

# devon

Project: Eddy County  
Site: Snapping 2 State  
Well: #5H  
Wellbore: OH  
Plan: Plan 1 (#5H/OH)

RECEIVED

MAY 26 2011

NMOCD ARTESIA

## PATHFINDER

A Schlumberger Company

West(-)/East(+) (200 usft/in)

PROJECT DETAILS: Eddy County  
Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: New Mexico Eastern Zone  
System Datum: Mean Sea Level  
Local North: Grid



Azimuths to Grid North  
True North: -0.31°  
Magnetic North: 7.34°

Magnetic Field  
Strength: 48548.5snT  
Dip Angle: 60.03°  
Date: 5/13/2011  
Model: IGRF200510

### SECTION DETAILS

| Sec | MD       | Inc   | Azi    | TVD     | +N/-S   | +E/-W   | Dleg  | TFace  | Vsect   | Target             |
|-----|----------|-------|--------|---------|---------|---------|-------|--------|---------|--------------------|
| 1   | 0.00     | 0.00  | 0.00   | 0.00    | 0.00    | 0.00    | 0.00  | 0.00   | 0.00    |                    |
| 2   | 8437.00  | 0.00  | 0.00   | 8437.00 | 0.00    | 0.00    | 0.00  | 0.00   | 0.00    |                    |
| 3   | 8714.74  | 27.77 | 304.84 | 8703.99 | 37.71   | -54.18  | 10.00 | 304.84 | 40.24   |                    |
| 4   | 8714.85  | 27.77 | 304.84 | 8704.08 | 37.74   | -54.22  | 0.00  | 0.00   | 40.27   |                    |
| 5   | 9460.45  | 90.00 | 0.00   | 9090.00 | 590.02  | -221.03 | 10.00 | 58.37  | 599.84  |                    |
| 6   | 13526.45 | 90.00 | 0.00   | 9090.00 | 4656.02 | -221.03 | 0.00  | 0.00   | 4661.28 | BHL (Snapping #5H) |

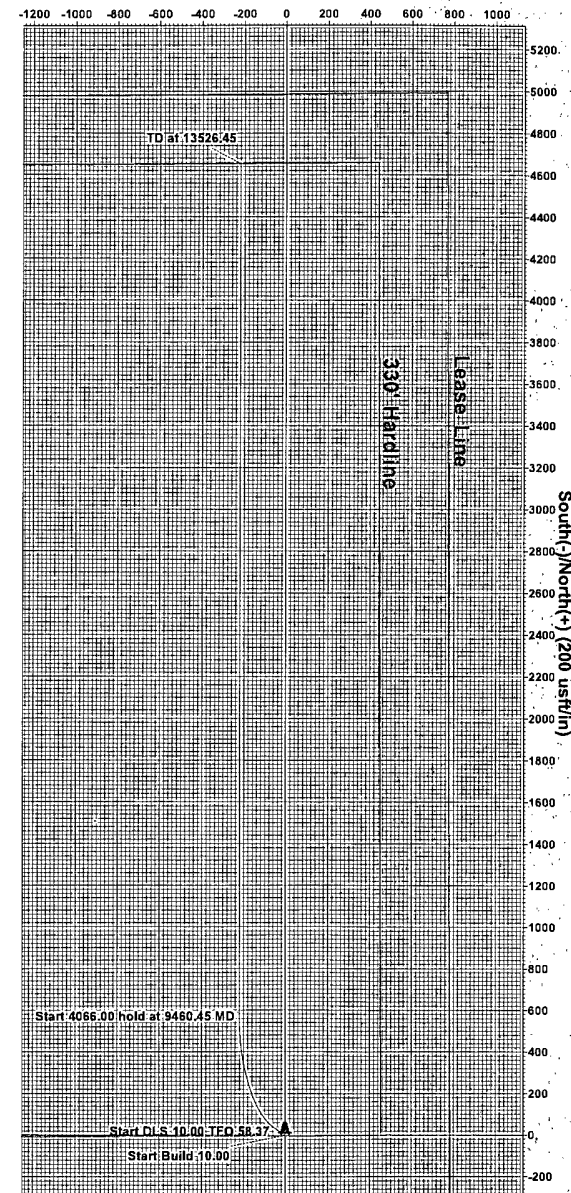
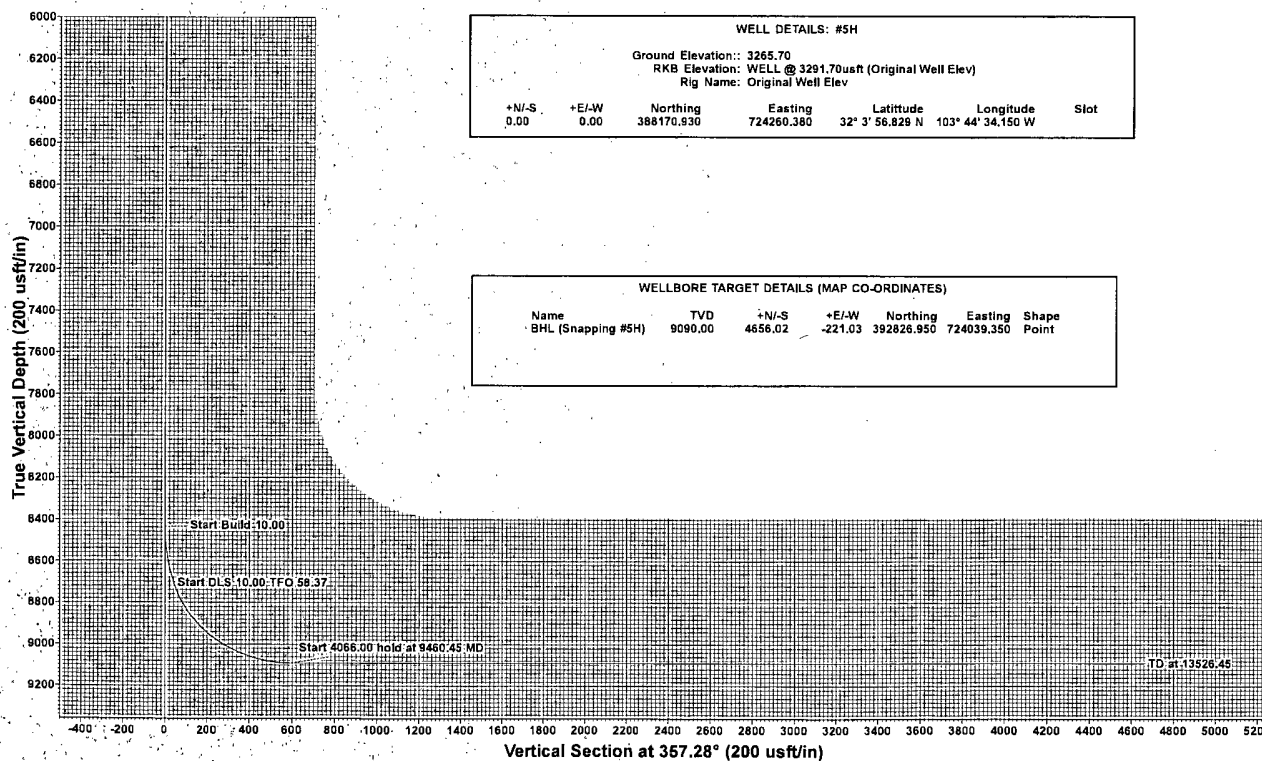
### WELL DETAILS: #5H

Ground Elevation: 3265.70  
RKB Elevation: WELL @ 3281.70usft (Original Well Elev)  
Rig Name: Original Well Elev

| +N/-S | +E/-W | Northing   | Easting    | Latitude        | Longitude         | Slot |
|-------|-------|------------|------------|-----------------|-------------------|------|
| 0.00  | 0.00  | 388170.830 | 724260.380 | 32° 3' 56.828 N | 103° 44' 34.150 W |      |

### WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

| Name               | TVD     | +N/-S   | +E/-W   | Northing   | Easting    | Shape |
|--------------------|---------|---------|---------|------------|------------|-------|
| BHL (Snapping #5H) | 9090.00 | 4656.02 | -221.03 | 392826.950 | 724039.350 | Point |



Plan: Plan 1 (#5H/OH)

Created By: Nate Bingham Date: 9:52, May 13 2011



## **Devon Energy, Inc.**

**Eddy County**

**Snapping 2 State**

**#5H**

**OH**

**Plan: Plan 1**

## **Pathfinder X&Y Report**

**13 May, 2011**



**A Schlumberger Company**



**Pathfinder**  
Pathfinder X&Y Report



**Company:** Devon Energy, Inc.  
**Project:** Eddy County  
**Site:** Snapping 2 State  
**Well:** #5H  
**Wellbore:** OH  
**Design:** Plan 1

**Local Co-ordinate Reference:** Well #5H  
**TVD Reference:** WELL @ 3291.70usft (Original Well Elev)  
**MD Reference:** WELL @ 3291.70usft (Original Well Elev)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 5000.1 Single User Db

|                      |                           |
|----------------------|---------------------------|
| <b>Project</b>       | Eddy County               |
| <b>Map System:</b>   | US State Plane 1983       |
| <b>Geo Datum:</b>    | North American Datum 1983 |
| <b>Map Zone:</b>     | New Mexico Eastern Zone   |
| <b>System Datum:</b> | Mean Sea Level            |

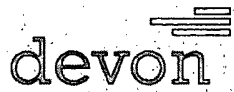
|                       |                  |              |                  |                   |                   |
|-----------------------|------------------|--------------|------------------|-------------------|-------------------|
| Site                  | Snapping 2 State |              |                  |                   |                   |
| Site Position:        |                  | Northing:    | 388,152.190 usft | Latitude:         | 32° 3' 56.850 N   |
| From:                 | Map              | Easting:     | 720,418.150 usft | Longitude:        | 103° 45' 18.802 W |
| Position Uncertainty: | 0.00 usft        | Slot Radius: | 13-3/16 "        | Grid Convergence: | 0.31 °            |

|                      |       |           |                     |                  |               |                   |
|----------------------|-------|-----------|---------------------|------------------|---------------|-------------------|
| Well                 |       | #5H       |                     |                  |               |                   |
| Well Position        | +N/-S | 0.00 usft | Northing:           | 388,170.930 usft | Latitude:     | 32° 3' 56.829 N   |
|                      | +E/-W | 0.00 usft | Easting:            | 724,260.380 usft | Longitude:    | 103° 44' 34.150 W |
| Position Uncertainty |       | 0.00 usft | Wellhead Elevation: | usft             | Ground Level: | 3,265.70 usft     |

|           |            |             |                    |                  |                        |
|-----------|------------|-------------|--------------------|------------------|------------------------|
| Wellbore  | OH         |             |                    |                  |                        |
| Magnetics | Model Name | Sample Date | Declination<br>(°) | Dip Angle<br>(°) | Field Strength<br>(nT) |
|           | IGRF200510 | 5/13/2011   | 7.65               | 60.03            | 48,549                 |

|                   |                  |           |               |           |
|-------------------|------------------|-----------|---------------|-----------|
| Design            | Plan 1           |           |               |           |
| Audit Notes:      |                  |           |               |           |
| Version:          | Phase:           | PROTOTYPE | Tie On Depth: | 0.00      |
| Vertical Section: | Depth From (TVD) | +N/-S     | +E/-W         | Direction |
|                   | (usft)           | (usft)    | (usft)        | (°)       |
|                   | 0.00             | 0.00      | 0.00          | 357.28    |

|                            |                  |                          |
|----------------------------|------------------|--------------------------|
| <b>Survey Tool Program</b> | <b>Date</b>      | 5/13/2011                |
| <b>From</b>                | <b>To</b>        |                          |
| (usft)                     | (usft)           | <b>Survey (Wellbore)</b> |
| 0.00                       | 13,525.49        | Plan 1 (OH)              |
|                            | <b>Tool Name</b> | <b>Description</b>       |
|                            | Pathfinder       | Pathfinder MWD           |



Pathfinder  
Pathfinder X&Y Report



Company: Devon Energy, Inc.  
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Site: Snapping 2 State  
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Wellbore: OH  
Design: Plan 1

Local Co-ordinate Reference: Well #5H  
TVD Reference: WELL @ 3291.70usft (Original Well Elev)  
MD Reference: WELL @ 3291.70usft (Original Well Elev)  
North Reference: Grid  
Survey Calculation Method: Minimum Curvature  
Database: EDM 5000.1 Single User Db

Planned Survey

| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | DLeg<br>(°/100usft) | Northing<br>(usft) | Easting<br>(usft) |
|--------------|------------|----------------------|---------------|-----------------|---------------|---------------|------------------|---------------------|--------------------|-------------------|
| 0.00         | 0.00       | 0.00                 | 0.00          | -3,291.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 100.00       | 0.00       | 0.00                 | 100.00        | -3,191.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 200.00       | 0.00       | 0.00                 | 200.00        | -3,091.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 300.00       | 0.00       | 0.00                 | 300.00        | -2,991.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 400.00       | 0.00       | 0.00                 | 400.00        | -2,891.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 500.00       | 0.00       | 0.00                 | 500.00        | -2,791.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 600.00       | 0.00       | 0.00                 | 600.00        | -2,691.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 700.00       | 0.00       | 0.00                 | 700.00        | -2,591.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 800.00       | 0.00       | 0.00                 | 800.00        | -2,491.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 900.00       | 0.00       | 0.00                 | 900.00        | -2,391.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 1,000.00     | 0.00       | 0.00                 | 1,000.00      | -2,291.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 1,100.00     | 0.00       | 0.00                 | 1,100.00      | -2,191.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 1,200.00     | 0.00       | 0.00                 | 1,200.00      | -2,091.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 1,300.00     | 0.00       | 0.00                 | 1,300.00      | -1,991.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 1,400.00     | 0.00       | 0.00                 | 1,400.00      | -1,891.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 1,500.00     | 0.00       | 0.00                 | 1,500.00      | -1,791.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 1,600.00     | 0.00       | 0.00                 | 1,600.00      | -1,691.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 1,700.00     | 0.00       | 0.00                 | 1,700.00      | -1,591.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 1,800.00     | 0.00       | 0.00                 | 1,800.00      | -1,491.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 1,900.00     | 0.00       | 0.00                 | 1,900.00      | -1,391.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 2,000.00     | 0.00       | 0.00                 | 2,000.00      | -1,291.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 2,100.00     | 0.00       | 0.00                 | 2,100.00      | -1,191.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 2,200.00     | 0.00       | 0.00                 | 2,200.00      | -1,091.70       | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 2,300.00     | 0.00       | 0.00                 | 2,300.00      | -991.70         | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 2,400.00     | 0.00       | 0.00                 | 2,400.00      | -891.70         | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 2,500.00     | 0.00       | 0.00                 | 2,500.00      | -791.70         | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 2,600.00     | 0.00       | 0.00                 | 2,600.00      | -691.70         | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |



Pathfinder  
Pathfinder X&Y Report



Company: Devon Energy, Inc.  
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Site: Snapping 2 State  
Well: #5H  
Wellbore: OH  
Design: Plan 1

Local Co-ordinate Reference:  
TVD Reference:  
MD Reference:  
North Reference:  
Survey Calculation Method:  
Database:

Well #5H  
WELL @ 3291.70usft (Original Well Elev)  
WELL @ 3291.70usft (Original Well Elev)  
Grid  
Minimum Curvature  
EDM 5000.1 Single User Db

Planned Survey

| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | DLeg<br>(°/100usft) | Northing<br>(usft) | Easting<br>(usft) |
|--------------|------------|----------------------|---------------|-----------------|---------------|---------------|------------------|---------------------|--------------------|-------------------|
| 2,700.00     | 0.00       | 0.00                 | 2,700.00      | -591.70         | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 2,800.00     | 0.00       | 0.00                 | 2,800.00      | -491.70         | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 2,900.00     | 0.00       | 0.00                 | 2,900.00      | -391.70         | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 3,000.00     | 0.00       | 0.00                 | 3,000.00      | -291.70         | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 3,100.00     | 0.00       | 0.00                 | 3,100.00      | -191.70         | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 3,200.00     | 0.00       | 0.00                 | 3,200.00      | -91.70          | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 3,300.00     | 0.00       | 0.00                 | 3,300.00      | 8.30            | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 3,400.00     | 0.00       | 0.00                 | 3,400.00      | 108.30          | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 3,500.00     | 0.00       | 0.00                 | 3,500.00      | 208.30          | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 3,600.00     | 0.00       | 0.00                 | 3,600.00      | 308.30          | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 3,700.00     | 0.00       | 0.00                 | 3,700.00      | 408.30          | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 3,800.00     | 0.00       | 0.00                 | 3,800.00      | 508.30          | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 3,900.00     | 0.00       | 0.00                 | 3,900.00      | 608.30          | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 4,000.00     | 0.00       | 0.00                 | 4,000.00      | 708.30          | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 4,100.00     | 0.00       | 0.00                 | 4,100.00      | 808.30          | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 4,200.00     | 0.00       | 0.00                 | 4,200.00      | 908.30          | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 4,300.00     | 0.00       | 0.00                 | 4,300.00      | 1,008.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 4,400.00     | 0.00       | 0.00                 | 4,400.00      | 1,108.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 4,500.00     | 0.00       | 0.00                 | 4,500.00      | 1,208.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 4,600.00     | 0.00       | 0.00                 | 4,600.00      | 1,308.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 4,700.00     | 0.00       | 0.00                 | 4,700.00      | 1,408.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 4,800.00     | 0.00       | 0.00                 | 4,800.00      | 1,508.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 4,900.00     | 0.00       | 0.00                 | 4,900.00      | 1,608.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 5,000.00     | 0.00       | 0.00                 | 5,000.00      | 1,708.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 5,100.00     | 0.00       | 0.00                 | 5,100.00      | 1,808.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 5,200.00     | 0.00       | 0.00                 | 5,200.00      | 1,908.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 5,300.00     | 0.00       | 0.00                 | 5,300.00      | 2,008.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |



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WELL @ 3291.70usft (Original Well Elev)  
WELL @ 3291.70usft (Original Well Elev)  
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Minimum Curvature  
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Planned Survey

| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | DLeg<br>(°/100usft) | Northing<br>(usft) | Easting<br>(usft) |
|--------------|------------|----------------------|---------------|-----------------|---------------|---------------|------------------|---------------------|--------------------|-------------------|
| 5,400.00     | 0.00       | 0.00                 | 5,400.00      | 2,108.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 5,500.00     | 0.00       | 0.00                 | 5,500.00      | 2,208.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 5,600.00     | 0.00       | 0.00                 | 5,600.00      | 2,308.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 5,700.00     | 0.00       | 0.00                 | 5,700.00      | 2,408.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 5,800.00     | 0.00       | 0.00                 | 5,800.00      | 2,508.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 5,900.00     | 0.00       | 0.00                 | 5,900.00      | 2,608.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 6,000.00     | 0.00       | 0.00                 | 6,000.00      | 2,708.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 6,100.00     | 0.00       | 0.00                 | 6,100.00      | 2,808.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 6,200.00     | 0.00       | 0.00                 | 6,200.00      | 2,908.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 6,300.00     | 0.00       | 0.00                 | 6,300.00      | 3,008.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 6,400.00     | 0.00       | 0.00                 | 6,400.00      | 3,108.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 6,500.00     | 0.00       | 0.00                 | 6,500.00      | 3,208.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 6,600.00     | 0.00       | 0.00                 | 6,600.00      | 3,308.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 6,700.00     | 0.00       | 0.00                 | 6,700.00      | 3,408.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 6,800.00     | 0.00       | 0.00                 | 6,800.00      | 3,508.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 6,900.00     | 0.00       | 0.00                 | 6,900.00      | 3,608.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 7,000.00     | 0.00       | 0.00                 | 7,000.00      | 3,708.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 7,100.00     | 0.00       | 0.00                 | 7,100.00      | 3,808.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 7,200.00     | 0.00       | 0.00                 | 7,200.00      | 3,908.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 7,300.00     | 0.00       | 0.00                 | 7,300.00      | 4,008.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 7,400.00     | 0.00       | 0.00                 | 7,400.00      | 4,108.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 7,500.00     | 0.00       | 0.00                 | 7,500.00      | 4,208.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 7,600.00     | 0.00       | 0.00                 | 7,600.00      | 4,308.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 7,700.00     | 0.00       | 0.00                 | 7,700.00      | 4,408.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 7,800.00     | 0.00       | 0.00                 | 7,800.00      | 4,508.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 7,900.00     | 0.00       | 0.00                 | 7,900.00      | 4,608.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 8,000.00     | 0.00       | 0.00                 | 8,000.00      | 4,708.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |



# Pathfinder Pathfinder X&Y Report



Company: Devon Energy, Inc.  
Project: Eddy County  
Site: Snapping 2 State  
Well: #5H  
Wellbore: OH  
Design: Plan 1

Local Co-ordinate Reference: Well #5H  
TVD Reference: WELL @ 3291.70usft (Original Well Elev)  
MD Reference: WELL @ 3291.70usft (Original Well Elev)  
North Reference: Grid  
Survey Calculation Method: Minimum Curvature  
Database: EDM 5000.1 Single User Db

## Planned Survey

| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | DLeg<br>(°/100usft) | Northing<br>(usft) | Easting<br>(usft) |
|--------------|------------|----------------------|---------------|-----------------|---------------|---------------|------------------|---------------------|--------------------|-------------------|
| 8,100.00     | 0.00       | 0.00                 | 8,100.00      | 4,808.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 8,200.00     | 0.00       | 0.00                 | 8,200.00      | 4,908.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 8,300.00     | 0.00       | 0.00                 | 8,300.00      | 5,008.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 8,400.00     | 0.00       | 0.00                 | 8,400.00      | 5,108.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 8,437.00     | 0.00       | 0.00                 | 8,437.00      | 5,145.30        | 0.00          | 0.00          | 0.00             | 0.00                | 388,170.93         | 724,260.38        |
| 8,450.00     | 1.30       | 304.84               | 8,450.00      | 5,158.30        | 0.08          | -0.12         | 0.09             | 10.00               | 388,171.01         | 724,260.26        |
| 8,500.00     | 6.30       | 304.84               | 8,499.87      | 5,208.17        | 1.98          | -2.84         | 2.11             | 10.00               | 388,172.91         | 724,257.54        |
| 8,550.00     | 11.30      | 304.84               | 8,549.27      | 5,257.57        | 6.35          | -9.12         | 6.77             | 10.00               | 388,177.28         | 724,251.26        |
| 8,600.00     | 16.30      | 304.84               | 8,597.81      | 5,306.11        | 13.16         | -18.90        | 14.04            | 10.00               | 388,184.09         | 724,241.48        |
| 8,650.00     | 21.30      | 304.84               | 8,645.13      | 5,353.43        | 22.36         | -32.12        | 23.86            | 10.00               | 388,193.29         | 724,228.26        |
| 8,700.00     | 26.30      | 304.84               | 8,690.86      | 5,399.16        | 33.88         | -48.68        | 36.15            | 10.00               | 388,204.81         | 724,211.70        |
| 8,714.74     | 27.77      | 304.84               | 8,703.99      | 5,412.29        | 37.71         | -54.18        | 40.24            | 10.00               | 388,208.64         | 724,206.20        |
| 8,714.85     | 27.77      | 304.84               | 8,704.08      | 5,412.38        | 37.74         | -54.22        | 40.27            | 0.00                | 388,208.67         | 724,206.16        |
| 8,750.00     | 29.76      | 310.88               | 8,734.90      | 5,443.20        | 48.13         | -67.54        | 51.28            | 10.00               | 388,219.06         | 724,192.84        |
| 8,800.00     | 32.98      | 318.23               | 8,777.61      | 5,485.91        | 66.41         | -86.00        | 70.42            | 10.00               | 388,237.34         | 724,174.38        |
| 8,850.00     | 36.57      | 324.35               | 8,818.68      | 5,526.98        | 88.68         | -103.75       | 93.50            | 10.00               | 388,259.61         | 724,156.63        |
| 8,900.00     | 40.41      | 329.49               | 8,857.82      | 5,566.12        | 114.76        | -120.67       | 120.36           | 10.00               | 388,285.69         | 724,139.71        |
| 8,950.00     | 44.45      | 333.86               | 8,894.73      | 5,603.03        | 144.46        | -136.62       | 150.78           | 10.00               | 388,315.39         | 724,123.76        |
| 9,000.00     | 48.64      | 337.63               | 8,929.11      | 5,637.41        | 177.55        | -151.49       | 184.54           | 10.00               | 388,348.48         | 724,108.89        |
| 9,050.00     | 52.93      | 340.94               | 8,960.72      | 5,669.02        | 213.78        | -165.15       | 221.38           | 10.00               | 388,384.71         | 724,095.23        |
| 9,100.00     | 57.31      | 343.89               | 8,989.31      | 5,697.61        | 252.88        | -177.51       | 261.01           | 10.00               | 388,423.81         | 724,082.87        |
| 9,150.00     | 61.75      | 346.57               | 9,014.67      | 5,722.97        | 294.54        | -188.47       | 303.14           | 10.00               | 388,465.47         | 724,071.91        |
| 9,200.00     | 66.23      | 349.03               | 9,036.59      | 5,744.89        | 338.45        | -197.94       | 347.45           | 10.00               | 388,509.38         | 724,062.44        |
| 9,250.00     | 70.75      | 351.32               | 9,054.92      | 5,763.22        | 384.27        | -205.87       | 393.60           | 10.00               | 388,555.20         | 724,054.51        |
| 9,300.00     | 75.30      | 353.49               | 9,069.51      | 5,777.81        | 431.66        | -212.17       | 441.23           | 10.00               | 388,602.59         | 724,048.21        |
| 9,350.00     | 79.87      | 355.57               | 9,080.26      | 5,788.56        | 480.25        | -216.82       | 489.99           | 10.00               | 388,651.18         | 724,043.56        |
| 9,400.00     | 84.45      | 357.59               | 9,087.08      | 5,795.38        | 529.68        | -219.77       | 539.50           | 10.00               | 388,700.61         | 724,040.61        |



Pathfinder  
Pathfinder X&Y Report



Company: Devon Energy, Inc.  
Project: Eddy County  
Site: Snapping 2 State  
Well: #5H  
Wellbore: OH  
Design: Plan 1

Local Co-ordinate Reference:  
TVD Reference:  
MD Reference:  
North Reference:  
Survey Calculation Method:  
Database:

Well #5H  
WELL @ 3291.70usft (Original Well Elev)  
WELL @ 3291.70usft (Original Well Elev)  
Grid  
Minimum Curvature  
EDM 5000.1 Single User Db

Planned Survey

| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | DLeg<br>(°/100usft) | Northing<br>(usft) | Easting<br>(usft) |
|--------------|------------|----------------------|---------------|-----------------|---------------|---------------|------------------|---------------------|--------------------|-------------------|
| 9,450.00     | 89.04      | 359.59               | 9,089.91      | 5,798.21        | 579.57        | -220.99       | 589.40           | 10.00               | 388,750.50         | 724,039.39        |
| 9,460.45     | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 590.02        | -221.03       | 599.84           | 10.00               | 388,760.95         | 724,039.35        |
| 9,500.00     | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 629.57        | -221.03       | 639.34           | 0.00                | 388,800.50         | 724,039.35        |
| 9,600.00     | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 729.57        | -221.03       | 739.23           | 0.00                | 388,900.50         | 724,039.35        |
| 9,700.00     | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 829.57        | -221.03       | 839.12           | 0.00                | 389,000.50         | 724,039.35        |
| 9,800.00     | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 929.57        | -221.03       | 939.00           | 0.00                | 389,100.50         | 724,039.35        |
| 9,900.00     | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 1,029.57      | -221.03       | 1,038.89         | 0.00                | 389,200.50         | 724,039.35        |
| 10,000.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 1,129.57      | -221.03       | 1,138.78         | 0.00                | 389,300.50         | 724,039.35        |
| 10,100.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 1,229.57      | -221.03       | 1,238.67         | 0.00                | 389,400.50         | 724,039.35        |
| 10,200.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 1,329.57      | -221.03       | 1,338.55         | 0.00                | 389,500.50         | 724,039.35        |
| 10,300.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 1,429.57      | -221.03       | 1,438.44         | 0.00                | 389,600.50         | 724,039.35        |
| 10,400.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 1,529.57      | -221.03       | 1,538.33         | 0.00                | 389,700.50         | 724,039.35        |
| 10,500.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 1,629.57      | -221.03       | 1,638.22         | 0.00                | 389,800.50         | 724,039.35        |
| 10,600.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 1,729.57      | -221.03       | 1,738.10         | 0.00                | 389,900.50         | 724,039.35        |
| 10,700.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 1,829.57      | -221.03       | 1,837.99         | 0.00                | 390,000.50         | 724,039.35        |
| 10,800.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 1,929.57      | -221.03       | 1,937.88         | 0.00                | 390,100.50         | 724,039.35        |
| 10,900.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 2,029.57      | -221.03       | 2,037.77         | 0.00                | 390,200.50         | 724,039.35        |
| 11,000.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 2,129.57      | -221.03       | 2,137.65         | 0.00                | 390,300.50         | 724,039.35        |
| 11,100.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 2,229.57      | -221.03       | 2,237.54         | 0.00                | 390,400.50         | 724,039.35        |
| 11,200.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 2,329.57      | -221.03       | 2,337.43         | 0.00                | 390,500.50         | 724,039.35        |
| 11,300.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 2,429.57      | -221.03       | 2,437.32         | 0.00                | 390,600.50         | 724,039.35        |
| 11,400.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 2,529.57      | -221.03       | 2,537.20         | 0.00                | 390,700.50         | 724,039.35        |
| 11,500.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 2,629.57      | -221.03       | 2,637.09         | 0.00                | 390,800.50         | 724,039.35        |
| 11,600.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 2,729.57      | -221.03       | 2,736.98         | 0.00                | 390,900.50         | 724,039.35        |
| 11,700.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 2,829.57      | -221.03       | 2,836.87         | 0.00                | 391,000.50         | 724,039.35        |
| 11,800.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 2,929.57      | -221.03       | 2,936.75         | 0.00                | 391,100.50         | 724,039.35        |
| 11,900.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 3,029.57      | -221.03       | 3,036.64         | 0.00                | 391,200.50         | 724,039.35        |





Pathfinder  
Pathfinder X&Y Report



Company: Devon Energy, Inc.  
Project: Eddy County  
Site: Snapping 2 State  
Well: #5H  
Wellbore: OH  
Design: Plan 1

Local Co-ordinate Reference: Well #5H  
TVD Reference: WELL @ 3291.70usft (Original Well Elev)  
MD Reference: WELL @ 3291.70usft (Original Well Elev)  
North Reference: Grid  
Survey Calculation Method: Minimum Curvature  
Database: EDM 5000.1 Single User Db

Planned Survey

| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | DLeg<br>(°/100usft) | Northing<br>(usft) | Easting<br>(usft) |
|--------------|------------|----------------------|---------------|-----------------|---------------|---------------|------------------|---------------------|--------------------|-------------------|
| 12,000.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 3,129.57      | -221.03       | 3,136.53         | 0.00                | 391,300.50         | 724,039.35        |
| 12,100.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 3,229.57      | -221.03       | 3,236.42         | 0.00                | 391,400.50         | 724,039.35        |
| 12,200.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 3,329.57      | -221.03       | 3,336.30         | 0.00                | 391,500.50         | 724,039.35        |
| 12,300.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 3,429.57      | -221.03       | 3,436.19         | 0.00                | 391,600.50         | 724,039.35        |
| 12,400.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 3,529.57      | -221.03       | 3,536.08         | 0.00                | 391,700.50         | 724,039.35        |
| 12,500.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 3,629.57      | -221.03       | 3,635.97         | 0.00                | 391,800.50         | 724,039.35        |
| 12,600.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 3,729.57      | -221.03       | 3,735.85         | 0.00                | 391,900.50         | 724,039.35        |
| 12,700.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 3,829.57      | -221.03       | 3,835.74         | 0.00                | 392,000.50         | 724,039.35        |
| 12,800.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 3,929.57      | -221.03       | 3,935.63         | 0.00                | 392,100.50         | 724,039.35        |
| 12,900.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 4,029.57      | -221.03       | 4,035.52         | 0.00                | 392,200.50         | 724,039.35        |
| 13,000.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 4,129.57      | -221.03       | 4,135.40         | 0.00                | 392,300.50         | 724,039.35        |
| 13,100.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 4,229.57      | -221.03       | 4,235.29         | 0.00                | 392,400.50         | 724,039.35        |
| 13,200.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 4,329.57      | -221.03       | 4,335.18         | 0.00                | 392,500.50         | 724,039.35        |
| 13,300.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 4,429.57      | -221.03       | 4,435.07         | 0.00                | 392,600.50         | 724,039.35        |
| 13,400.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 4,529.57      | -221.03       | 4,534.95         | 0.00                | 392,700.50         | 724,039.35        |
| 13,500.00    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 4,629.57      | -221.03       | 4,634.84         | 0.00                | 392,800.50         | 724,039.35        |
| 13,526.45    | 90.00      | 0.00                 | 9,090.00      | 5,798.30        | 4,656.02      | -221.03       | 4,661.26         | 0.00                | 392,826.95         | 724,039.35        |

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

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Job : 164  
 Date: 5/25/2011  
 Time: 7:40:55 AM