41             |  |
| 300.00       | 0.07 | 123.54            | 300.00  | 0.08  | 0.45   | 0.07  | 9.33              | 0.18            | 0.46             |  |
| 400.00       | 0.11 | 135.76            | 400.00  | 0.19  | 0.35   | 0.19  | 28.70             | 0.04            | 0.40             |  |
| 500.00       | 0.09 | 159.34            | 500.00  | 0.29  | 0.21   | 0.29  | 54.03             | 0.04            | 0.35             |  |
| 600.00       | 0.22 | 145.58            | 600.00  | 0.42  | -0.03  | 0.42  | 93.93             | 0.14            | 0.42             |  |
| 700.00       | 0.36 | 128.54            | 700.00  | 0.78  | -0.38  | 0.78  | 116.26            | 0.16            | 0.87             |  |
| 800.00       | 0.30 | 138.03            | 800.00  | 1.19  | -0.77  | 1.19  | 122.83            | 0.08            | 1.42             |  |
| 900.00       | 0.36 | 132.12            | 899.99  | 1.59  | -1.17  | 1.60  | 126.25            | 0.07            | 1.98             |  |
| 1000.00      | 0.41 | 133.27            | 999.99  | 2.08  | -1.62  | 2.09  | 127.88            | 0.05            | 2.64             |  |
| 1100.00      | 0.53 | 118.10            | 1099.99 | 2.75  | -2.08  | 2.75  | 127.14            | 0.17            | 3.45             |  |
| 1200.00      | 0.60 | 114.48            | 1199.98 | 3.63  | -2.52  | 3.63  | 124.71            | 0.08            | 4.42             |  |
| 1300.00      | 0.71 | 105.66            | 1299.98 | 4.71  | -2.90  | 4.71  | 121.64            | 0.15            | 5.53             |  |
| 1400.00      | 0.70 | 93.83             | 1399.97 | 5.92  | -3.11  | 5.93  | 117.71            | 0.15            | 6.69             |  |
| 1500.00      | 0.71 | 83.39             | 1499.96 | 7.15  | -3.08  | 7.15  | 113.32            | 0.13            | 7.79             |  |
| 1600.00      | 0.68 | 71.30             | 1599.95 | 8.32  | -2.82  | 8.33  | 108.72            | 0.15            | 8.79             |  |
| 1700.00      | 0.70 | 51.12             | 1699.95 | 9.36  | -2.25  | 9.36  | 103.49            | 0.24            | 9.63             |  |
| 1800.00      | 0.69 | 38.15             | 1799.94 | 10.21 | -1.39  | 10.22 | 97.72             | 0.16            | 10.31            |  |
| 1900.00      | 0.72 | 30.72             | 1899.93 | 10.91 | -0.37  | 10.91 | 91.95             | 0.10            | 10.92            |  |
| 2000.00      | 0.47 | 36.28             | 1999.93 | 11.47 | 0.50   | 11.47 | 87.52             | 0.25            | 11.48            |  |
| 2100.00      | 0.38 | 35.25             | 2099.92 | 11.91 | 1.10   | 11.90 | 84.74             | 0.09            | 11.96            |  |
| 2200.00      | 0.24 | 289.25            | 2199.92 | 11.90 | 1.44   | 11.89 | 83.12             | 0.50            | 11.98            |  |
| 2300.00      | 0.50 | 261.99            | 2299.92 | 11.26 | 1.44   | 11.26 | 82.69             | 0.31            | 11.35            |  |
| 2400.00      | 0.39 | 189.33            | 2399.92 | 10.78 | 1.05   | 10.77 | 84.43             | 0.53            | 10.82            |  |
| 2500.00      | 1.32 | 136.68            | 2499.91 | 11.51 | -0.12  | 11.51 | 90.61             | 1.13            | 11.51            |  |
| 2600.00      | 1.49 | 134.78            | 2599.88 | 13.22 | -1.88  | 13.22 | 98.08             | 0.17            | 13.36            |  |
| 2700.00      | 1.92 | 139.46            | 2699.83 | 15.23 | -4.07  | 15.23 | 104.95            | 0.45            | 15.77            |  |
| 2800.00      | 2.31 | 141.71            | 2799.77 | 17.56 | -6.92  | 17.57 | 111.50            | 0.40            | 18.89            |  |
| 2900.00      | 2.35 | 143.68            | 2899.68 | 20.02 | -10.16 | 20.04 | 116.88            | 0.09            | 22.46            |  |
| 3000.00      | 2.19 | 145.29            | 2999.60 | 22.31 | -13.39 | 22.34 | 120.92            | 0.17            | 26.05            |  |
| 3100.00      | 1.58 | 146.17            | 3099.55 | 24.17 | -16.10 | 24.20 | 123.64            | 0.61            | 29.07            |  |
| 3200.00      | 0.92 | 125.63            | 3199.53 | 25.58 | -17.72 | 25.62 | 124.66            | 0.79            | 31.15            |  |
| 3300.00      | 0.99 | 120.54            | 3299.51 | 26.97 | -18.62 | 27.01 | 124.58            | 0.11            | 32.81            |  |
| 3400.00      | 0.82 | 122.06            | 3399.50 | 28.32 | -19.44 | 28.36 | 124.43            | 0.17            | 34.38            |  |
| 3500.00      | 0.84 | 114.68            | 3499.49 | 29.60 | -20.13 | 29.64 | 124.18            | 0.11            | 35.83            |  |
| 3600.00      | 0.71 | 111.12            | 3599.48 | 30.84 | -20.66 | 30.88 | 123.78            | 0.15            | 37.16            |  |
| 3700.00      | 0.65 | 112.60            | 3699.47 | 31.94 | -21.10 | 31.98 | 123.41            | 0.06            | 38.31            |  |
| 3800.00      | 0.56 | 116.01            | 3799.47 | 32.90 | -21.53 | 32.94 | 123.16            | 0.10            | 39.35            |  |
| 3900.00      | 0.58 | 114.09            | 3899.46 | 33.79 | -21.95 | 33.84 | 122.97            | 0.03            | 40.33            |  |

# Scientific Drilling

# Survey Report

| Survey:      |      | FINAL GYRO SURVEY |         |       |        |       |                   |                 |                  |
|--------------|------|-------------------|---------|-------|--------|-------|-------------------|-----------------|------------------|
| Survey Date: |      | 1/19/2012         |         |       |        |       |                   |                 |                  |
| MD           | Inc  | Azim              | TVD     | VS    | +N/-S  | +E/-W | Closure Direction | Dogleg Severity | Closure Distance |
| ft           | deg  | deg               | ft      | ft    | ft     | ft    | deg               | 7100ft          | ft               |
| 4000.00      | 0.52 | 109.51            | 3999.46 | 34.68 | -22.31 | 34.73 | 122.71            | 0.07            | 41.28            |
| 4100.00      | 0.36 | 101.04            | 4099.45 | 35.42 | -22.52 | 35.47 | 122.41            | 0.17            | 42.01            |
| 4200.00      | 0.30 | 100.54            | 4199.45 | 35.98 | -22.63 | 36.03 | 122.13            | 0.06            | 42.55            |
| 4300.00      | 0.21 | 96.94             | 4299.45 | 36.42 | -22.69 | 36.47 | 121.90            | 0.09            | 42.95            |
| 4400.00      | 0.22 | 80.74             | 4399.45 | 36.79 | -22.69 | 36.84 | 121.62            | 0.06            | 43.26            |
| 4500.00      | 0.19 | 65.90             | 4499.45 | 37.14 | -22.59 | 37.18 | 121.27            | 0.06            | 43.51            |
| 4600.00      | 0.17 | 81.46             | 4599.45 | 37.43 | -22.50 | 37.48 | 120.97            | 0.05            | 43.71            |
| 4700.00      | 0.07 | 40.83             | 4699.45 | 37.61 | -22.43 | 37.66 | 120.78            | 0.12            | 43.83            |
| 4800.00      | 0.07 | 350.99            | 4799.45 | 37.64 | -22.32 | 37.69 | 120.64            | 0.06            | 43.81            |
| 4900.00      | 0.10 | 224.19            | 4899.45 | 37.57 | -22.33 | 37.62 | 120.69            | 0.16            | 43.74            |
| 5000.00      | 0.15 | 220.85            | 4999.45 | 37.42 | -22.49 | 37.47 | 120.98            | 0.05            | 43.70            |
| 5100.00      | 0.21 | 225.63            | 5099.45 | 37.20 | -22.72 | 37.25 | 121.38            | 0.06            | 43.63            |
| 5200.00      | 0.28 | 228.07            | 5199.45 | 36.88 | -23.02 | 36.93 | 121.93            | 0.07            | 43.52            |
| 5300.00      | 0.39 | 219.35            | 5299.45 | 36.48 | -23.44 | 36.53 | 122.69            | 0.12            | 43.41            |
| 5400.00      | 0.66 | 215.92            | 5399.44 | 35.93 | -24.18 | 35.98 | 123.90            | 0.28            | 43.35            |
| 5500.00      | 0.76 | 223.60            | 5499.43 | 35.13 | -25.12 | 35.18 | 125.53            | 0.14            | 43.23            |
| 5600.00      | 0.93 | 220.26            | 5599.42 | 34.15 | -26.22 | 34.20 | 127.48            | 0.18            | 43.10            |
| 5700.00      | 1.01 | 232.40            | 5699.41 | 32.92 | -27.38 | 32.98 | 129.70            | 0.22            | 42.86            |
| 5800.00      | 1.12 | 255.72            | 5799.39 | 31.28 | -28.15 | 31.34 | 131.94            | 0.44            | 42.13            |
| 5900.00      | 0.90 | 253.65            | 5899.38 | 29.58 | -28.62 | 29.64 | 133.99            | 0.22            | 41.20            |
| 6000.00      | 0.75 | 243.13            | 5999.37 | 28.25 | -29.13 | 28.31 | 135.82            | 0.21            | 40.62            |
| 6024.00      | 0.62 | 246.31            | 6023.36 | 27.99 | -29.26 | 28.05 | 136.21            | 0.56            | 40.53            |

# Scientific Drilling

# Survey Report

| Survey:      |      | FINAL GYRO SURVEY |         |       |        |       |                   |                 |                  |  |
|--------------|------|-------------------|---------|-------|--------|-------|-------------------|-----------------|------------------|--|
| Survey Date: |      | 1/19/2012         |         |       |        |       |                   |                 |                  |  |
| MD           | Inc  | Azim              | TVD     | VS    | +N/-S  | +E/-W | Closure Direction | Dogleg Severity | Closure Distance |  |
| ft           | deg  | deg               | ft      | ft    | ft     | ft    | deg               | %100ft          | ft               |  |
| 4000.00      | 0.52 | 109.51            | 3999.46 | 34.68 | -22.31 | 34.73 | 122.71            | 0.07            | 41.28            |  |
| 4100.00      | 0.36 | 101.04            | 4099.45 | 35.42 | -22.52 | 35.47 | 122.41            | 0.17            | 42.01            |  |
| 4200.00      | 0.30 | 100.54            | 4199.45 | 35.98 | -22.63 | 36.03 | 122.13            | 0.06            | 42.55            |  |
| 4300.00      | 0.21 | 96.94             | 4299.45 | 36.42 | -22.69 | 36.47 | 121.90            | 0.09            | 42.95            |  |
| 4400.00      | 0.22 | 80.74             | 4399.45 | 36.79 | -22.69 | 36.84 | 121.62            | 0.06            | 43.26            |  |
| 4500.00      | 0.19 | 65.90             | 4499.45 | 37.14 | -22.59 | 37.18 | 121.27            | 0.06            | 43.51            |  |
| 4600.00      | 0.17 | 81.46             | 4599.45 | 37.43 | -22.50 | 37.48 | 120.97            | 0.05            | 43.71            |  |
| 4700.00      | 0.07 | 40.83             | 4699.45 | 37.61 | -22.43 | 37.66 | 120.78            | 0.12            | 43.83            |  |
| 4800.00      | 0.07 | 350.99            | 4799.45 | 37.64 | -22.32 | 37.69 | 120.64            | 0.06            | 43.81            |  |
| 4900.00      | 0.10 | 224.19            | 4899.45 | 37.57 | -22.33 | 37.62 | 120.69            | 0.16            | 43.74            |  |
| 5000.00      | 0.15 | 220.85            | 4999.45 | 37.42 | -22.49 | 37.47 | 120.98            | 0.05            | 43.70            |  |
| 5100.00      | 0.21 | 225.63            | 5099.45 | 37.20 | -22.72 | 37.25 | 121.38            | 0.06            | 43.63            |  |
| 5200.00      | 0.28 | 228.07            | 5199.45 | 36.88 | -23.02 | 36.93 | 121.93            | 0.07            | 43.52            |  |
| 5300.00      | 0.39 | 219.35            | 5299.45 | 36.48 | -23.44 | 36.53 | 122.69            | 0.12            | 43.41            |  |
| 5400.00      | 0.66 | 215.92            | 5399.44 | 35.93 | -24.18 | 35.98 | 123.90            | 0.28            | 43.35            |  |
| 5500.00      | 0.76 | 223.60            | 5499.43 | 35.13 | -25.12 | 35.18 | 125.53            | 0.14            | 43.23            |  |
| 5600.00      | 0.93 | 220.26            | 5599.42 | 34.15 | -26.22 | 34.20 | 127.48            | 0.18            | 43.10            |  |
| 5700.00      | 1.01 | 232.40            | 5699.41 | 32.92 | -27.38 | 32.98 | 129.70            | 0.22            | 42.86            |  |
| 5800.00      | 1.12 | 255.72            | 5799.39 | 31.28 | -28.15 | 31.34 | 131.94            | 0.44            | 42.13            |  |
| 5900.00      | 0.90 | 253.65            | 5899.38 | 29.58 | -28.62 | 29.64 | 133.99            | 0.22            | 41.20            |  |
| 6000.00      | 0.75 | 243.13            | 5999.37 | 28.25 | -29.13 | 28.31 | 135.82            | 0.21            | 40.62            |  |
| 6024.00      | 0.62 | 246.31            | 6023.36 | 27.99 | -29.26 | 28.05 | 136.21            | 0.56            | 40.53            |  |



A Schlumberger Company

**PathFinder Energy Services, Inc.**

## Magnetic & Grid Calculations

XTO Energy  
Nash Unit #50H  
Eddy County, NM  
Rig: Pioneer 33

Wed Jan 18 12:35:46 2012

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### Coordinates

Latitude: 32.303063 N ( 32 deg. 18 min. 11.0276 sec.)  
Longitude: 103.929812 W (-103 deg. 55 min. 47.3224 sec.)  
Elevation: 3037.00 feet.  
Calculation Date: Jan/18/2012

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### Magnetic Calculations

Model: IGRF2010  
Dip Angle: 60.1838 degrees  
Total Magnetic Field: 0.48568 gauss  
Magnetic Declination: 7.683437 degrees  
Horizontal Intensity: 0.241488 gauss  
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.683437 Degr

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### Transverse Mercator Grid Calculations NAD27

Grid System: Transverse Mercator: new mexico east  
Ellipsoid: Clarke 1866  
X: 624676.8000 feet  
Y: 474205.8000 feet  
True to Grid: (convergence) -0.215644 degrees  
Magnetic to Grid: 7.467793 degrees  
To Convert a Magnetic Dir. to a GRID dir. Add 7.467793 Degr.

# PathFinder Energy Services, Inc.

## Magnetic & Grid Calculations

XTO ENERGY  
NASH UNIT #50H  
NASH DRAW; DELAWARE  
Rig: PIONEER # 33

CN LOCATION

Fri Jan 20 08:33:02 2012

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### Coordinates

Latitude: 32.303063 N (32 deg. 18 min. 11.0276 sec.)  
Longitude: 103.929812 W (-103 deg. 55 min. 47.3224 sec.)  
Elevation: 3035.50 feet.  
Calculation Date: Jan/19/2012

---

### Magnetic Calculations

Model: IGRF2010  
Dip Angle: 60.1837 degrees  
Total Magnetic Field: 0.48567 gauss  
Magnetic Declination: 7.683102 degrees  
Horizontal Intensity: 0.241487 gauss  
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.683102 Degr.

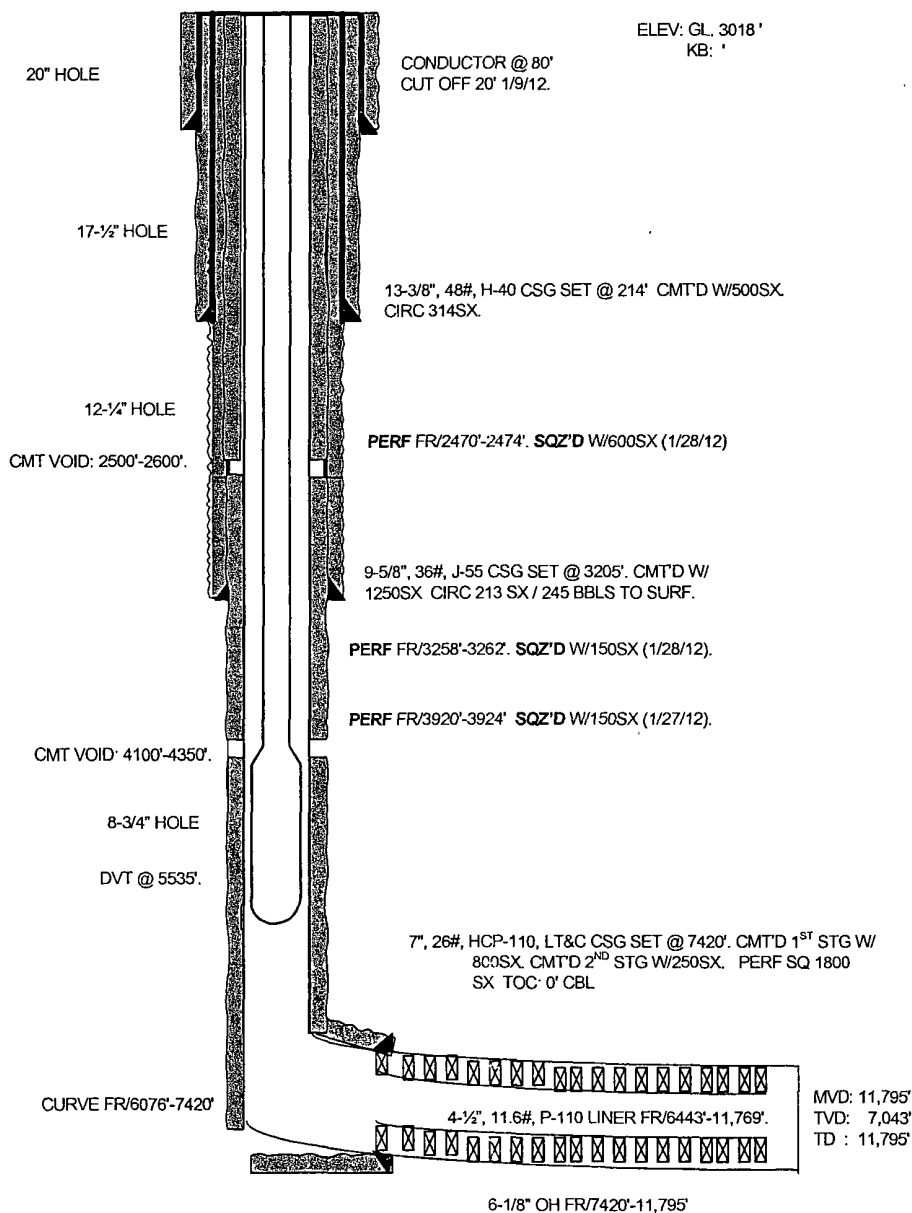
---

### Transverse Mercator Grid Calculations NAD27

Grid System: Transverse Mercator: new mexico east  
Ellipsoid: Clarke 1866  
X: 624676.8000 feet  
Y: 474205.8000 feet  
True to Grid: (convergence) -0.215644 degrees  
Magnetic to Grid: 7.467459 degrees  
To Convert a Magnetic Dir. to a GRID dir. Add 7.467459 Degr.

# NASH UNIT #50

**LOCATION:** SHL: 1980' FSL & 200' FEL, SEC 13, 23S, 29E. BHL: 1980' FSL & 340' FEL, SEC 18, 23S, 30E  
**COUNTY/STATE:** EDDY, NM  
**FIELD:** NASH DRAW  
**FORMATION:** BRUSHY CANYON  
**SPUD DATE:** 1/8/12  
**API#:** 30-015-38991





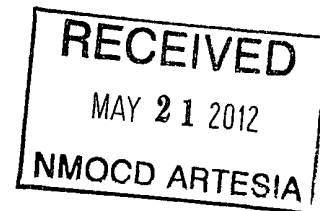
Devon Energy Corporation  
20 North Broadway  
Oklahoma City, OK 73102-8260

405 235 3611 Phone  
www.devonenergy.com

May 17th, 2012

Bureau of Land Management  
620 E. Greene Street  
Carlsbad, NM 88221

Re: Habanero 17 Federal 1H  
API # 30-015-36108



Ladies and Gentlemen:

Devon Energy Production Company, L.P. would like to request that you maintain confidentiality on the above referenced well.

Please feel free contact me at (405) 552-7802 should you need anything further or have any questions. Thank you for your assistance in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephanie A. Ysasaga". The signature is fluid and cursive.

Stephanie A. Ysasaga  
Sr. Staff Engineering Technician  
Devon Energy Production Company, L.P.

Attachment