

HOBBS OCD

Form 3160-3  
(March 2012)

APR 22 2013

FORM APPROVED  
OMB No. 1004-0137  
Expires October 31, 2014

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD Hobbs  
RECEIVED

APPLICATION FOR PERMIT TO DRILL OR REENTER

|                                                                                                                                                                                                                        |                                                |                                                                                                                |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|----------------------------------------------------------------------------------------------------------------|--|
| 1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER                                                                                                                           |                                                | 5. Lease Serial No.<br>LC-069276                                                                               |  |
| 1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone |                                                | 6. If Indian, Allottee or Tribe Name                                                                           |  |
| 2. Name of Operator DEVON ENERGY PRODUCTION COMPANY, L.P.                                                                                                                                                              |                                                | 7. If Unit or CA Agreement, Name and No.                                                                       |  |
| 3a. Address 333 W. SHERIDAN<br>OKLAHOMA CITY, OK. 73102                                                                                                                                                                |                                                | 8. Lease Name and Well No.<br>EISCHENS 29 FED 2H <38986>                                                       |  |
| 3b. Phone No. (include area code)<br>(405) 552-4524                                                                                                                                                                    |                                                | 9. API Well No.<br>30-025-41128                                                                                |  |
| 4. Location of Well (Report location clearly and in accordance with any State requirements *)<br>At surface 330 FSL & 1540 FWL<br>At proposed prod. zone 330 FNL & 1815 FWL                                            |                                                | 10. Field and Pool, or Exploratory<br>CORBIN; BONE SPRING, SOUTH <13160>                                       |  |
| 11. Sec., T. R. M. or Blk. and Survey or Area<br>SECTION 29, T. 18 S., R. 33 E.                                                                                                                                        |                                                | 12. County or Parish<br>LEA                                                                                    |  |
| 13. State<br>NM                                                                                                                                                                                                        |                                                | 14. Distance in miles and direction from nearest town or post office*<br>10.5 MILES SOUTHEAST OF MALJAMAR, NM. |  |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)<br>330'                                                                                          | 16. No. of acres in lease<br>2440 2470.16      | 17. Spacing Unit dedicated to this well<br>160                                                                 |  |
| 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.<br>1042' (BHL)<br>585' (SHL)                                                                                | 19. Proposed Depth<br>MD: 13082'<br>TVD: 8640' | 20. BLM/BIA Bond No. on file<br>NMB-000801 CO-1104                                                             |  |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.)<br>3757.9' GL                                                                                                                                                      | 22. Approximate date work will start*          | 23. Estimated duration<br>30 DAYS                                                                              |  |

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must be attached to this form:

- |                                                                                                                                                |                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| 1. Well plat certified by a registered surveyor.                                                                                               | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan.                                                                                                                            | 5. Operator certification                                                                       |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM.             |

|                                                                 |                                       |                     |
|-----------------------------------------------------------------|---------------------------------------|---------------------|
| 25. Signature                                                   | Name (Printed/Typed)<br>BARRY W. HUNT | Date<br>7/31/12     |
| Title<br>PERMIT AGENT FOR DEVON ENERGY PRODUCTION COMPANY, L.P. |                                       |                     |
| Approved by (Signature)                                         | Name (Printed/Typed) James A. Amos    | Date<br>APR 18 2013 |
| Title<br>FIELD MANAGER                                          | Office<br>CARLSBAD FIELD OFFICE       |                     |

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

APPROVAL FOR TWO YEARS

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

(Continued on page 2)

\*(Instructions on page 2)

Capitan Controlled Water Basin

Ka  
04/23/13

Approval Subject to General Requirements  
& Special Stipulations Attached

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

APR 5 2013

DEVON ENERGY PRODUCTION, L. P.  
DRILLING PLAN

EISCHENS 29 FED 2H  
SHL: 330 FSL & 1540 FWL  
BHL: 330 FNL & 1815 FWL  
Section 29, T. 18 S., R. 33 E.  
LEA County, NM

The elevation of the unprepared ground is 3757.9 feet above sea level.

The geologic name of the surface formation is Quaternary - Alluvium.

A rotary rig will be utilized to drill the well.

Proposed total depth is: MD: 13082'. TVD: 8640'.

Estimated tops of important geologic markers:

|                       |                      |
|-----------------------|----------------------|
| Quaternary – Alluvium | Surface*             |
| Rustler               | 1404'                |
| Salado/ Top of Salt   | 1553'                |
| Base of Salt          | 2767'                |
| Tansill               | 2799'                |
| Yates                 | 2940'                |
| Seven Rivers          | 3474'                |
| Queen                 | 4155'                |
| Cherry Canyon         | 5145'                |
| Brushy Canyon         | 5923'                |
| Bone Spring           | 7315'                |
| TVD                   | 8640' (145 degree F) |

\*Water anticipated at 200 feet.

Estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered:

|               |                  |
|---------------|------------------|
| Yates         | Oil (1294 psi)   |
| Seven Rivers  | Oil (1529 psi)   |
| Queen         | Oil (1828 psi)   |
| Cherry Canyon | Oil (2264 psi)   |
| Brushy Canyon | Oil (2606 psi)   |
| Bone Spring   | Oil (3219 psi)   |
| TVD           | Oil BHP 3802 psi |

Drilling Program / Surface Use Plan  
Discipline-Specific Input Form

**Eischens 29 Fed 2H Drilling Plan**

**1. Casing and Cementing Plan Summary**

The surface fresh water sands will be protected by setting 13.375" casing at 1,430' and circulating cement back to surface. The fresh water sands will be protected by setting 9.625" casing at 5,250' and circulating cement to surface. The Delaware intervals will be isolated by setting 5-1/2" casing to total depth of 13,082' and circulating cement above the base of the 9-5/8" casing. All casing is new and API approved.

**2. Casing Program: (All new casing)**

| Hole Size | Hole Interval    | Casing OD | Casing Interval  | Weight | Collar | Grade   |
|-----------|------------------|-----------|------------------|--------|--------|---------|
| 17.5"     | 0 - 1,430'       | 13.375"   | 0 - 1,430'       | 54.5#  | STC    | J-55    |
| 12.25"    | 1,430' - 5,250'  | 9.625"    | 0 - 5,250'       | 40#    | BTC    | HCK-55  |
| 8.75"     | 5,250' - 8,000'  | 5.5"      | 0 - 8,000'       | 17#    | LTC    | P-110HC |
| 8.75"     | 8,000' - 13,082' | 5.5"      | 8,000' - 13,082' | 17#    | BTC    | P-110HC |

**3. Design Factors:**

| Casing Size | Collapse Design Factor | Burst Design Factor | Tension Design Factor |
|-------------|------------------------|---------------------|-----------------------|
| 13.375"     | 1.72                   | 4.17                | 12.69                 |
| 9.625"      | 1.56                   | 1.45                | 4.41                  |
| 5.5" LTC    | 2.26                   | 2.80                | 2.00                  |
| 5.5" BTC    | 2.12                   | 2.63                | 6.74                  |

**4. Cementing Program (cement volumes based on at least 25% excess)**

**13-3/8" Surface**

**Lead:** 875 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Poly-E-Flake + 4% bwoc Bentonite + 70.1% Fresh Water, 13.5 ppg

**Yield:** 1.75 cf/sk

**TOC @ surface**

**Tail:** 335 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Poly-E-Flake + 63.1% Fresh Water, 14.8 ppg

**Yield:** 1.35 cf/sk

**9-5/8" Intermediate**

**Lead:** 1120 sacks (65:35) Class C Cement:Poz (Fly Ash): + 5% bwow Sodium Chloride + 0.125 lbs/sack Poly-E-Flake + 6% bwoc Bentonite + 70.9% Fresh Water, 12.9 ppg

**Yield:** 1.85 cf/sk

**TOC @ surface**

**Tail:** 425 sacks Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Water, 14.8 ppg

**Yield:** 1.33 cf/sk

**5-1/2" Production**

**1<sup>st</sup> Stage**

**Lead:** 415 sacks (65:35) Class H Cement:Poz (Fly Ash) + 6% bwoc Bentonite + 0.2% bwoc HR-601 + 74.1% Fresh Water, 12.5 ppg

**Yield:** 1.95 cf/sk

Drilling Program / Surface Use Plan  
Discipline-Specific Input Form

**Tail:** 1290 sacks (50:50) Class H Cement:Poz (Fly Ash) + 1 lb/sk Sodium Chloride + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.1% bwoc HR-601 + 2% bwoc Bentonite + 58.8% Fresh Water, 14.5 ppg

**Yield:** 1.22 cf/sk

**DV TOOL at 6000 ft** *See COA*

**2<sup>nd</sup> Stage**

**Tail:** 325 sacks Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Fresh Water, 14.8 ppg

**Yield:** 1.33 cf/sk

**TOC @ 4700 ft**

**TOC for All Strings:**

Surface: 0  
Intermediate: 0  
Production: 4700 ft

ACTUAL CEMENT VOLUMES WILL BE ADJUSTED BASED ON FLUID CALIPER AND CALIPER LOG DATA.

**5. Pressure Control Equipment**

**BOP DESIGN:** The BOP system used to drill the intermediate and production holes will consist of a 13-5/8" 3M Triple Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a 3M system prior to drilling out the prior casing shoe.

The pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 3,000 psi WP.

*See COA*  
Devon requests a variance to use a flexible line with flanged ends between the BOP and the choke manifold (choke line). The line will be kept as straight as possible with minimal turns.

**6. Proposed Mud Circulation System:**

| Depth Range      | Mud Weight | Viscosity | Fluid Loss | Type System |
|------------------|------------|-----------|------------|-------------|
| 0 - 1,430'       | 8.4-9.0    | 28-34     | NC         | Fresh Water |
| 1,430' - 5,250'  | 9.8-10.2   | 28-32     | NC         | Brine       |
| 5,250' - 13,082' | 8.6-9.0    | 28-32     | NC-12      | Fresh Water |

The necessary mud products for weight addition and fluid loss control will be on location at all times.

**7. Auxiliary Well Control and Monitoring Equipment:**

- A Kelly cock will be in the drill string at all times.
- A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
- Hydrogen Sulfide detection equipment will be in operation after drilling out the 13.375" casing shoe until the 5.5" casing is cemented. Breathing equipment will be on location upon drilling the 13.375" shoe until total depth is reached.

*See COA*

Drilling Program / Surface Use Plan  
Discipline-Specific Input Form

**8. Potential Hazards:**

No abnormal pressures or temperatures are expected. There is no known presence of H<sub>2</sub>S in this area. If H<sub>2</sub>S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP of 3,802 psi and estimated BHT 145°. No H<sub>2</sub>S is anticipated to be encountered.

**9. Anticipated Starting Date and Duration of Operations:**

- a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon as a rig becomes available following BLM approval. Move in operations and drilling is expected to take 32 days. If production casing is run, then an additional 30 days will be needed to complete the well and construct surface facilities and/or lay flow lines in order to place well on production.

**10. Location and Types of Water Supply:**

This location will be drilled using a combination of water mud systems (outlined in the Drilling Program). The water will be obtained from commercial water stations in the area and hauled to location by transport truck using the existing and proposed roads shown in the C-102. On occasion, water will be obtained from a pre-existing water well, running a pump directly to the drill rig. In these cases where a poly pipeline is used to transport water for drilling purposes, proper authorizations will be secured. If a poly pipeline is used, the size, distance, and map showing route will be provided to the BLM via sundry notice.

**11. Methods of Handling Waste Material:**

- a. Drill cuttings will be disposed of in a closed loop system.
- b. All trash, junk and other waste material will be contained in trash cages or trash bins to prevent scattering. When the job is completed all contents will be removed and disposed of in an approved sanitary landfill.
- c. The supplier will pick up salts remaining, including broken sacks, after completion of well.
- d. A Porto-john will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- e. Remaining drilling fluids will be sent to a closed loop system.
- f. Disposal of fluids to be transported by the following companies:
  - i. American Production Service Inc, Odessa TX
  - ii. Gandy Corporation, Lovington NM
  - iii. I & W Inc, Loco Hill NM
  - iv. Jims Water Service of Co Inc, Denver CO

**12. LOGGING, CORING, AND TESTING PROGRAM:**

- a. Drill stem tests will be based on geological sample shows.
- b. If a drill stem test is anticipated; a procedure, equipment to be used and safety measures will be provided via sundry notice to the BLM.
- c. The open hole electrical logging program will be:
  1. Total depth to intermediate casing Dual Laterolog-Micro Laterolog with SP and Gamma Ray.  
Compensated Neutron – Z Density log with Gamma Ray and Caliper.
  2. Total Depth to Surface Compensated Neutron with Gamma Ray.
  3. No coring program is planned.
  4. Additional testing will be initiated subsequent to setting the 5 ½" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.



PROJECT DETAILS: Lea County (NAD83)  
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: -0.35°  
Magnetic North: 7.20°

Magnetic Field  
Strength: 48790.2snT  
Dip Angle: 60.59°  
Date: 7/2/2012  
Model: IGRF2010

Project: Lea County (NAD83)  
Site: Elschens 29 Fed  
Well: #2H  
Wellbore: OH  
Plan: Plan 2 (#2H/OH)

#### WELL DETAILS: #2H

Ground Elevation: 3757.9  
RKB Elevation: KB = 19 @ 3776.9usft (McVay 8)  
Rig Name: McVay 8

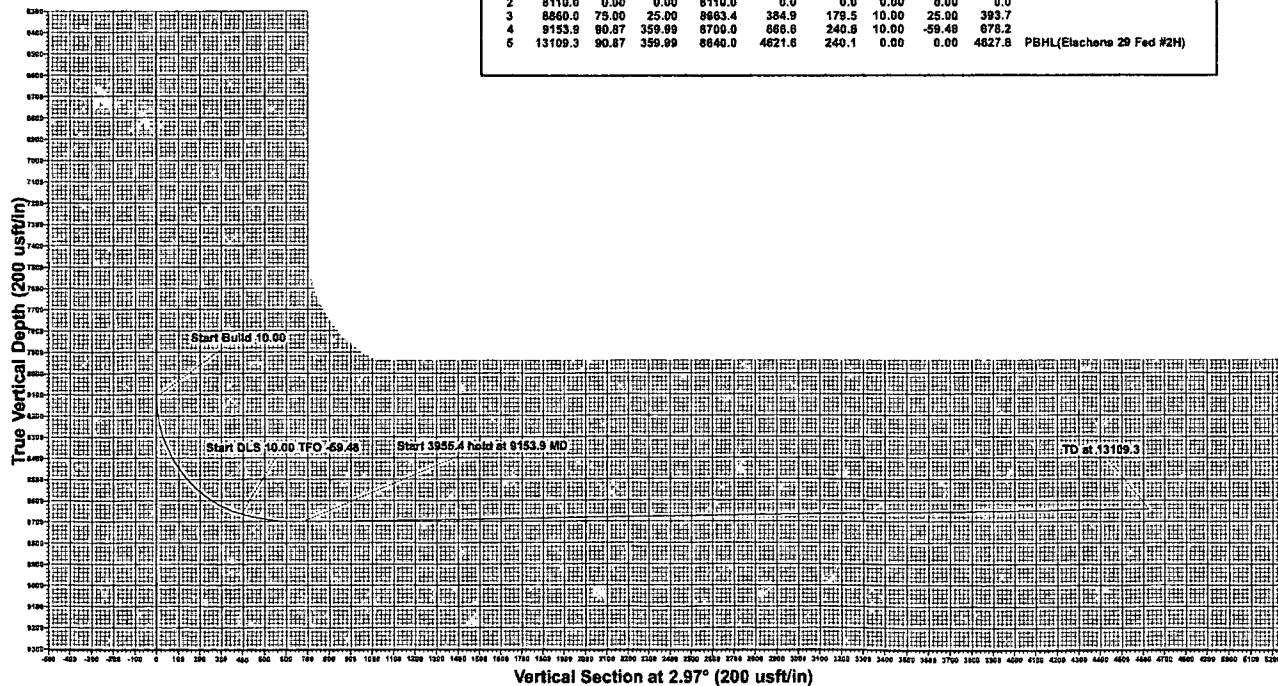
| +N-S | +E-W | Northing   | Easting    | Latitude  | Longitude   | Slot |
|------|------|------------|------------|-----------|-------------|------|
| 0.0  | 0.0  | 623395.500 | 739582.700 | 32.712099 | -103.538782 |      |

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

| Name                            | TVD    | +N-S  | +E-W       | Northing   | Easting | Shape |
|---------------------------------|--------|-------|------------|------------|---------|-------|
| PBHL(Elschens 29 Fed #2H)8640.0 | 4621.6 | 240.1 | 628017.100 | 739822.800 | Point   |       |

#### SECTION DETAILS

| Sec | MD      | Inc   | Azi    | TVD    | +N-S   | +E-W  | Diag  | TFace  | VSec   | Target                    |
|-----|---------|-------|--------|--------|--------|-------|-------|--------|--------|---------------------------|
| 1   | 0.0     | 0.00  | 0.00   | 0.0    | 0.0    | 0.00  | 0.00  | 0.00   | 0.0    |                           |
| 2   | 8110.0  | 0.00  | 0.00   | 8110.0 | 0.0    | 0.0   | 0.00  | 0.00   | 0.0    |                           |
| 3   | 8660.0  | 75.00 | 25.00  | 8663.4 | 384.9  | 178.5 | 10.00 | 25.00  | 393.7  |                           |
| 4   | 9153.9  | 90.87 | 359.99 | 8700.0 | 868.8  | 240.8 | 10.00 | -59.48 | 678.2  |                           |
| 5   | 13109.3 | 90.87 | 359.99 | 8640.0 | 4621.6 | 240.1 | 0.00  | 0.00   | 4827.8 | PBHL(Elschens 29 Fed #2H) |

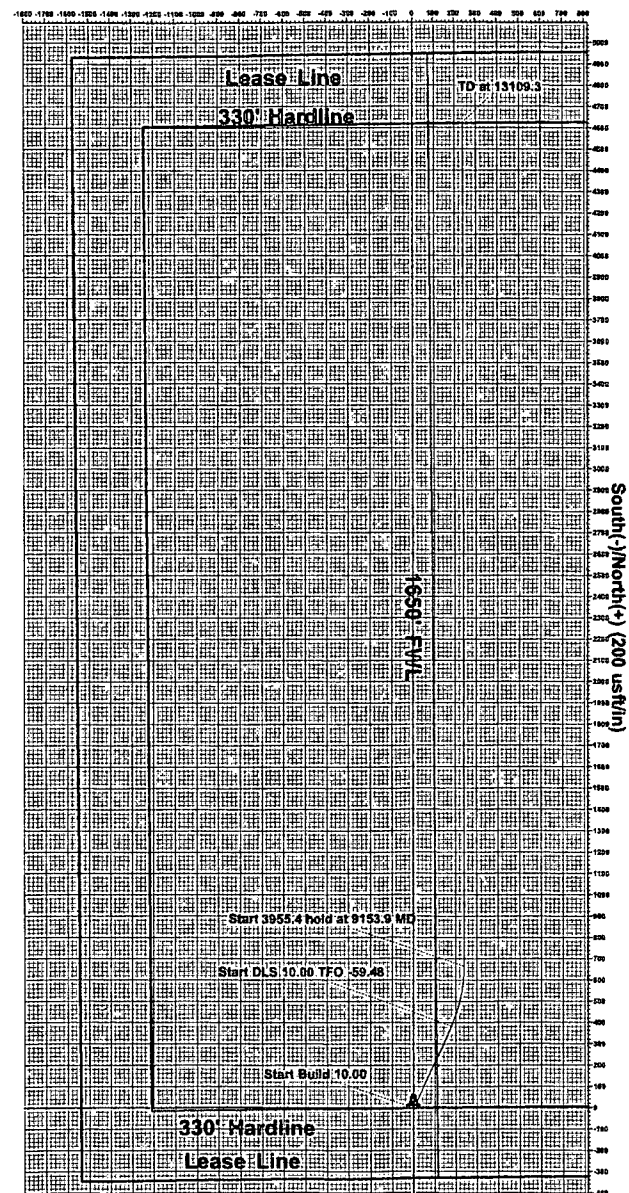


Vertical Section at 2.97° (200 usft/in)



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



Plan: Plan 2 (#2H/OH)

Created By: Sam Bliffle Date: 16:58, January 28 2013

Checked: \_\_\_\_\_ Date: \_\_\_\_\_

North Arrow  
Lea County (NAD83)  
Well: #2H  
Plan: 2



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## **Devon Energy, Inc.**

Lea County (NAD83)

Eischens 29 Fed

#2H

OH

Plan: Plan 2

## **Pathfinder X&Y Report**

28 January, 2013





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# Pathfinder

Pathfinder X&Y Report



|                  |                    |                                     |                                |
|------------------|--------------------|-------------------------------------|--------------------------------|
| <b>Company:</b>  | Devon Energy, Inc. | <b>Local Co-ordinate Reference:</b> | Well #2H                       |
| <b>Project:</b>  | Lea County (NAD83) | <b>TVD Reference:</b>               | KB = 19 @ 3776.9usft (McVay 8) |
| <b>Site:</b>     | Eischens 29 Fed    | <b>MD Reference:</b>                | KB = 19 @ 3776.9usft (McVay 8) |
| <b>Well:</b>     | #2H                | <b>North Reference:</b>             | Grid                           |
| <b>Wellbore:</b> | OH                 | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Design:</b>   | Plan 2             | <b>Database:</b>                    | EDM 5000.1 Single User Db      |

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <b>Project:</b>    | Lea County (NAD83)        | <b>System Datum:</b> | Mean Sea Level |
| <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>Site:</b>                 | Eischens 29 Fed |                          |                  |
| <b>Site Position:</b>        |                 | <b>Northing:</b>         | 623,395.500 usft |
| <b>From:</b>                 | Map             | <b>Easting:</b>          | 739,582.700 usft |
| <b>Position Uncertainty:</b> | 0.0 usft        | <b>Slot Radius:</b>      | 13-3/16 "        |
|                              |                 | <b>Latitude:</b>         | 32.712099        |
|                              |                 | <b>Longitude:</b>        | -103.688782      |
|                              |                 | <b>Grid Convergence:</b> | 0.35 °           |

|                      |       |          |                     |                  |               |              |
|----------------------|-------|----------|---------------------|------------------|---------------|--------------|
| Well                 |       | #2H      |                     |                  |               |              |
| Well Position        | +N/-S | 0.0 usft | Northing:           | 623,395.500 usft | Latitude:     | 32.712099    |
|                      | +E/-W | 0.0 usft | Easting:            | 739,582.700 usft | Longitude:    | -103.688782  |
| Position Uncertainty |       | 0.0 usft | Wellhead Elevation: | usft             | Ground Level: | 3,757.9 usft |

|           |            |             |                    |                  |                        |
|-----------|------------|-------------|--------------------|------------------|------------------------|
| Wellbore  | OH         |             |                    |                  |                        |
| Magnetics | Model Name | Sample Date | Declination<br>(°) | Dip Angle<br>(°) | Field Strength<br>(nT) |
|           | IGRF2010   | 7/2/2012    | 7.55               | 60.59            | 48,790                 |

|                   |                            |                 |                 |                  |
|-------------------|----------------------------|-----------------|-----------------|------------------|
| Design            |                            | Plan 2          |                 |                  |
| Audit Notes:      |                            |                 |                 |                  |
| Version:          | Phase:                     | PLAN            | Tie On Depth:   | 0.0              |
| Vertical Section: | Depth From (TVD)<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Direction<br>(°) |
|                   | 0.0                        | 0.0             | 0.0             | 2.97             |

|                            |           |                          |                  |                    |
|----------------------------|-----------|--------------------------|------------------|--------------------|
| <b>Survey Tool Program</b> | Date      | 1/28/2013                |                  |                    |
| <b>From</b>                | <b>To</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Description</b> |
| (usft)                     | (usft)    |                          |                  |                    |
| 0.0                        | 13,109.3  | Plan 2 (OH)              | Pathfinder       | Pathfinder MWD     |





A Schlumberger Company

# Pathfinder

Pathfinder X&Y Report



|                  |                    |                                     |                                |
|------------------|--------------------|-------------------------------------|--------------------------------|
| <b>Company:</b>  | Devon Energy, Inc. | <b>Local Co-ordinate Reference:</b> | Well #2H                       |
| <b>Project:</b>  | Lea County (NAD83) | <b>TVD Reference:</b>               | KB = 19 @ 3776.9usft (McVay 8) |
| <b>Site:</b>     | Eischens 29 Fed    | <b>MD Reference:</b>                | KB = 19 @ 3776.9usft (McVay 8) |
| <b>Well:</b>     | #2H                | <b>North Reference:</b>             | Grid                           |
| <b>Wellbore:</b> | OH                 | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Design:</b>   | Plan 2             | <b>Database:</b>                    | 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) |
|----------------|------------|----------------------|---------------|-----------------|---------------|---------------|------------------|---------------------|--------------------|-------------------|
| 0.0            | 0.00       | 0.00                 | 0.0           | -3,776.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 100.0          | 0.00       | 0.00                 | 100.0         | -3,676.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 200.0          | 0.00       | 0.00                 | 200.0         | -3,576.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 300.0          | 0.00       | 0.00                 | 300.0         | -3,476.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 400.0          | 0.00       | 0.00                 | 400.0         | -3,376.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 500.0          | 0.00       | 0.00                 | 500.0         | -3,276.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 600.0          | 0.00       | 0.00                 | 600.0         | -3,176.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 700.0          | 0.00       | 0.00                 | 700.0         | -3,076.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 800.0          | 0.00       | 0.00                 | 800.0         | -2,976.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 900.0          | 0.00       | 0.00                 | 900.0         | -2,876.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 1,000.0        | 0.00       | 0.00                 | 1,000.0       | -2,776.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 1,100.0        | 0.00       | 0.00                 | 1,100.0       | -2,676.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 1,200.0        | 0.00       | 0.00                 | 1,200.0       | -2,576.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 1,300.0        | 0.00       | 0.00                 | 1,300.0       | -2,476.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 1,340.0        | 0.00       | 0.00                 | 1,340.0       | -2,436.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| <b>Rustler</b> |            |                      |               |                 |               |               |                  |                     |                    |                   |
| 1,400.0        | 0.00       | 0.00                 | 1,400.0       | -2,376.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 1,500.0        | 0.00       | 0.00                 | 1,500.0       | -2,276.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 1,580.0        | 0.00       | 0.00                 | 1,580.0       | -2,196.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| <b>Salado</b>  |            |                      |               |                 |               |               |                  |                     |                    |                   |
| 1,600.0        | 0.00       | 0.00                 | 1,600.0       | -2,176.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 1,700.0        | 0.00       | 0.00                 | 1,700.0       | -2,076.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 1,800.0        | 0.00       | 0.00                 | 1,800.0       | -1,976.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 1,900.0        | 0.00       | 0.00                 | 1,900.0       | -1,876.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 2,000.0        | 0.00       | 0.00                 | 2,000.0       | -1,776.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 2,100.0        | 0.00       | 0.00                 | 2,100.0       | -1,676.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 2,200.0        | 0.00       | 0.00                 | 2,200.0       | -1,576.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |



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# Pathfinder

Pathfinder X&Y Report



|                  |                    |                                     |                                |
|------------------|--------------------|-------------------------------------|--------------------------------|
| <b>Company:</b>  | Devon Energy, Inc. | <b>Local Co-ordinate Reference:</b> | Well #2H                       |
| <b>Project:</b>  | Lea County (NAD83) | <b>TVD Reference:</b>               | KB = 19 @ 3776.9usft (McVay 8) |
| <b>Site:</b>     | Eischens 29 Fed    | <b>MD Reference:</b>                | KB = 19 @ 3776.9usft (McVay 8) |
| <b>Well:</b>     | #2H                | <b>North Reference:</b>             | Grid                           |
| <b>Wellbore:</b> | OH                 | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Design:</b>   | Plan 2             | <b>Database:</b>                    | 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) |
| 2,300.0             | 0.00       | 0.00                 | 2,300.0       | -1,476.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 2,400.0             | 0.00       | 0.00                 | 2,400.0       | -1,376.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 2,500.0             | 0.00       | 0.00                 | 2,500.0       | -1,276.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 2,600.0             | 0.00       | 0.00                 | 2,600.0       | -1,176.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 2,700.0             | 0.00       | 0.00                 | 2,700.0       | -1,076.9        | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 2,799.0             | 0.00       | 0.00                 | 2,799.0       | -977.9          | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| <b>Tansill</b>      |            |                      |               |                 |               |               |                  |                     |                    |                   |
| 2,800.0             | 0.00       | 0.00                 | 2,800.0       | -976.9          | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 2,900.0             | 0.00       | 0.00                 | 2,900.0       | -876.9          | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 2,940.0             | 0.00       | 0.00                 | 2,940.0       | -836.9          | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| <b>Yates</b>        |            |                      |               |                 |               |               |                  |                     |                    |                   |
| 3,000.0             | 0.00       | 0.00                 | 3,000.0       | -776.9          | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 3,100.0             | 0.00       | 0.00                 | 3,100.0       | -676.9          | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 3,200.0             | 0.00       | 0.00                 | 3,200.0       | -576.9          | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 3,300.0             | 0.00       | 0.00                 | 3,300.0       | -476.9          | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 3,400.0             | 0.00       | 0.00                 | 3,400.0       | -376.9          | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 3,474.0             | 0.00       | 0.00                 | 3,474.0       | -302.9          | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| <b>Seven Rivers</b> |            |                      |               |                 |               |               |                  |                     |                    |                   |
| 3,500.0             | 0.00       | 0.00                 | 3,500.0       | -276.9          | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 3,600.0             | 0.00       | 0.00                 | 3,600.0       | -176.9          | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 3,700.0             | 0.00       | 0.00                 | 3,700.0       | -76.9           | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 3,800.0             | 0.00       | 0.00                 | 3,800.0       | 23.1            | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 3,900.0             | 0.00       | 0.00                 | 3,900.0       | 123.1           | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 4,000.0             | 0.00       | 0.00                 | 4,000.0       | 223.1           | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 4,100.0             | 0.00       | 0.00                 | 4,100.0       | 323.1           | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| 4,155.0             | 0.00       | 0.00                 | 4,155.0       | 378.1           | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |
| <b>Queen</b>        |            |                      |               |                 |               |               |                  |                     |                    |                   |
| 4,200.0             | 0.00       | 0.00                 | 4,200.0       | 423.1           | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |



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# Pathfinder

Pathfinder X&Y Report



|                  |                    |                                     |                                |
|------------------|--------------------|-------------------------------------|--------------------------------|
| <b>Company:</b>  | Devon Energy, Inc. | <b>Local Co-ordinate Reference:</b> | Well #2H                       |
| <b>Project:</b>  | Lea County (NAD83) | <b>TVD Reference:</b>               | KB = 19 @ 3776.9usft (McVay 8) |
| <b>Site:</b>     | Eischens 29 Fed    | <b>MD Reference:</b>                | KB = 19 @ 3776.9usft (McVay 8) |
| <b>Well:</b>     | #2H                | <b>North Reference:</b>             | Grid                           |
| <b>Wellbore:</b> | OH                 | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Design:</b>   | Plan 2             | <b>Database:</b>                    | 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) |  |
| 4,300.0        | 0.00       | 0.00                 | 4,300.0       | 523.1           | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 4,400.0        | 0.00       | 0.00                 | 4,400.0       | 623.1           | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 4,500.0        | 0.00       | 0.00                 | 4,500.0       | 723.1           | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 4,600.0        | 0.00       | 0.00                 | 4,600.0       | 823.1           | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 4,700.0        | 0.00       | 0.00                 | 4,700.0       | 923.1           | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 4,800.0        | 0.00       | 0.00                 | 4,800.0       | 1,023.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 4,900.0        | 0.00       | 0.00                 | 4,900.0       | 1,123.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 5,000.0        | 0.00       | 0.00                 | 5,000.0       | 1,223.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 5,100.0        | 0.00       | 0.00                 | 5,100.0       | 1,323.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 5,145.0        | 0.00       | 0.00                 | 5,145.0       | 1,368.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| Cherry Canyon  |            |                      |               |                 |               |               |                  |                     |                    |                   |  |
| 5,200.0        | 0.00       | 0.00                 | 5,200.0       | 1,423.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 5,300.0        | 0.00       | 0.00                 | 5,300.0       | 1,523.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 5,400.0        | 0.00       | 0.00                 | 5,400.0       | 1,623.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 5,500.0        | 0.00       | 0.00                 | 5,500.0       | 1,723.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 5,600.0        | 0.00       | 0.00                 | 5,600.0       | 1,823.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 5,700.0        | 0.00       | 0.00                 | 5,700.0       | 1,923.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 5,800.0        | 0.00       | 0.00                 | 5,800.0       | 2,023.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 5,900.0        | 0.00       | 0.00                 | 5,900.0       | 2,123.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 5,923.0        | 0.00       | 0.00                 | 5,923.0       | 2,146.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| Brushy Canyon  |            |                      |               |                 |               |               |                  |                     |                    |                   |  |
| 6,000.0        | 0.00       | 0.00                 | 6,000.0       | 2,223.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 6,100.0        | 0.00       | 0.00                 | 6,100.0       | 2,323.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 6,200.0        | 0.00       | 0.00                 | 6,200.0       | 2,423.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 6,300.0        | 0.00       | 0.00                 | 6,300.0       | 2,523.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 6,400.0        | 0.00       | 0.00                 | 6,400.0       | 2,623.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 6,500.0        | 0.00       | 0.00                 | 6,500.0       | 2,723.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |



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Pathfinder X&Y Report



|                  |                    |                                     |                                |
|------------------|--------------------|-------------------------------------|--------------------------------|
| <b>Company:</b>  | Devon Energy, Inc. | <b>Local Co-ordinate Reference:</b> | Well #2H                       |
| <b>Project:</b>  | Lea County (NAD83) | <b>TVD Reference:</b>               | KB = 19 @ 3776.9usft (McVay 8) |
| <b>Site:</b>     | Eischens 29 Fed    | <b>MD Reference:</b>                | KB = 19 @ 3776.9usft (McVay 8) |
| <b>Well:</b>     | #2H                | <b>North Reference:</b>             | Grid                           |
| <b>Wellbore:</b> | OH                 | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Design:</b>   | Plan 2             | <b>Database:</b>                    | 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) |  |
| 6,600.0            | 0.00       | 0.00                 | 6,600.0       | 2,823.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 6,700.0            | 0.00       | 0.00                 | 6,700.0       | 2,923.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 6,800.0            | 0.00       | 0.00                 | 6,800.0       | 3,023.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 6,900.0            | 0.00       | 0.00                 | 6,900.0       | 3,123.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 7,000.0            | 0.00       | 0.00                 | 7,000.0       | 3,223.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 7,100.0            | 0.00       | 0.00                 | 7,100.0       | 3,323.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 7,200.0            | 0.00       | 0.00                 | 7,200.0       | 3,423.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 7,300.0            | 0.00       | 0.00                 | 7,300.0       | 3,523.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 7,315.0            | 0.00       | 0.00                 | 7,315.0       | 3,538.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| <b>Bone Spring</b> |            |                      |               |                 |               |               |                  |                     |                    |                   |  |
| 7,400.0            | 0.00       | 0.00                 | 7,400.0       | 3,623.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 7,500.0            | 0.00       | 0.00                 | 7,500.0       | 3,723.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 7,600.0            | 0.00       | 0.00                 | 7,600.0       | 3,823.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 7,700.0            | 0.00       | 0.00                 | 7,700.0       | 3,923.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 7,800.0            | 0.00       | 0.00                 | 7,800.0       | 4,023.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 7,900.0            | 0.00       | 0.00                 | 7,900.0       | 4,123.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 8,000.0            | 0.00       | 0.00                 | 8,000.0       | 4,223.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 8,110.0            | 0.00       | 0.00                 | 8,110.0       | 4,333.1         | 0.0           | 0.0           | 0.0              | 0.00                | 623,395.50         | 739,582.70        |  |
| 8,150.0            | 4.00       | 25.00                | 8,150.0       | 4,373.1         | 1.3           | 0.6           | 1.3              | 10.00               | 623,396.76         | 739,583.29        |  |
| 8,200.0            | 9.00       | 25.00                | 8,199.6       | 4,422.7         | 6.4           | 3.0           | 6.5              | 10.00               | 623,401.89         | 739,585.68        |  |
| 8,250.0            | 14.00      | 25.00                | 8,248.6       | 4,471.7         | 15.4          | 7.2           | 15.8             | 10.00               | 623,410.92         | 739,589.89        |  |
| 8,300.0            | 19.00      | 25.00                | 8,296.5       | 4,519.6         | 28.3          | 13.2          | 28.9             | 10.00               | 623,423.79         | 739,595.89        |  |
| 8,350.0            | 24.00      | 25.00                | 8,343.0       | 4,566.1         | 44.9          | 20.9          | 45.9             | 10.00               | 623,440.39         | 739,603.63        |  |
| 8,400.0            | 29.00      | 25.00                | 8,387.8       | 4,610.9         | 65.1          | 30.4          | 66.6             | 10.00               | 623,460.61         | 739,613.06        |  |
| 8,450.0            | 34.00      | 25.00                | 8,430.4       | 4,653.5         | 88.8          | 41.4          | 90.8             | 10.00               | 623,484.28         | 739,624.10        |  |
| 8,500.0            | 39.00      | 25.00                | 8,470.6       | 4,693.7         | 115.7         | 54.0          | 118.4            | 10.00               | 623,511.22         | 739,636.66        |  |
| 8,550.0            | 44.00      | 25.00                | 8,508.0       | 4,731.1         | 145.7         | 68.0          | 149.1            | 10.00               | 623,541.24         | 739,650.66        |  |



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# Pathfinder

Pathfinder X&Y Report



|                  |                    |                                     |                                |
|------------------|--------------------|-------------------------------------|--------------------------------|
| <b>Company:</b>  | Devon Energy, Inc. | <b>Local Co-ordinate Reference:</b> | Well #2H                       |
| <b>Project:</b>  | Lea County (NAD83) | <b>TVD Reference:</b>               | KB = 19 @ 3776.9usft (McVay 8) |
| <b>Site:</b>     | Eischens 29 Fed    | <b>MD Reference:</b>                | KB = 19 @ 3776.9usft (McVay 8) |
| <b>Well:</b>     | #2H                | <b>North Reference:</b>             | Grid                           |
| <b>Wellbore:</b> | OH                 | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Design:</b>   | Plan 2             | <b>Database:</b>                    | 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) |  |
| 8,600.0        | 49.00      | 25.00                | 8,542.4       | 4,765.5         | 178.6         | 83.3          | 182.7            | 10.00               | 623,574.10         | 739,665.98        |  |
| 8,650.0        | 54.00      | 25.00                | 8,573.5       | 4,796.6         | 214.1         | 99.8          | 218.9            | 10.00               | 623,609.55         | 739,682.51        |  |
| 8,700.0        | 59.00      | 25.00                | 8,601.1       | 4,824.2         | 251.8         | 117.4         | 257.6            | 10.00               | 623,647.33         | 739,700.13        |  |
| 8,750.0        | 64.00      | 25.00                | 8,625.0       | 4,848.1         | 291.6         | 136.0         | 298.3            | 10.00               | 623,687.14         | 739,718.69        |  |
| 8,800.0        | 69.00      | 25.00                | 8,644.9       | 4,868.0         | 333.2         | 155.4         | 340.8            | 10.00               | 623,728.68         | 739,738.07        |  |
| 8,850.0        | 74.00      | 25.00                | 8,660.8       | 4,883.9         | 376.1         | 175.4         | 384.7            | 10.00               | 623,771.64         | 739,758.10        |  |
| 8,860.0        | 75.00      | 25.00                | 8,663.4       | 4,886.5         | 384.9         | 179.5         | 393.7            | 10.00               | 623,780.38         | 739,762.17        |  |
| 8,900.0        | 77.06      | 21.46                | 8,673.1       | 4,896.2         | 420.5         | 194.8         | 430.1            | 10.00               | 623,816.04         | 739,777.47        |  |
| 8,950.0        | 79.69      | 17.13                | 8,683.2       | 4,906.3         | 466.8         | 210.9         | 477.1            | 10.00               | 623,862.25         | 739,793.64        |  |
| 9,000.0        | 82.39      | 12.86                | 8,691.0       | 4,914.1         | 514.4         | 223.7         | 525.4            | 10.00               | 623,909.94         | 739,806.41        |  |
| 9,050.0        | 85.12      | 8.65                 | 8,696.4       | 4,919.5         | 563.3         | 233.0         | 574.6            | 10.00               | 623,958.76         | 739,815.68        |  |
| 9,100.0        | 87.88      | 4.47                 | 8,699.5       | 4,922.6         | 612.8         | 238.7         | 624.4            | 10.00               | 624,008.32         | 739,821.38        |  |
| 9,153.9        | 90.87      | 359.99               | 8,700.0       | 4,923.1         | 666.6         | 240.8         | 678.2            | 10.00               | 624,062.13         | 739,823.48        |  |
| 9,200.0        | 90.87      | 359.99               | 8,699.3       | 4,922.4         | 712.8         | 240.8         | 724.3            | 0.00                | 624,108.25         | 739,823.47        |  |
| 9,300.0        | 90.87      | 359.99               | 8,697.8       | 4,920.9         | 812.7         | 240.8         | 824.1            | 0.00                | 624,208.24         | 739,823.45        |  |
| 9,400.0        | 90.87      | 359.99               | 8,696.3       | 4,919.4         | 912.7         | 240.7         | 924.0            | 0.00                | 624,308.23         | 739,823.44        |  |
| 9,500.0        | 90.87      | 359.99               | 8,694.8       | 4,917.9         | 1,012.7       | 240.7         | 1,023.8          | 0.00                | 624,408.22         | 739,823.42        |  |
| 9,600.0        | 90.87      | 359.99               | 8,693.3       | 4,916.4         | 1,112.7       | 240.7         | 1,123.7          | 0.00                | 624,508.21         | 739,823.40        |  |
| 9,700.0        | 90.87      | 359.99               | 8,691.7       | 4,914.8         | 1,212.7       | 240.7         | 1,223.6          | 0.00                | 624,608.20         | 739,823.38        |  |
| 9,800.0        | 90.87      | 359.99               | 8,690.2       | 4,913.3         | 1,312.7       | 240.7         | 1,323.4          | 0.00                | 624,708.19         | 739,823.37        |  |
| 9,900.0        | 90.87      | 359.99               | 8,688.7       | 4,911.8         | 1,412.7       | 240.6         | 1,423.3          | 0.00                | 624,808.17         | 739,823.35        |  |
| 10,000.0       | 90.87      | 359.99               | 8,687.2       | 4,910.3         | 1,512.7       | 240.6         | 1,523.1          | 0.00                | 624,908.16         | 739,823.33        |  |
| 10,100.0       | 90.87      | 359.99               | 8,685.7       | 4,908.8         | 1,612.7       | 240.6         | 1,623.0          | 0.00                | 625,008.15         | 739,823.32        |  |
| 10,200.0       | 90.87      | 359.99               | 8,684.2       | 4,907.3         | 1,712.6       | 240.6         | 1,722.8          | 0.00                | 625,108.14         | 739,823.30        |  |
| 10,300.0       | 90.87      | 359.99               | 8,682.6       | 4,905.7         | 1,812.6       | 240.6         | 1,822.7          | 0.00                | 625,208.13         | 739,823.28        |  |
| 10,400.0       | 90.87      | 359.99               | 8,681.1       | 4,904.2         | 1,912.6       | 240.6         | 1,922.5          | 0.00                | 625,308.12         | 739,823.26        |  |
| 10,500.0       | 90.87      | 359.99               | 8,679.6       | 4,902.7         | 2,012.6       | 240.5         | 2,022.4          | 0.00                | 625,408.11         | 739,823.25        |  |



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Pathfinder X&Y Report



|                  |                    |                                     |                                |
|------------------|--------------------|-------------------------------------|--------------------------------|
| <b>Company:</b>  | Devon Energy, Inc. | <b>Local Co-ordinate Reference:</b> | Well #2H                       |
| <b>Project:</b>  | Lea County (NAD83) | <b>TVD Reference:</b>               | KB = 19 @ 3776.9usft (McVay 8) |
| <b>Site:</b>     | Eischens 29 Fed    | <b>MD Reference:</b>                | KB = 19 @ 3776.9usft (McVay 8) |
| <b>Well:</b>     | #2H                | <b>North Reference:</b>             | Grid                           |
| <b>Wellbore:</b> | OH                 | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Design:</b>   | Plan 2             | <b>Database:</b>                    | 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) |  |
| 10,600.0                  | 90.87      | 359.99               | 8,678.1       | 4,901.2         | 2,112.6       | 240.5         | 2,122.2          | 0.00                | 625,508.09         | 739,823.23        |  |
| 10,700.0                  | 90.87      | 359.99               | 8,676.6       | 4,899.7         | 2,212.6       | 240.5         | 2,222.1          | 0.00                | 625,608.08         | 739,823.21        |  |
| 10,800.0                  | 90.87      | 359.99               | 8,675.1       | 4,898.2         | 2,312.6       | 240.5         | 2,321.9          | 0.00                | 625,708.07         | 739,823.20        |  |
| 10,900.0                  | 90.87      | 359.99               | 8,673.5       | 4,896.6         | 2,412.6       | 240.5         | 2,421.8          | 0.00                | 625,808.06         | 739,823.18        |  |
| 11,000.0                  | 90.87      | 359.99               | 8,672.0       | 4,895.1         | 2,512.5       | 240.5         | 2,521.6          | 0.00                | 625,908.05         | 739,823.16        |  |
| 11,100.0                  | 90.87      | 359.99               | 8,670.5       | 4,893.6         | 2,612.5       | 240.4         | 2,621.5          | 0.00                | 626,008.04         | 739,823.14        |  |
| 11,200.0                  | 90.87      | 359.99               | 8,669.0       | 4,892.1         | 2,712.5       | 240.4         | 2,721.3          | 0.00                | 626,108.02         | 739,823.13        |  |
| 11,300.0                  | 90.87      | 359.99               | 8,667.5       | 4,890.6         | 2,812.5       | 240.4         | 2,821.2          | 0.00                | 626,208.01         | 739,823.11        |  |
| 11,400.0                  | 90.87      | 359.99               | 8,665.9       | 4,889.0         | 2,912.5       | 240.4         | 2,921.1          | 0.00                | 626,308.00         | 739,823.09        |  |
| 11,500.0                  | 90.87      | 359.99               | 8,664.4       | 4,887.5         | 3,012.5       | 240.4         | 3,020.9          | 0.00                | 626,407.99         | 739,823.08        |  |
| 11,600.0                  | 90.87      | 359.99               | 8,662.9       | 4,886.0         | 3,112.5       | 240.4         | 3,120.8          | 0.00                | 626,507.98         | 739,823.06        |  |
| 11,700.0                  | 90.87      | 359.99               | 8,661.4       | 4,884.5         | 3,212.5       | 240.3         | 3,220.6          | 0.00                | 626,607.97         | 739,823.04        |  |
| 11,800.0                  | 90.87      | 359.99               | 8,659.9       | 4,883.0         | 3,312.5       | 240.3         | 3,320.5          | 0.00                | 626,707.96         | 739,823.02        |  |
| 11,900.0                  | 90.87      | 359.99               | 8,658.4       | 4,881.5         | 3,412.4       | 240.3         | 3,420.3          | 0.00                | 626,807.94         | 739,823.01        |  |
| 12,000.0                  | 90.87      | 359.99               | 8,656.8       | 4,879.9         | 3,512.4       | 240.3         | 3,520.2          | 0.00                | 626,907.93         | 739,822.99        |  |
| 12,100.0                  | 90.87      | 359.99               | 8,655.3       | 4,878.4         | 3,612.4       | 240.3         | 3,620.0          | 0.00                | 627,007.92         | 739,822.97        |  |
| 12,200.0                  | 90.87      | 359.99               | 8,653.8       | 4,876.9         | 3,712.4       | 240.3         | 3,719.9          | 0.00                | 627,107.91         | 739,822.96        |  |
| 12,300.0                  | 90.87      | 359.99               | 8,652.3       | 4,875.4         | 3,812.4       | 240.2         | 3,819.7          | 0.00                | 627,207.90         | 739,822.94        |  |
| 12,400.0                  | 90.87      | 359.99               | 8,650.8       | 4,873.9         | 3,912.4       | 240.2         | 3,919.6          | 0.00                | 627,307.89         | 739,822.92        |  |
| 12,500.0                  | 90.87      | 359.99               | 8,649.2       | 4,872.3         | 4,012.4       | 240.2         | 4,019.4          | 0.00                | 627,407.87         | 739,822.90        |  |
| 12,600.0                  | 90.87      | 359.99               | 8,647.7       | 4,870.8         | 4,112.4       | 240.2         | 4,119.3          | 0.00                | 627,507.86         | 739,822.89        |  |
| 12,700.0                  | 90.87      | 359.99               | 8,646.2       | 4,869.3         | 4,212.4       | 240.2         | 4,219.1          | 0.00                | 627,607.85         | 739,822.87        |  |
| 12,800.0                  | 90.87      | 359.99               | 8,644.7       | 4,867.8         | 4,312.3       | 240.2         | 4,319.0          | 0.00                | 627,707.84         | 739,822.85        |  |
| 12,900.0                  | 90.87      | 359.99               | 8,643.2       | 4,866.3         | 4,412.3       | 240.1         | 4,418.8          | 0.00                | 627,807.83         | 739,822.84        |  |
| 13,000.0                  | 90.87      | 359.99               | 8,641.7       | 4,864.8         | 4,512.3       | 240.1         | 4,518.7          | 0.00                | 627,907.82         | 739,822.82        |  |
| 13,109.3                  | 90.87      | 359.99               | 8,640.0       | 4,863.1         | 4,621.6       | 240.1         | 4,627.8          | 0.00                | 628,017.10         | 739,822.80        |  |
| PBHL(Eischens 29 Fed #2H) |            |                      |               |                 |               |               |                  |                     |                    |                   |  |



A Schlumberger Company

Pathfinder  
Pathfinder X&Y Report



|           |                    |                              |                                |
|-----------|--------------------|------------------------------|--------------------------------|
| Company:  | Devon Energy, Inc. | Local Co-ordinate Reference: | Well #2H                       |
| Project:  | Lea County (NAD83) | TVD Reference:               | KB = 19 @ 3776.9usft (McVay 8) |
| Site:     | Eischens 29 Fed    | MD Reference:                | KB = 19 @ 3776.9usft (McVay 8) |
| Well:     | #2H                | North Reference:             | Grid                           |
| Wellbore: | OH                 | Survey Calculation Method:   | Minimum Curvature              |
| Design:   | Plan 2             | Database:                    | EDM 5000.1 Single User Db      |

| Formations                  |                             |               |           |            |                         |  |
|-----------------------------|-----------------------------|---------------|-----------|------------|-------------------------|--|
| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Name          | Lithology | Dip<br>(°) | Dip<br>Direction<br>(°) |  |
| 1,340.0                     | 1,340.0                     | Rustler       |           |            |                         |  |
| 2,940.0                     | 2,940.0                     | Yates         |           |            |                         |  |
| 5,923.0                     | 5,923.0                     | Brushy Canyon |           |            |                         |  |
| 2,799.0                     | 2,799.0                     | Tansill       |           |            |                         |  |
| 3,474.0                     | 3,474.0                     | Seven Rivers  |           |            |                         |  |
| 4,155.0                     | 4,155.0                     | Queen         |           |            |                         |  |
| 7,315.0                     | 7,315.0                     | Bone Spring   |           |            |                         |  |
| 5,145.0                     | 5,145.0                     | Cherry Canyon |           |            |                         |  |
| 1,580.0                     | 1,580.0                     | Salado        |           |            |                         |  |

|                   |                    |             |
|-------------------|--------------------|-------------|
| Checked By: _____ | Approved By: _____ | Date: _____ |
|-------------------|--------------------|-------------|

Devon - Eischens 29 Fed \_2H - Plan \_2 - TXT

HEADER INFORMATION

COMPANY : Devon Energy, Inc.  
 FIELD : Lea County (NAD83)  
 SITE : Eischens 29 Fed  
 WELL : #2H  
 WELLPATH: OH  
 DEPTHUNT: usft

WELL INFORMATION

WELL EW MAP : 739582.70  
 WELL NS MAP : 623395.50  
 DATUM ELEVN : 3776.90  
 VSECT ANGLE : 2.97  
 VSECT NORTH : 0.00  
 VSECT EAST : 0.00

SURVEY TYPE INFORMATION

H 0.00 - 13109.30 PLAN 2 : PATHFINDER

SURVEY LIST

| MD      | INC  | AZI  | TVD     | VSEC | N/S  | E/W  |
|---------|------|------|---------|------|------|------|
| 0.00    | 0.00 | 0.00 | 0.00    | 0.00 | 0.00 | 0.00 |
| 100.00  | 0.00 | 0.00 | 100.00  | 0.00 | 0.00 | 0.00 |
| 200.00  | 0.00 | 0.00 | 200.00  | 0.00 | 0.00 | 0.00 |
| 300.00  | 0.00 | 0.00 | 300.00  | 0.00 | 0.00 | 0.00 |
| 400.00  | 0.00 | 0.00 | 400.00  | 0.00 | 0.00 | 0.00 |
| 500.00  | 0.00 | 0.00 | 500.00  | 0.00 | 0.00 | 0.00 |
| 600.00  | 0.00 | 0.00 | 600.00  | 0.00 | 0.00 | 0.00 |
| 700.00  | 0.00 | 0.00 | 700.00  | 0.00 | 0.00 | 0.00 |
| 800.00  | 0.00 | 0.00 | 800.00  | 0.00 | 0.00 | 0.00 |
| 900.00  | 0.00 | 0.00 | 900.00  | 0.00 | 0.00 | 0.00 |
| 1000.00 | 0.00 | 0.00 | 1000.00 | 0.00 | 0.00 | 0.00 |
| 1100.00 | 0.00 | 0.00 | 1100.00 | 0.00 | 0.00 | 0.00 |
| 1200.00 | 0.00 | 0.00 | 1200.00 | 0.00 | 0.00 | 0.00 |
| 1300.00 | 0.00 | 0.00 | 1300.00 | 0.00 | 0.00 | 0.00 |
| 1400.00 | 0.00 | 0.00 | 1400.00 | 0.00 | 0.00 | 0.00 |
| 1500.00 | 0.00 | 0.00 | 1500.00 | 0.00 | 0.00 | 0.00 |
| 1600.00 | 0.00 | 0.00 | 1600.00 | 0.00 | 0.00 | 0.00 |
| 1700.00 | 0.00 | 0.00 | 1700.00 | 0.00 | 0.00 | 0.00 |
| 1800.00 | 0.00 | 0.00 | 1800.00 | 0.00 | 0.00 | 0.00 |
| 1900.00 | 0.00 | 0.00 | 1900.00 | 0.00 | 0.00 | 0.00 |
| 2000.00 | 0.00 | 0.00 | 2000.00 | 0.00 | 0.00 | 0.00 |
| 2100.00 | 0.00 | 0.00 | 2100.00 | 0.00 | 0.00 | 0.00 |
| 2200.00 | 0.00 | 0.00 | 2200.00 | 0.00 | 0.00 | 0.00 |
| 2300.00 | 0.00 | 0.00 | 2300.00 | 0.00 | 0.00 | 0.00 |
| 2400.00 | 0.00 | 0.00 | 2400.00 | 0.00 | 0.00 | 0.00 |
| 2500.00 | 0.00 | 0.00 | 2500.00 | 0.00 | 0.00 | 0.00 |
| 2600.00 | 0.00 | 0.00 | 2600.00 | 0.00 | 0.00 | 0.00 |
| 2700.00 | 0.00 | 0.00 | 2700.00 | 0.00 | 0.00 | 0.00 |
| 2800.00 | 0.00 | 0.00 | 2800.00 | 0.00 | 0.00 | 0.00 |
| 2900.00 | 0.00 | 0.00 | 2900.00 | 0.00 | 0.00 | 0.00 |
| 3000.00 | 0.00 | 0.00 | 3000.00 | 0.00 | 0.00 | 0.00 |
| 3100.00 | 0.00 | 0.00 | 3100.00 | 0.00 | 0.00 | 0.00 |
| 3200.00 | 0.00 | 0.00 | 3200.00 | 0.00 | 0.00 | 0.00 |
| 3300.00 | 0.00 | 0.00 | 3300.00 | 0.00 | 0.00 | 0.00 |
| 3400.00 | 0.00 | 0.00 | 3400.00 | 0.00 | 0.00 | 0.00 |
| 3500.00 | 0.00 | 0.00 | 3500.00 | 0.00 | 0.00 | 0.00 |
| 3600.00 | 0.00 | 0.00 | 3600.00 | 0.00 | 0.00 | 0.00 |
| 3700.00 | 0.00 | 0.00 | 3700.00 | 0.00 | 0.00 | 0.00 |
| 3800.00 | 0.00 | 0.00 | 3800.00 | 0.00 | 0.00 | 0.00 |
| 3900.00 | 0.00 | 0.00 | 3900.00 | 0.00 | 0.00 | 0.00 |
| 4000.00 | 0.00 | 0.00 | 4000.00 | 0.00 | 0.00 | 0.00 |
| 4100.00 | 0.00 | 0.00 | 4100.00 | 0.00 | 0.00 | 0.00 |



Devon - Eischens 29 Fed \_2H - Plan \_2 - TXT

|         |       |        |         |        |        |        |
|---------|-------|--------|---------|--------|--------|--------|
| 4200.00 | 0.00  | 0.00   | 4200.00 | 0.00   | 0.00   | 0.00   |
| 4300.00 | 0.00  | 0.00   | 4300.00 | 0.00   | 0.00   | 0.00   |
| 4400.00 | 0.00  | 0.00   | 4400.00 | 0.00   | 0.00   | 0.00   |
| 4500.00 | 0.00  | 0.00   | 4500.00 | 0.00   | 0.00   | 0.00   |
| 4600.00 | 0.00  | 0.00   | 4600.00 | 0.00   | 0.00   | 0.00   |
| 4700.00 | 0.00  | 0.00   | 4700.00 | 0.00   | 0.00   | 0.00   |
| 4800.00 | 0.00  | 0.00   | 4800.00 | 0.00   | 0.00   | 0.00   |
| 4900.00 | 0.00  | 0.00   | 4900.00 | 0.00   | 0.00   | 0.00   |
| 5000.00 | 0.00  | 0.00   | 5000.00 | 0.00   | 0.00   | 0.00   |
| 5100.00 | 0.00  | 0.00   | 5100.00 | 0.00   | 0.00   | 0.00   |
| 5200.00 | 0.00  | 0.00   | 5200.00 | 0.00   | 0.00   | 0.00   |
| 5300.00 | 0.00  | 0.00   | 5300.00 | 0.00   | 0.00   | 0.00   |
| 5400.00 | 0.00  | 0.00   | 5400.00 | 0.00   | 0.00   | 0.00   |
| 5500.00 | 0.00  | 0.00   | 5500.00 | 0.00   | 0.00   | 0.00   |
| 5600.00 | 0.00  | 0.00   | 5600.00 | 0.00   | 0.00   | 0.00   |
| 5700.00 | 0.00  | 0.00   | 5700.00 | 0.00   | 0.00   | 0.00   |
| 5800.00 | 0.00  | 0.00   | 5800.00 | 0.00   | 0.00   | 0.00   |
| 5900.00 | 0.00  | 0.00   | 5900.00 | 0.00   | 0.00   | 0.00   |
| 6000.00 | 0.00  | 0.00   | 6000.00 | 0.00   | 0.00   | 0.00   |
| 6100.00 | 0.00  | 0.00   | 6100.00 | 0.00   | 0.00   | 0.00   |
| 6200.00 | 0.00  | 0.00   | 6200.00 | 0.00   | 0.00   | 0.00   |
| 6300.00 | 0.00  | 0.00   | 6300.00 | 0.00   | 0.00   | 0.00   |
| 6400.00 | 0.00  | 0.00   | 6400.00 | 0.00   | 0.00   | 0.00   |
| 6500.00 | 0.00  | 0.00   | 6500.00 | 0.00   | 0.00   | 0.00   |
| 6600.00 | 0.00  | 0.00   | 6600.00 | 0.00   | 0.00   | 0.00   |
| 6700.00 | 0.00  | 0.00   | 6700.00 | 0.00   | 0.00   | 0.00   |
| 6800.00 | 0.00  | 0.00   | 6800.00 | 0.00   | 0.00   | 0.00   |
| 6900.00 | 0.00  | 0.00   | 6900.00 | 0.00   | 0.00   | 0.00   |
| 7000.00 | 0.00  | 0.00   | 7000.00 | 0.00   | 0.00   | 0.00   |
| 7100.00 | 0.00  | 0.00   | 7100.00 | 0.00   | 0.00   | 0.00   |
| 7200.00 | 0.00  | 0.00   | 7200.00 | 0.00   | 0.00   | 0.00   |
| 7300.00 | 0.00  | 0.00   | 7300.00 | 0.00   | 0.00   | 0.00   |
| 7400.00 | 0.00  | 0.00   | 7400.00 | 0.00   | 0.00   | 0.00   |
| 7500.00 | 0.00  | 0.00   | 7500.00 | 0.00   | 0.00   | 0.00   |
| 7600.00 | 0.00  | 0.00   | 7600.00 | 0.00   | 0.00   | 0.00   |
| 7700.00 | 0.00  | 0.00   | 7700.00 | 0.00   | 0.00   | 0.00   |
| 7800.00 | 0.00  | 0.00   | 7800.00 | 0.00   | 0.00   | 0.00   |
| 7900.00 | 0.00  | 0.00   | 7900.00 | 0.00   | 0.00   | 0.00   |
| 8000.00 | 0.00  | 0.00   | 8000.00 | 0.00   | 0.00   | 0.00   |
| 8110.00 | 0.00  | 0.00   | 8110.00 | 0.00   | 0.00   | 0.00   |
| 8150.00 | 4.00  | 25.00  | 8149.97 | 1.29   | 1.26   | 0.59   |
| 8200.00 | 9.00  | 25.00  | 8199.63 | 6.54   | 6.39   | 2.98   |
| 8250.00 | 14.00 | 25.00  | 8248.61 | 15.78  | 15.42  | 7.19   |
| 8300.00 | 19.00 | 25.00  | 8296.54 | 28.94  | 28.29  | 13.19  |
| 8350.00 | 24.00 | 25.00  | 8343.04 | 45.92  | 44.89  | 20.93  |
| 8400.00 | 29.00 | 25.00  | 8387.78 | 66.59  | 65.11  | 30.36  |
| 8450.00 | 34.00 | 25.00  | 8430.39 | 90.80  | 88.78  | 41.40  |
| 8500.00 | 39.00 | 25.00  | 8470.57 | 118.37 | 115.72 | 53.96  |
| 8550.00 | 44.00 | 25.00  | 8508.01 | 149.07 | 145.74 | 67.96  |
| 8600.00 | 49.00 | 25.00  | 8542.42 | 182.68 | 178.60 | 83.28  |
| 8650.00 | 54.00 | 25.00  | 8573.53 | 218.94 | 214.05 | 99.81  |
| 8700.00 | 59.00 | 25.00  | 8601.12 | 257.58 | 251.83 | 117.43 |
| 8750.00 | 64.00 | 25.00  | 8624.97 | 298.30 | 291.64 | 135.99 |
| 8800.00 | 69.00 | 25.00  | 8644.90 | 340.80 | 333.18 | 155.37 |
| 8850.00 | 74.00 | 25.00  | 8660.76 | 384.74 | 376.14 | 175.40 |
| 8860.00 | 75.00 | 25.00  | 8663.43 | 393.67 | 384.88 | 179.47 |
| 8900.00 | 77.06 | 21.46  | 8673.09 | 430.08 | 420.54 | 194.77 |
| 8950.00 | 79.69 | 17.13  | 8683.17 | 477.07 | 466.75 | 210.94 |
| 9000.00 | 82.39 | 12.86  | 8690.96 | 525.36 | 514.44 | 223.71 |
| 9050.00 | 85.12 | 8.65   | 8696.40 | 574.59 | 563.26 | 232.98 |
| 9100.00 | 87.88 | 4.47   | 8699.45 | 624.38 | 612.82 | 238.68 |
| 9153.87 | 90.87 | 359.99 | 8700.04 | 678.22 | 666.63 | 240.78 |
| 9200.00 | 90.87 | 359.99 | 8699.34 | 724.29 | 712.75 | 240.77 |

|          |       | Devon - Eischens 29 Fed _2H - Plan _2 - TXT |         |         |         |        |
|----------|-------|---------------------------------------------|---------|---------|---------|--------|
| 9300.00  | 90.87 | 359.99                                      | 8697.82 | 824.14  | 812.74  | 240.75 |
| 9400.00  | 90.87 | 359.99                                      | 8696.30 | 923.99  | 912.73  | 240.74 |
| 9500.00  | 90.87 | 359.99                                      | 8694.79 | 1023.85 | 1012.72 | 240.72 |
| 9600.00  | 90.87 | 359.99                                      | 8693.27 | 1123.70 | 1112.71 | 240.70 |
| 9700.00  | 90.87 | 359.99                                      | 8691.75 | 1223.55 | 1212.70 | 240.68 |
| 9800.00  | 90.87 | 359.99                                      | 8690.23 | 1323.40 | 1312.69 | 240.67 |
| 9900.00  | 90.87 | 359.99                                      | 8688.71 | 1423.26 | 1412.67 | 240.65 |
| 10000.00 | 90.87 | 359.99                                      | 8687.20 | 1523.11 | 1512.66 | 240.63 |
| 10100.00 | 90.87 | 359.99                                      | 8685.68 | 1622.96 | 1612.65 | 240.62 |
| 10200.00 | 90.87 | 359.99                                      | 8684.16 | 1722.82 | 1712.64 | 240.60 |
| 10300.00 | 90.87 | 359.99                                      | 8682.64 | 1822.67 | 1812.63 | 240.58 |
| 10400.00 | 90.87 | 359.99                                      | 8681.12 | 1922.52 | 1912.62 | 240.56 |
| 10500.00 | 90.87 | 359.99                                      | 8679.61 | 2022.37 | 2012.61 | 240.55 |
| 10600.00 | 90.87 | 359.99                                      | 8678.09 | 2122.23 | 2112.59 | 240.53 |
| 10700.00 | 90.87 | 359.99                                      | 8676.57 | 2222.08 | 2212.58 | 240.51 |
| 10800.00 | 90.87 | 359.99                                      | 8675.05 | 2321.93 | 2312.57 | 240.50 |
| 10900.00 | 90.87 | 359.99                                      | 8673.54 | 2421.79 | 2412.56 | 240.48 |
| 11000.00 | 90.87 | 359.99                                      | 8672.02 | 2521.64 | 2512.55 | 240.46 |
| 11100.00 | 90.87 | 359.99                                      | 8670.50 | 2621.49 | 2612.54 | 240.44 |
| 11200.00 | 90.87 | 359.99                                      | 8668.98 | 2721.35 | 2712.52 | 240.43 |
| 11300.00 | 90.87 | 359.99                                      | 8667.46 | 2821.20 | 2812.51 | 240.41 |
| 11400.00 | 90.87 | 359.99                                      | 8665.95 | 2921.05 | 2912.50 | 240.39 |
| 11500.00 | 90.87 | 359.99                                      | 8664.43 | 3020.90 | 3012.49 | 240.38 |
| 11600.00 | 90.87 | 359.99                                      | 8662.91 | 3120.76 | 3112.48 | 240.36 |
| 11700.00 | 90.87 | 359.99                                      | 8661.39 | 3220.61 | 3212.47 | 240.34 |
| 11800.00 | 90.87 | 359.99                                      | 8659.87 | 3320.46 | 3312.46 | 240.32 |
| 11900.00 | 90.87 | 359.99                                      | 8658.36 | 3420.32 | 3412.44 | 240.31 |
| 12000.00 | 90.87 | 359.99                                      | 8656.84 | 3520.17 | 3512.43 | 240.29 |
| 12100.00 | 90.87 | 359.99                                      | 8655.32 | 3620.02 | 3612.42 | 240.27 |
| 12200.00 | 90.87 | 359.99                                      | 8653.80 | 3719.87 | 3712.41 | 240.26 |
| 12300.00 | 90.87 | 359.99                                      | 8652.28 | 3819.73 | 3812.40 | 240.24 |
| 12400.00 | 90.87 | 359.99                                      | 8650.77 | 3919.58 | 3912.39 | 240.22 |
| 12500.00 | 90.87 | 359.99                                      | 8649.25 | 4019.43 | 4012.37 | 240.20 |
| 12600.00 | 90.87 | 359.99                                      | 8647.73 | 4119.29 | 4112.36 | 240.19 |
| 12700.00 | 90.87 | 359.99                                      | 8646.21 | 4219.14 | 4212.35 | 240.17 |
| 12800.00 | 90.87 | 359.99                                      | 8644.69 | 4318.99 | 4312.34 | 240.15 |
| 12900.00 | 90.87 | 359.99                                      | 8643.18 | 4418.84 | 4412.33 | 240.14 |
| 13000.00 | 90.87 | 359.99                                      | 8641.66 | 4518.70 | 4512.32 | 240.12 |
| 13109.30 | 90.87 | 359.99                                      | 8640.00 | 4627.83 | 4621.60 | 240.10 |



## **Devon Energy, Inc.**

**Lea County (NAD83)**

**Eischens 29 Fed**

**#2H**

**OH**

**Plan #1**

# **Anticollision Summary Report**

**02 July, 2012**



**A Schlumberger Company**



Pathfinder  
Anticollision Summary Report

**PATHFINDER**  
A Schlumberger Company

|                     |                    |                              |                                |
|---------------------|--------------------|------------------------------|--------------------------------|
| Company:            | Devon Energy, Inc. | Local Co-ordinate Reference: | Well #2H                       |
| Project:            | Lea County (NAD83) | TVD Reference:               | KB = 19 @ 3776.9usft (McVay 8) |
| Reference Site:     | Eischens 29 Fed    | MD Reference:                | KB = 19 @ 3776.9usft (McVay 8) |
| Site Error:         | 0.0 usft           | North Reference:             | Grid                           |
| Reference Well:     | #2H                | Survey Calculation Method:   | Minimum Curvature              |
| Well Error:         | 0.0 usft           | Output errors are at         | 2.00 sigma                     |
| Reference Wellbore: | OH                 | Database:                    | EDM 5000.1 Single User Db      |
| Reference Design:   | Plan #1            | Offset TVD Reference:        | Offset Datum                   |

|                              |                                                                     |                |                     |
|------------------------------|---------------------------------------------------------------------|----------------|---------------------|
| Reference                    | Plan #1                                                             |                |                     |
| Filter type:                 | NO GLOBAL FILTER: Using user defined selection & filtering criteria |                |                     |
| Interpolation Method:        | Stations                                                            | Error Model:   | Systematic Ellipse  |
| Depth Range:                 | Unlimited                                                           | Scan Method:   | Closest Approach 3D |
| Results Limited by:          | Maximum separation factor of 1.50                                   | Error Surface: | Elliptical Conic    |
| Warning Levels Evaluated at: | 2.00 Sigma                                                          | Casing Method: | Not applied         |

|                     |           |                   |            |                |
|---------------------|-----------|-------------------|------------|----------------|
| Survey Tool Program |           | Date 7/2/2012     |            |                |
| From (usft)         | To (usft) | Survey (Wellbore) | Tool Name  | Description    |
| 0.0                 | 13,082.2  | Plan #1 (OH)      | Pathfinder | Pathfinder MWD |

| Summary                         |                       |                       |                        |                         |                   |              |
|---------------------------------|-----------------------|-----------------------|------------------------|-------------------------|-------------------|--------------|
| Site Name                       | Reference             | Offset                | Distance               |                         | Separation Factor | Warning      |
|                                 | Measured Depth (usft) | Measured Depth (usft) | Between Centres (usft) | Between Ellipses (usft) |                   |              |
| Offset Well - Wellbore - Design |                       |                       |                        |                         |                   |              |
| Green Wave 20 Federal           |                       |                       |                        |                         |                   |              |
| #1H - OH - OH                   |                       |                       |                        |                         |                   | Out of range |
| Ichabod "7" Fed                 |                       |                       |                        |                         |                   |              |
| #1H - OH - OH                   |                       |                       |                        |                         |                   | Out of range |
| #4H - OH - OH                   |                       |                       |                        |                         |                   | Out of range |
| Red Bull 31 State               |                       |                       |                        |                         |                   |              |
| #4H - OH - OH                   |                       |                       |                        |                         |                   | Out of range |
| Thistle Unit                    |                       |                       |                        |                         |                   |              |
| #17H - OH - OH                  |                       |                       |                        |                         |                   | Out of range |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Pathfinder  
Anticollision Summary Report

**PATHFINDER**  
A Schlumberger Company

|                    |                    |                              |                                |
|--------------------|--------------------|------------------------------|--------------------------------|
| Company:           | Devon Energy, Inc. | Local Co-ordinate Reference: | Well #2H                       |
| Project:           | Lea County (NAD83) | TVD Reference:               | KB = 19 @ 3776.9usft (McVay 8) |
| Reference Site:    | Eischens 29 Fed    | MD Reference:                | KB = 19 @ 3776.9usft (McVay 8) |
| Site Error:        | 0.0 usft           | North Reference:             | Grid                           |
| Reference Well:    | #2H                | Survey Calculation Method:   | Minimum Curvature              |
| Well Error:        | 0.0 usft           | Output errors are at         | 2.00 sigma                     |
| Reference Wellbore | OH                 | Database:                    | EDM 5000.1 Single User Db      |
| Reference Design:  | Plan #1            | Offset TVD Reference:        | Offset Datum                   |

Reference Depths are relative to KB = 19 @ 3776.9usft (McVay 8)

Offset Depths are relative to Offset Datum

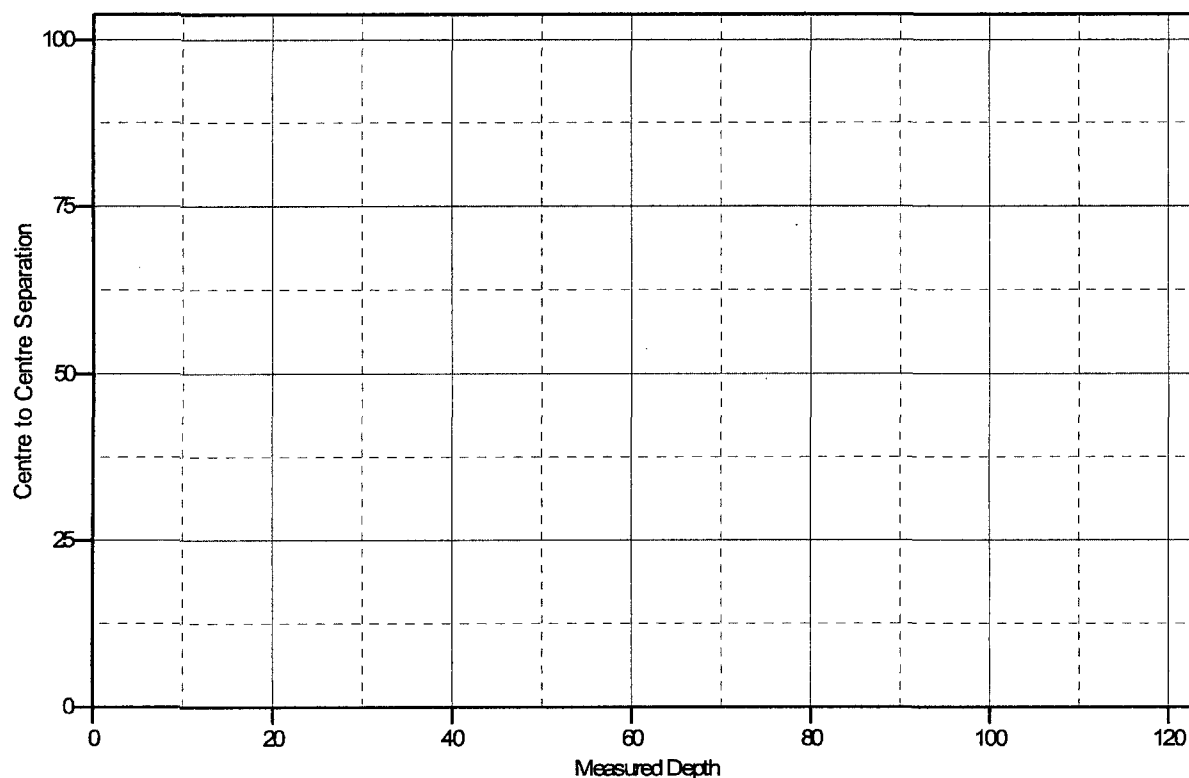
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: #2H

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Grid Convergence at Surface is: 0.35°

## Ladder Plot



## LEGEND

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Pathfinder  
Anticollision Summary Report

PATHFINDER  
A Schlumberger Company

|                     |                    |                              |                                |
|---------------------|--------------------|------------------------------|--------------------------------|
| Company:            | Devon Energy, Inc. | Local Co-ordinate Reference: | Well #2H                       |
| Project:            | Lea County (NAD83) | TVD Reference:               | KB = 19 @ 3776.9usft (McVay 8) |
| Reference Site:     | Eischens 29 Fed    | MD Reference:                | KB = 19 @ 3776.9usft (McVay 8) |
| Site Error:         | 0.0 usft           | North Reference:             | Grid                           |
| Reference Well:     | #2H                | Survey Calculation Method:   | Minimum Curvature              |
| Well Error:         | 0.0 usft           | Output errors are at         | 2.00 sigma                     |
| Reference Wellbore: | OH                 | Database:                    | EDM 5000.1 Single User Db      |
| Reference Design:   | Plan #1            | Offset TVD Reference:        | Offset Datum                   |

Reference Depths are relative to KB = 19 @ 3776.9usft (McVay 8)

Offset Depths are relative to Offset Datum

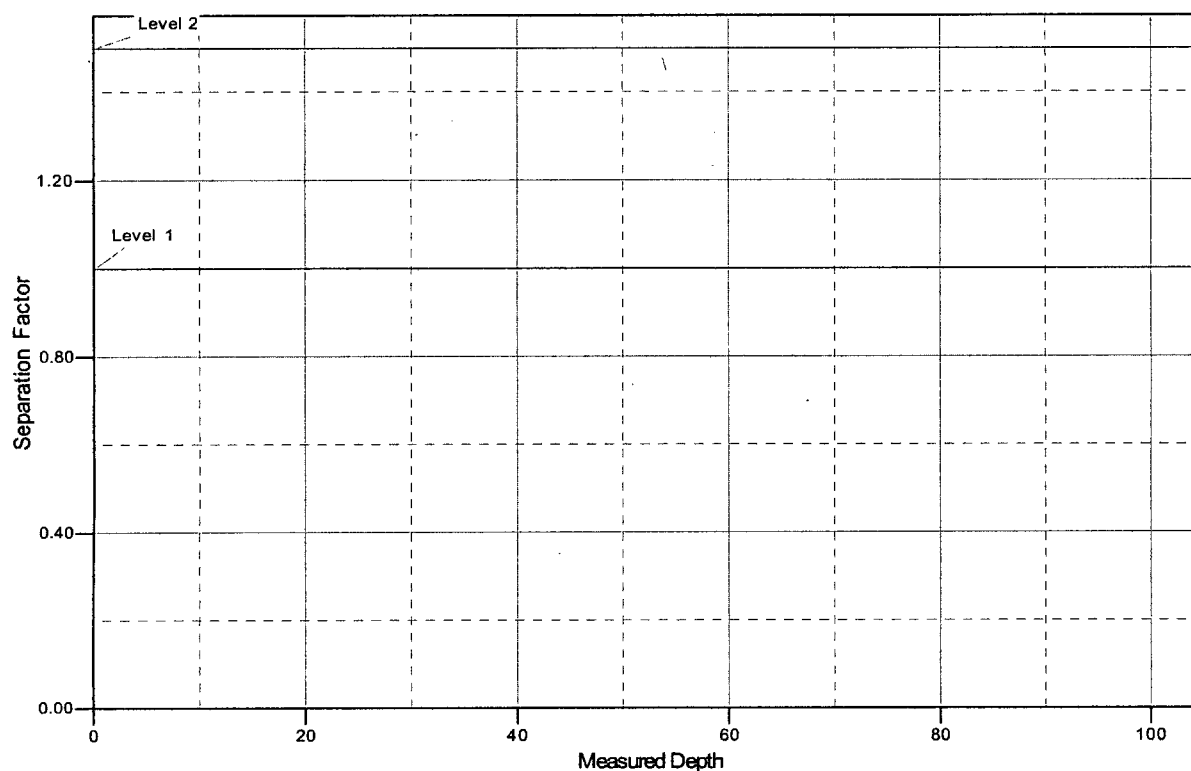
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: #2H

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Grid Convergence at Surface is: 0.35°

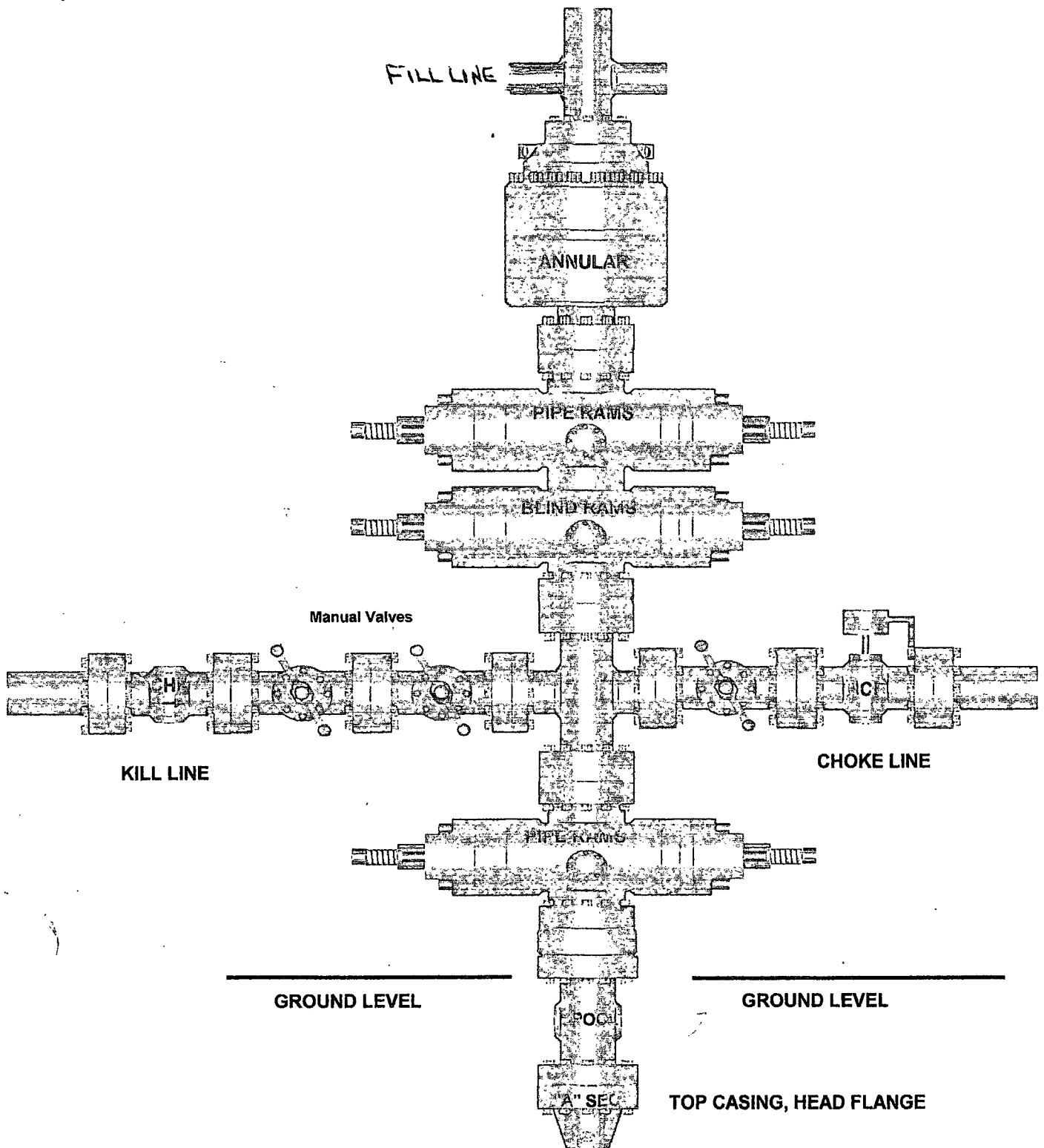
## Separation Factor Plot



## LEGEND

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# 13-5/8" x 3,000 psi BOP Stack



Attachment to Exhibit #1  
NOTES REGARDING BLOWOUT PREVENTERS  
Devon Energy Production Company, LP

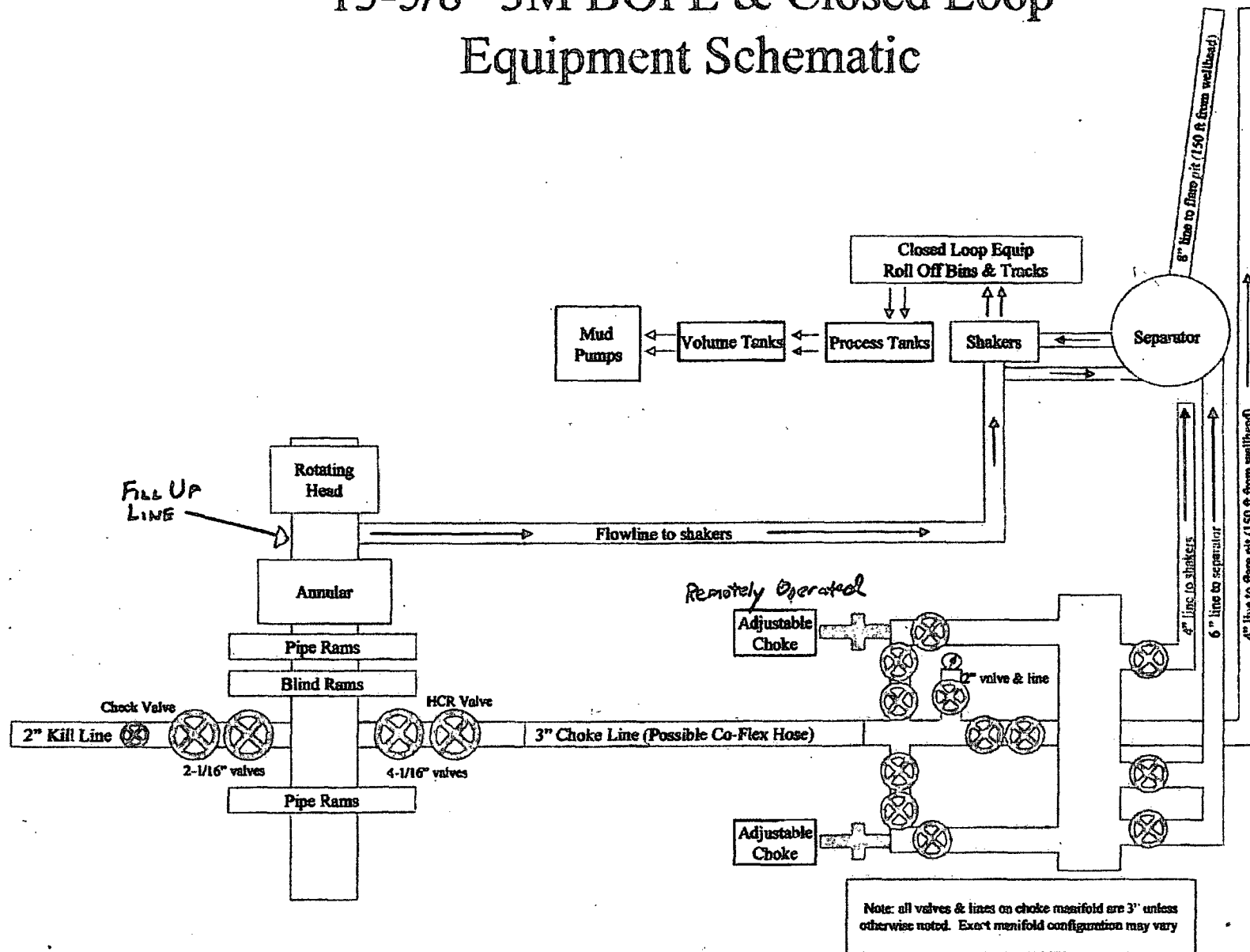
**Eischens 29 Fed 2H**

Surface Location: 330' FSL and 1540' FWL, UL N, Section 29, 18S, 33E, Lea, NM  
Bottom Hole Location: 330' FNL and 1815' FWL, UL C, Section 29, 18S, 33E, Lea, NM

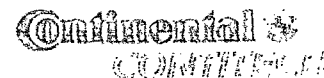
1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
2. Wear ring will be properly installed in head.
3. Blowout preventer and all associated fittings will be in operable condition to withstand a minimum 5000 psi working pressure.
4. All fittings will be flanged.
5. A full bore safety valve tested to a minimum 5000 psi WP with proper thread connections will be available on the rotary rig floor at all times.
6. All choke lines will be anchored to prevent movement.
7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
8. Will maintain a kelly cock attached to the kelly.
9. Hand wheels and wrenches will be properly installed and tested for safe operation.
10. Hydraulic floor control for blowout preventer will be located as near in proximity to driller's controls as possible.
11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.



# 13-5/8" 3M BOPE & Closed Loop Equipment Schematic



# Hydrostatic Test Certificate

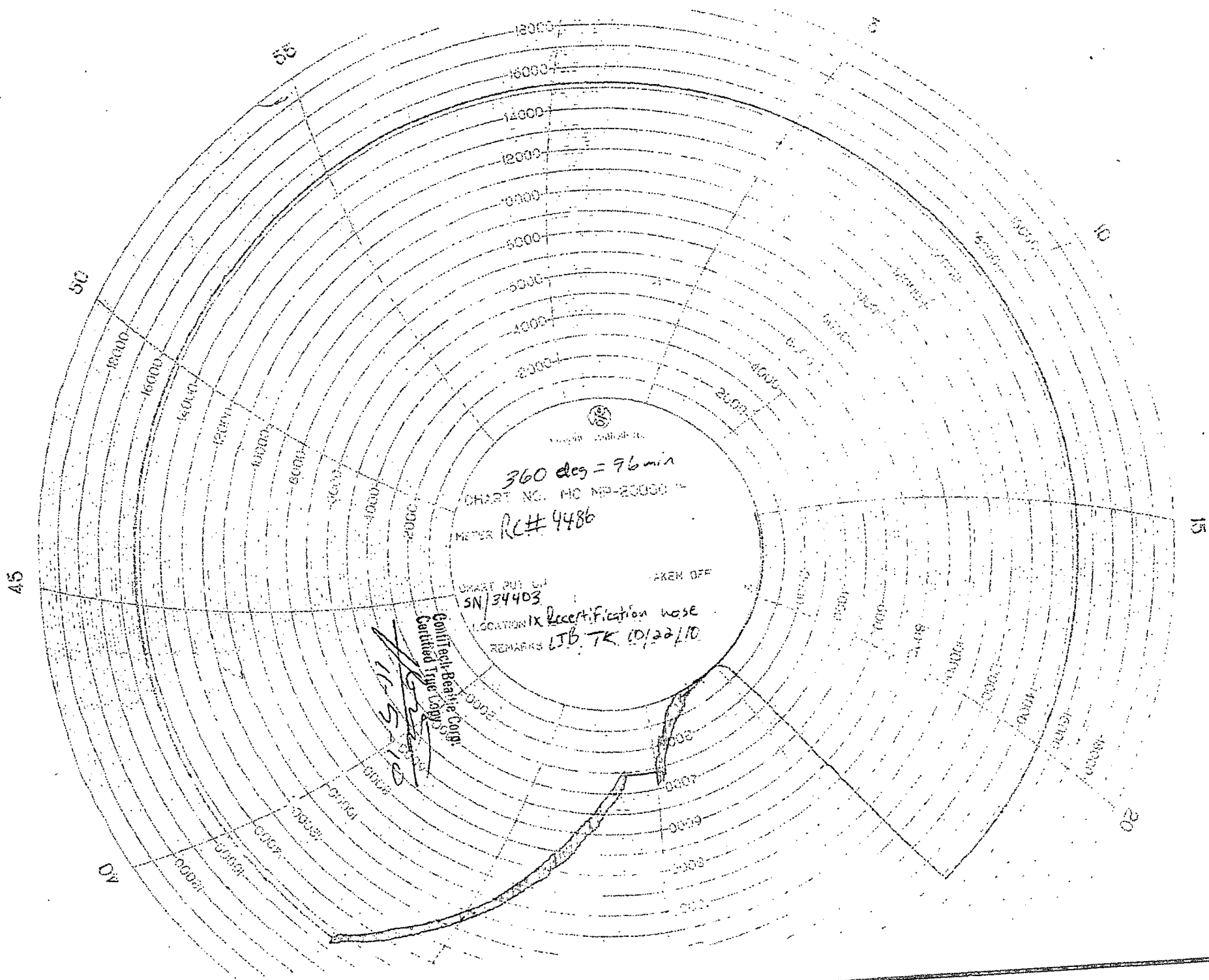


|                                                                                    |                                                  |                                                                              |  |
|------------------------------------------------------------------------------------|--------------------------------------------------|------------------------------------------------------------------------------|--|
| <b>Certificate Number:</b> 4620                                                    | <b>PBC No:</b> 10321                             | <b>Customer Name &amp; Address</b>                                           |  |
| <b>Customer Purchase Order No:</b> RIG 300                                         |                                                  | HELMERICH & PAYNE INT'L DRILLING CO<br>1437 SOUTH BOULDER<br>TULSA, OK 74119 |  |
| <b>Project:</b>                                                                    |                                                  |                                                                              |  |
| <b>Test Centre/Address</b>                                                         | <b>Accepted by: ContiTech Beattie Inspection</b> | <b>Accepted by: Client Inspection</b>                                        |  |
| ContiTech Beattie Corp.<br>11535 Brittmoore Park Drive<br>Houston, TX 77041<br>USA | Signed: Josh Sims<br>Date: 10/27/10              |                                                                              |  |

We certify that the goods detailed hereon have been inspected by our Quality Management System, and to the best of our knowledge are found to conform to relevant industrial standards within the requirements of the purchase order as issued to ContiTech Beattie Corporation.

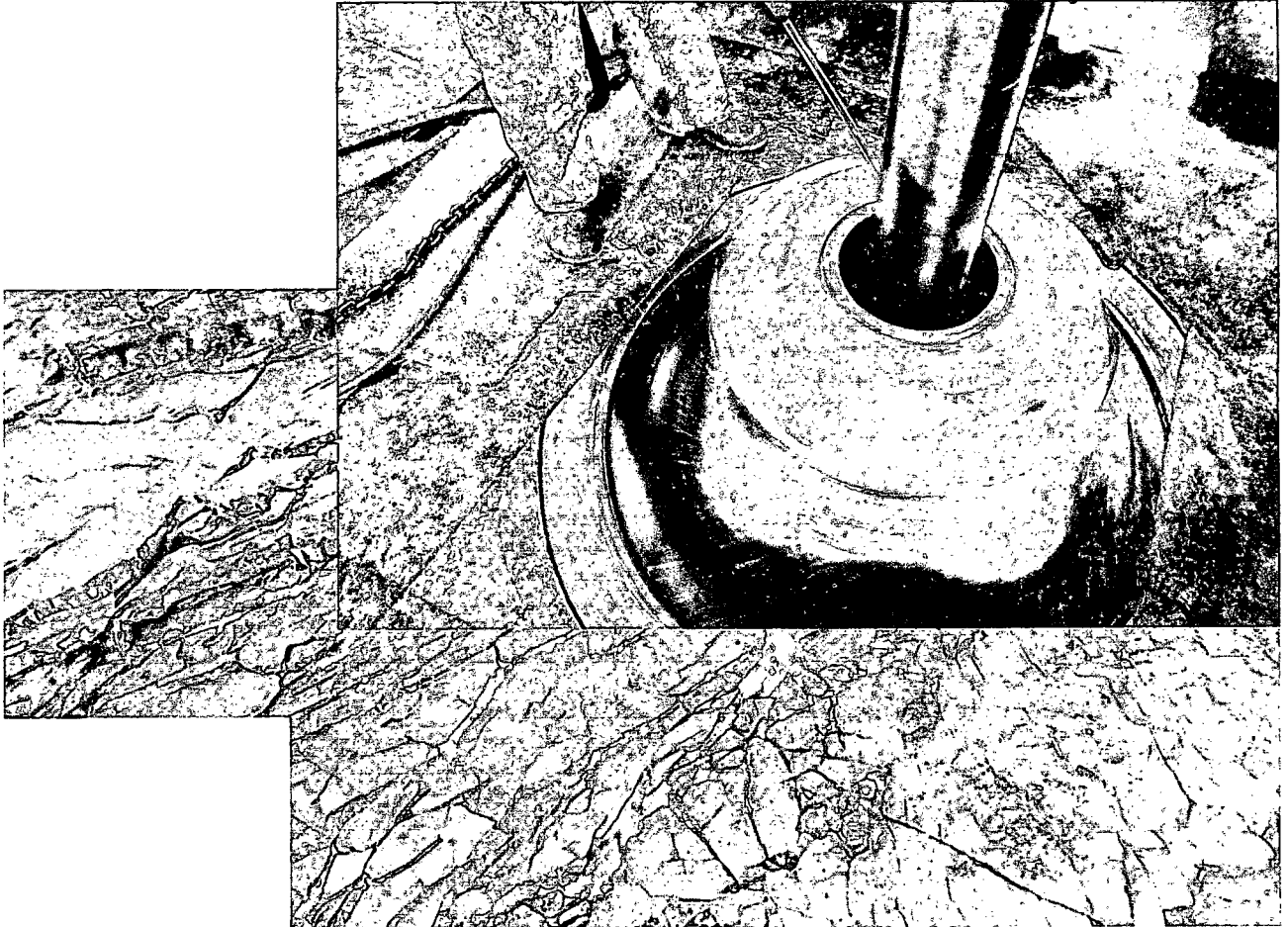
These goods were made in the United States of America.

| Item | Part No. | Description                                                                                                                                                                                                                   | Qty | Serial Number | As-Built Length (m) | Work Press | Test Press | Test Time (minutes) |
|------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---------------|---------------------|------------|------------|---------------------|
| 1    |          | 3" ID 10K Choke & Kill Hose x 35ft OAL<br>End A: 4.1/16" 10Kpsi API Spec 6A Type 6BX Flange<br>End B: 4.1/16" 10Kpsi API Spec 6A Type 6BX Flange<br>Working Pressure: 10,000psi<br>Test Pressure: 15,000psi<br>Serial#: 49108 | 1   | 49108         |                     | 10 kpsi    | 15 kpsi    | 60                  |





Commitment Runs Deep



Design Plan  
Operation and Maintenance Plan  
Closure Plan

SENM - Closed Loop Systems  
June 2012

## **I. Design Plan**

Devon uses various high efficient closed loop systems (CLS). The CLS shown is designed to maintain drill solids at or below 5%. The equipment is arranged to progressively remove solids from the largest to the smallest size. Drilling fluids can thus be reused and savings is realized on mud and disposal costs. Dewatering may be required with the centrifuges to insure removal of ultra fine solids.

The drilling location is constructed to allow storm water to flow to a central sump normally the cellar. This insures no contamination leaves the drilling pad in the event of a spill. Storm water is reused in the mud system or stored in a reserve fluid tank farm until it can be reused. All lubricants, oils, or chemicals are removed immediately from the ground to prevent the contamination of storm water. An oil trap is normally installed on the sump if an oil spill occurs during a storm.

A tank farm is utilized to store drilling fluids including fresh water and brine fluids. The tank farm is constructed on a 20 ml plastic lined, bermed pad to prevent the contamination of the drilling site during a spill. Fluids from other sites may be stored in these tanks for processing by the solids control equipment and reused in the mud system. At the end of the well the fluids are transported from the tank farm to an adjoining well or to the next well for the rig.

Prior to installing a closed-loop system on site, the topsoil, if present, will be stripped and stockpiled for use as the final cover or fill at the time of closure.

Signs will be posted on the fence surrounding the closed-loop system unless the closed-loop system is located on a site where there is an existing well, that is operated by Devon.

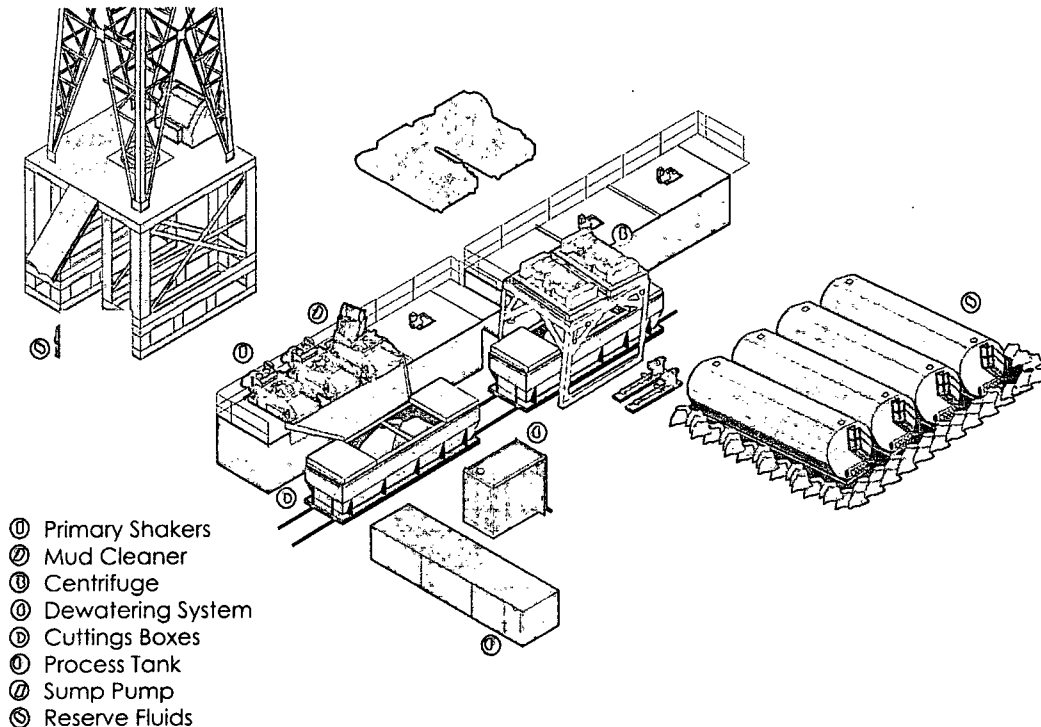
## **II. Operations and Maintenance Plan**

*Primary Shakers:* The primary shakers make the first removal of drill solids from the drilling mud as it leaves the well bore. The shakers are sized to handle maximum drilling rate at optimal screen size. The shakers normally remove solids down to 74 microns.

**Mud Cleaner:** The Mud Cleaner cleans the fluid after it leaves the shakers. A set of hydrocyclones are sized to handle 1.25 to 1.5 times the maximum circulating rate. This ensures all the fluid is being processed to an average cut point of 25 microns. The wet discharged is dewatered on a shaker equipped with ultra fine mesh screens and generally cut at 40 microns.

devon

## Closed Loop Schematic



**Centrifuges:** The centrifuges can be utilized depending on the well's anticipated solids volume. One or two centrifuges can be used depending on the well geometry or depth of well. The centrifuges are sized to maintain low gravity solids at 5% or below. They may or may not need a dewatering system to enhance the removal rates. The centrifuges can make a cut point of 8-10 microns depending on bowl speed, feed rate, solids loading and other factors.

The centrifuge system is designed to work on the active system and be flexible to process incoming fluids from other locations. This set-up is also dependant on well factors.

**Dewatering System:** The dewatering system is a chemical mixing and dosing system designed to enhance the solids removal of the centrifuge. Not commonly used in shallow wells. It may contain pH adjustment, coagulant mixing and dosing, and polymer mixing and dosing. Chemical flocculation binds

ultra fine solids into a mass that is within the centrifuge operating design. The dewatering system improves the centrifuge cut point to infinity or allows for the return of clear water or brine fluid. This ability allows for the ultimate control of low gravity solids.

*Cuttings Boxes:* Cuttings boxes are utilized to capture drill solids that are discarded from the solids control equipment. These boxes are set upon a rail system that allows for the removal and replacement of a full box of cuttings with an empty one. They are equipped with a cover that insures no product is spilled into the environment during the transportation phase.

*Process Tank:* (Optional) The process tank allows for the holding and process of fluids that are being transferred into the mud system. Additionally, during times of lost circulation the process tank may hold active fluids that are removed for additional treatment. It can further be used as a mixing tank during well control conditions.

*Sump and Sump Pump:* The sump is used to collect storm water and the pump is used to transfer this fluid to the active system or to the tank for to hold in reserve. It can also be used to collect fluids that may escape during spills. The location contains drainage ditches that allow the location fluids to drain to the sump.

*Reserve Fluids (Tank Farm):* A series of frac tanks are used to replace the reserve pit. These are steel tanks that are equipped with a manifold system and a transfer pump. These tanks can contain any number of fluids used during the drilling process. These can include fresh water, cut brine, and saturated salt fluid. The fluid can be from the active well or reclaimed fluid from other locations. A 20 ml liner and berm system is employed to ensure the fluids do not migrate to the environment during a spill.

If a leak develops, the appropriate division district office will be notified within 48 hours of the discovery and the leak will be addressed. Spill prevention is accomplished by maintaining pump packing, hoses, and pipe fittings to insure no leaks are occurring. During an upset condition the source of the spill is isolated and repaired as soon as it is discovered. Free liquid is removed by a diaphragm pump and returned to the mud system. Loose topsoil may be used to stabilize the spill and the contaminated soil is excavated and placed in the cuttings boxes. After the well is finished and the rig has moved, the entire location is scrapped and testing will be performed to determine if a release has occurred.

All trash is kept in a wire mesh enclosure and removed to an approved landfill when full. All spent motor oils are kept in separate containers and they are removed and sent to an approved recycling center. Any spilled lubricants, pipe

dope, or regulated chemicals are removed from soil and sent to landfills approved for these products.

These operations are monitored by Solids Control service technicians. Daily logs are maintained to ensure optimal equipment operation and maintenance. Screen and chemical use is logged to maintain inventory control. Fluid properties are monitored and recorded and drilling mud volumes are accounted for in the mud storage farm. This data is kept for end of well review to insure performance goals are met. Lessons learned are logged and used to help with continuous improvement.

### **III. Closure Plan**

A maximum 170' X 170' caliche pad is built per well. All of the trucks and steel tanks fit on this pad. All fluid cuttings go to the steel tanks to be hauled by various trucking companies to an agency approved disposal.