

HOBBS OCD

Form 3160-3  
(March 2012)

JUL 29 2013

OCD Hobbs

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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>NMNM 116574                                                                                             |  |
| 1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone                                       |  | 6. If Indian, Allottee or Tribe Name                                                                                           |  |
| 2. Name of Operator<br>Devon Energy Production Company, L.P.                                                                                                                                                                                      |  | 7. If Unit or CA Agreement, Name and No.                                                                                       |  |
| 3a. Address<br>333 W. Sheridan Ave.<br>Oklahoma City, OK 73102                                                                                                                                                                                    |  | 8. Lease Name and Well No.<br>Bell Lake 24 Fed 4H                                                                              |  |
| 3b. Phone No. (include area code)<br>405-552-7848                                                                                                                                                                                                 |  | 9. API Well No.<br>30-025-41304                                                                                                |  |
| 4. Location of Well (Report location clearly and in accordance with any State requirements.)<br>At surface 200 FSL & 2030 FEL Unit O, Sec 24, 24S-32E PP: 200 FSL & 1980 FWL<br>At proposed prod. zone 330 FNL & 1980 FWL Unit C, Sec 24, 24S-32E |  | 10. Well Name and Location<br>Bell Lake 24 Fed 4H                                                                              |  |
| 14. Distance in miles and direction from nearest town or post office*<br>Approximately 25 miles E of Malaga, NM                                                                                                                                   |  | 11. Sec., T. R. M. or Blk. and Survey or Area<br>Sec 24, T24S- R32E                                                            |  |
| 15. Distance from proposed* location to nearest property or lease line, ft.<br>(Also to nearest drig. unit line, if any)<br>200'                                                                                                                  |  | 12. County or Parish<br>Lea County                                                                                             |  |
| 16. No. of acres in lease<br>680                                                                                                                                                                                                                  |  | 13. State<br>NM                                                                                                                |  |
| 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>see attached map |  |
| 19. Proposed Depth<br>MD: 16,093' TVD: 11,105'                                                                                                                                                                                                    |  | 20. BLM/BIA Bond No. on file<br>CO-1104; NMB-000801                                                                            |  |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.)<br>3555' GL                                                                                                                                                                                   |  | 22. Approximate date work will start*<br>45 days                                                                               |  |

24. Attachments To be pad drilled w/ Bell Lake 24 Fed 2H and 3H

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

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

|                   |                                    |                    |
|-------------------|------------------------------------|--------------------|
| 25. Signature<br> | Name (Printed/Typed)<br>David Cook | Date<br>01/16/2013 |
|-------------------|------------------------------------|--------------------|

Title  
Regulatory Specialist

|                                                |                                             |                     |
|------------------------------------------------|---------------------------------------------|---------------------|
| Approved by (Signature)<br>/s/George MacDonell | Name (Printed/Typed)<br>/s/George MacDonell | Date<br>JUN 25 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)

Carlsbad Controlled Water Basin

Approval Subject to General Requirements  
& Special Stipulations Attached

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

AUG 01 2013

RM

KZ  
07/31/13

COPY

**DRILLING PROGRAM**  
Devon Energy Production Company, LP  
**Bell Lake 24 Fed 4H**

Surface Location: 200 FSL & 2030 FEL, Unit O, Sec 24 T24S R32E, Lea, NM  
Bottom Hole Location: 330 FNL & 1980 FWL, Unit C, Sec 24 T24S R32E, Lea, NM

**1. Geologic Name of Surface Formation**

a. Quaternary

**2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:**

|                                     |         |           |
|-------------------------------------|---------|-----------|
| a. Fresh Water                      | 200'    |           |
| b. Rustler                          | 1,078'  |           |
| c. Top of Salt                      | 1,410'  |           |
| d. Base of Salt                     | 4,750'  |           |
| e. Delaware                         | 4,950'  | Oil & Gas |
| f. Bone Spring                      | 8,950'  | Oil & Gas |
| g. 1 <sup>st</sup> Bone Spring Sand | 10,030' | Oil & Gas |
| h. 2 <sup>nd</sup> Bone Spring Sand | 10,582' | Oil & Gas |

Total Depth                      16,093' MD                      11,105' TVD

**3. Casing Program: (All casing is new and API approved.)**

| <u>Hole Size</u> | <u>Hole Interval</u> | <u>OD Csg</u> | <u>Casing Interval</u> | <u>Weight</u> | <u>Collar</u> | <u>Grade</u> |
|------------------|----------------------|---------------|------------------------|---------------|---------------|--------------|
| 17 1/2"          | 0'-1,150'            | 13 3/8"       | 0'-1,150'              | 48#           | ST&C          | H-40         |
| 12 1/4"          | 1,150'-4,900'        | 9 5/8"        | 0'-4,900'              | 40#           | LT&C          | HCK-55       |
| 8 3/4"           | 4,900'-10,200'       | 5 1/2"        | 0'-10,200'             | 17#           | LT&C          | HCP-110      |
| 8 3/4"           | 10,200'-16,093'      | 5 1/2"        | 10,200'-16,093'        | 17#           | BT&C          | HCP-110      |

Sec  
COP

Design Factors:

| <u>Casing Size</u>        | <u>Collapse Design Factor</u> | <u>Burst Design Factor</u> | <u>Tension Design Factor</u> |
|---------------------------|-------------------------------|----------------------------|------------------------------|
| 13-3/8", 48#, H-40, ST&C  | 1.43                          | 3.21                       | 5.83                         |
| 9-5/8", 40#, HCK-55, LT&C | 1.66                          | 1.38                       | 3.21                         |
| 5-1/2" 17# HCP-110 LTC    | 1.44                          | 2.05                       | 1.63                         |
| 5-1/2" 17# HCP-110 BTC    | 1.52                          | 2.17                       | 5.96                         |

#### 4. Cement Program: (volumes based on at least 25% excess):

|         |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13 3/8" | Surface      | <p><b>Lead:</b> 520 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</p> <p><b>Yield:</b> 1.75 cf/sk</p> <p><b>TOC @ surface</b></p> <p><b>Tail:</b> 515 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Poly-E-Flake + 63.1% Fresh Water, 14.8 ppg</p> <p><b>Yield:</b> 1.35 cf/sk</p>                                                                                                |
| 9-5/8"  | Intermediate | <p><b>Lead:</b> 1085 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</p> <p><b>Yield:</b> 1.85 cf/sk</p> <p><b>TOC @ surface</b></p> <p><b>Tail:</b> 360 sacks Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Water, 14.8 ppg</p> <p><b>Yield:</b> 1.33 cf/sk</p>                                                                                                          |
| 5-1/2"  | Production   | <p><b>1<sup>st</sup> Stage</b></p> <p><b>Lead:</b> 650 sacks (65:35) Class H Cement:Poz (Fly Ash) + 6% bwoc Bentonite + 0.2% bwoc HR-601 + 74.1% Fresh Water, 12.5 ppg</p> <p><b>Yield:</b> 1.95 cf/sk</p> <p><b>Tail:</b> 1580 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</p> <p><b>Yield:</b> 1.22 cf/sk</p> <p><b>DV TOOL at 6000 ft</b></p> |

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

**Lead:** 130 sacks Class C Cement + 3% bwoc Econolite + 0.125 lbs/sack Poly-E-Flake + 82.4% Fresh Water, 11.4 ppg

**Yield:** 2.87 cf/sk

**Tail:** 250 sacks Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Fresh Water, 14.8 ppg

**Yield:** 1.33cf/sk

**TOC @ 4,400' ft**

**The above cement volumes could be revised pending the caliper measurement from the open hole logs.**

**5. Pressure Control Equipment**

A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the surface casing shoe. The BOP system used to drill the intermediate hole will be tested per BLM Onshore Oil and Gas Order 2.

A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the intermediate casing shoe. The BOP system used to drill the production hole will be tested per BLM Onshore Oil and Gas Order 2.

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.

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**

| <u>Depth</u>   | <u>Mud Wt.</u> | <u>Visc.</u> | <u>Fluid Loss</u> | <u>Type System</u> |
|----------------|----------------|--------------|-------------------|--------------------|
| 0 - 1,150      | 8.4 - 9.0      | 30 - 34      | N/C               | FW                 |
| 1,150 - 4,900  | 9.8 - 10.0     | 28 - 32      | N/C               | Brine              |
| 4,900 - 16,093 | 8.6 - 9.0      | 28 - 32      | N/C-12            | FW                 |

The necessary mud products for weight addition and fluid loss control will be on location at all times. Visual mud monitoring equipment will be in place to detect volume changes indicating loss or gain of circulating fluid volume. If abnormal pressures are encountered, electronic/mechanical mud monitoring equipment will be installed.

7. **Auxiliary Well Control and Monitoring Equipment:**
- a. A Kelly cock will be in the drill string at all times.
  - b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
  - c. Hydrogen Sulfide detection equipment will be in operation after drilling out the 13 3/8" casing shoe until the 5 1/2" casing is cemented. Breathing equipment will be on location upon drilling the 13 3/8" shoe until total depth is reached.
8. **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:
    - i. Total Depth to Intermediate Casing      Dual Laterolog-Micro Laterolog with SP and Gamma Ray. Compensated Neutron – Z Density log with Gamma Ray and Caliper.
    - ii. Total Depth to Surface      Compensated Neutron with Gamma Ray
    - iii. No coring program is planned
    - iv. Additional testing will be initiated subsequent to setting the 5 1/2" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.
9. **Potential Hazards:**
- a. 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 No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 4,850 psi and Estimated BHT 165°. No H<sub>2</sub>S is anticipated to be encountered.
10. **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 after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 25 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.



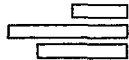
**Weatherford<sup>®</sup>**

## **Drilling Services**

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## **Proposal**

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**devon**

BELL LAKE 24 FED 4H

LEA COUNTY, NM

WELL FILE: **PLAN 2**

JANUARY 4, 2013

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**Weatherford International, Ltd.**

P.O. Box 61028

Midland, TX 79711 USA

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+1.432.561.8895 Fax

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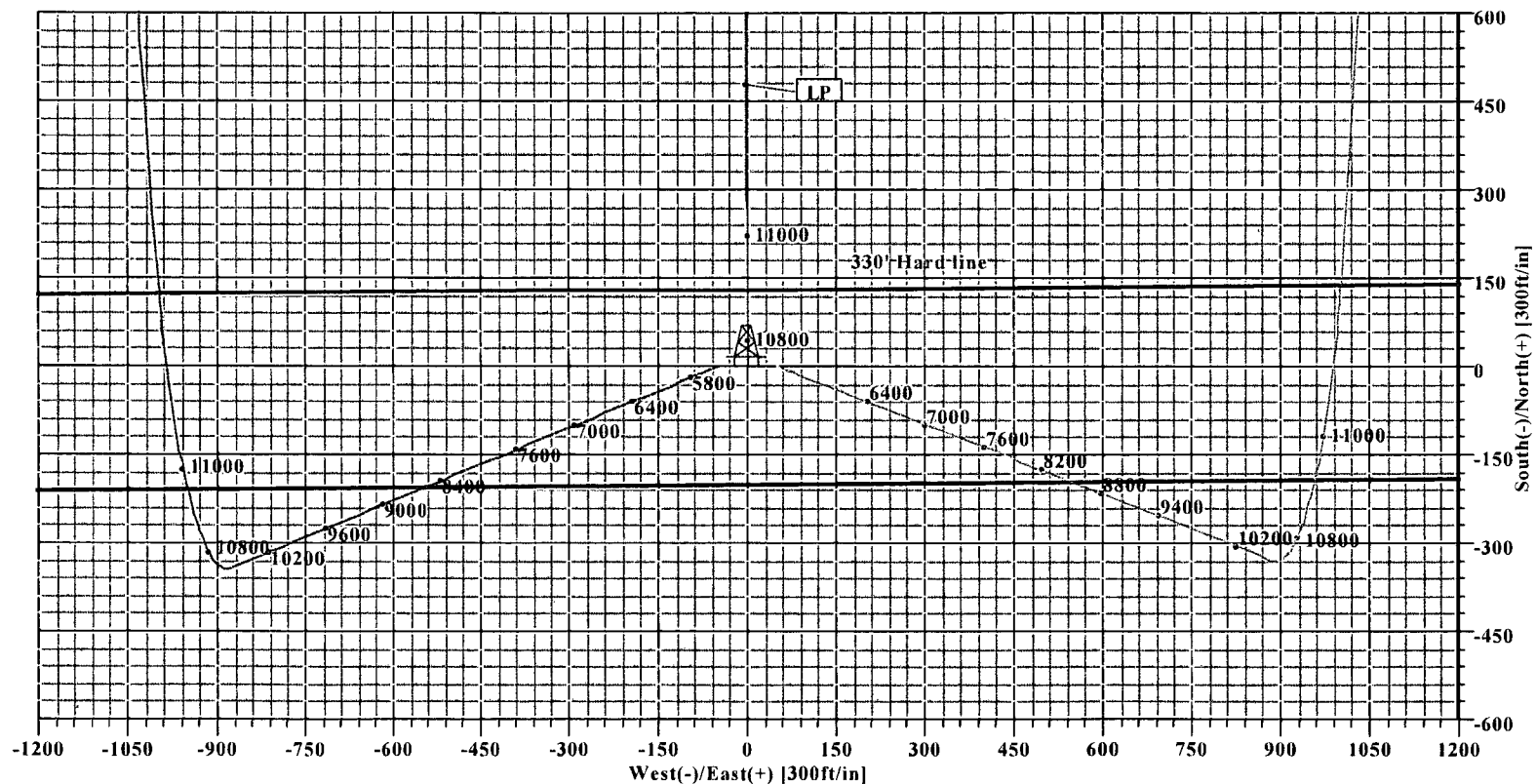


Bell Lake 24 Fed PAD  
Lea County, New Mexico

| LEGEND |                                    |
|--------|------------------------------------|
|        | Bell Lake 24 Fed 2H (BL 24 Fed 2H) |
|        | Bell Lake 24 Fed 4H (BL 24 Fed 4H) |
|        | BL 24 Fed 3H                       |
|        | Plan #1                            |



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**Bell Lake 24 Fed 4H**  
**Lea County, New Mexico**

**SECTION DETAILS**

| Sec | MD       | Inc   | Azi    | TVD      | +N/-S   | +E/-W    | DLeg  | TFace  | VSec    | Target    |
|-----|----------|-------|--------|----------|---------|----------|-------|--------|---------|-----------|
| 1   | 0.00     | 0.00  | 344.84 | 0.00     | 0.00    | 0.00     | 0.00  | 0.00   | 0.00    |           |
| 2   | 5345.00  | 0.00  | 344.84 | 5345.00  | 0.00    | 0.00     | 0.00  | 344.84 | 0.00    |           |
| 3   | 5678.33  | 10.00 | 247.52 | 5676.64  | -11.09  | -26.81   | 3.00  | 0.00   | -3.70   |           |
| 4   | 10686.17 | 10.00 | 247.52 | 10608.41 | -343.59 | -830.32  | 0.00  | 0.00   | -114.50 |           |
| 5   | 11462.23 | 90.00 | 355.82 | 11105.00 | 125.84  | -947.95  | 12.00 | 108.04 | 369.36  | LP Tgt 4H |
| 6   | 16093.07 | 90.00 | 355.82 | 11105.00 | 4744.39 | -1285.21 | 0.00  | 0.00   | 4915.38 | PBHL 4H   |

**WELL DETAILS**

| Name                | +N/-S | +E/-W  | Northing  | Easting   | Latitude      | Longitude      | Slot |
|---------------------|-------|--------|-----------|-----------|---------------|----------------|------|
| Bell Lake 24 Fed 4H | -0.83 | -99.96 | 435923.39 | 760016.11 | 32°11'47.228N | 103°37'35.013W | N/A  |

**TARGET DETAILS**

| Name      | TVD      | +N/-S   | +E/-W    | Northing  | Easting   | Shape |
|-----------|----------|---------|----------|-----------|-----------|-------|
| PBHL 4H   | 11105.00 | 4744.39 | -1285.21 | 440667.78 | 758730.90 | Point |
| LP Tgt 4H | 11105.00 | 125.84  | -947.95  | 436049.23 | 759068.16 | Point |

**SITE DETAILS**

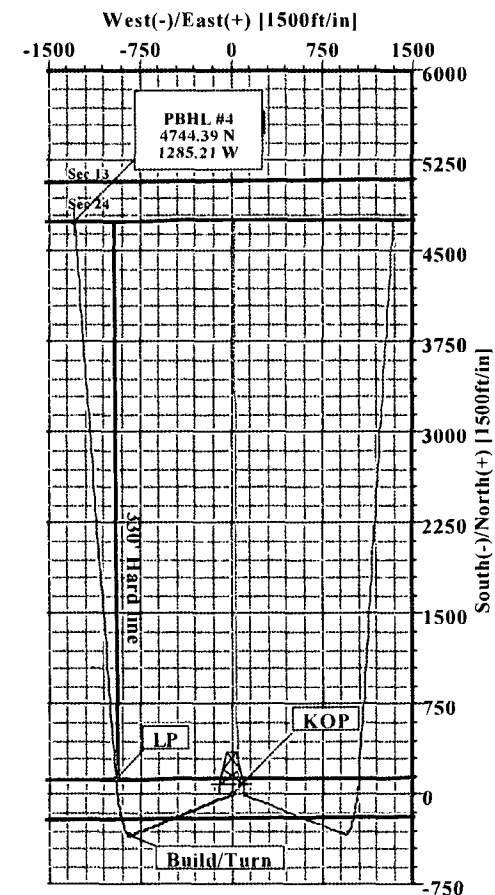
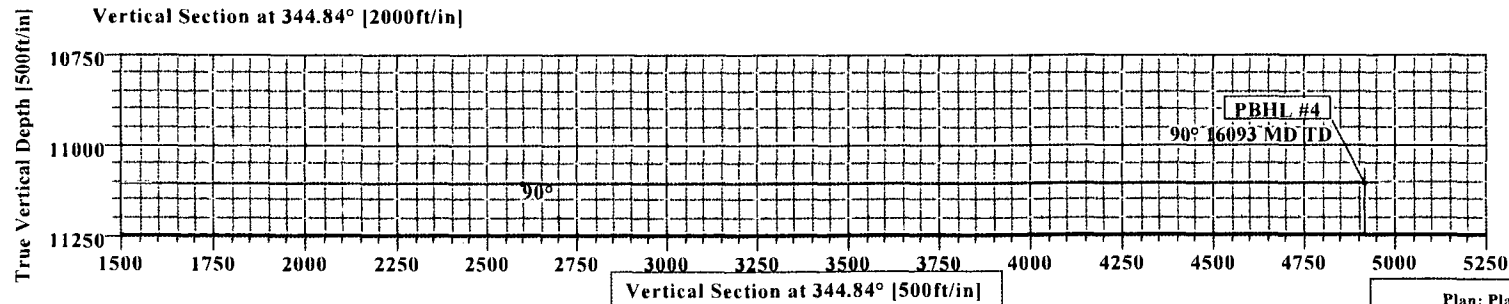
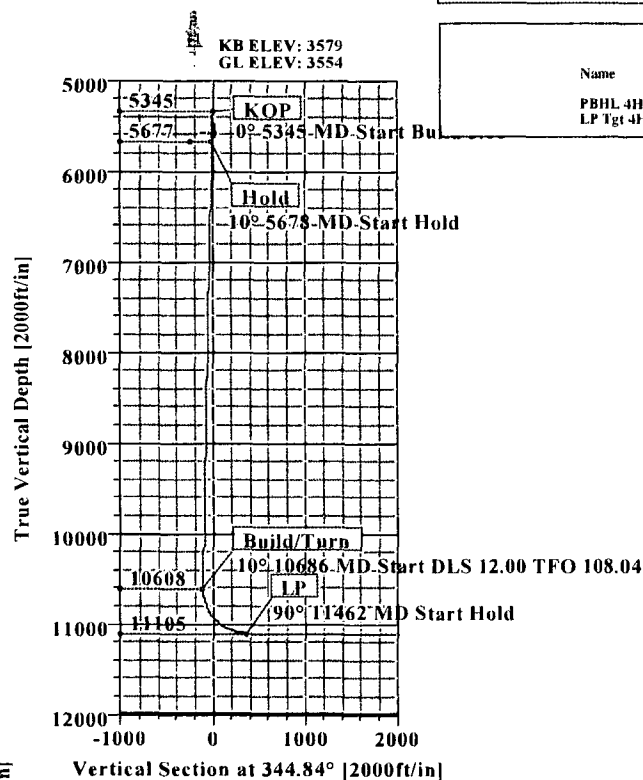
Bell Lake 24 Fed PAD  
Site Centre Northing: 435924.22  
Easting: 760116.07  
Ground Level: 3554.00  
Positional Uncertainty: 0.00  
Convergence: 0.38



**Weatherford**

**LEGEND**

- Bell Lake 24 Fed 2H (BL 24 Fed 2H)
- Bell Lake 24 Fed 3H (BL 24 Fed 3H)
- BL 24 Fed 4H
- Plan #2



Plan: Plan #2 (Bell Lake 24 Fed 4H/BL 24 Fed 4H)

Created By: Russell W. Joyner

Date: 1/4/2013



# Weatherford

## Wft Plan Report X Y's.

**Weatherford**

Company: Devon Energy  
Field: Lea County, New Mexico (NAD 83)  
Site: Bell Lake 24 Fed PAD  
Well: Bell Lake 24 Fed 4H  
Wellpath: BL 24 Fed 4H

Date: 1/4/2013 Time: 11:09:22 Page: 1  
Co-ordinate(NE) Reference: Well: Bell Lake 24 Fed 4H, Grid North  
Vertical (TVD) Reference: #4 3579.0  
Section (VS) Reference: Well (0.00N,0.00E,344.84Azi)  
Survey Calculation Method: Minimum Curvature Db: Sybase

Plan: Plan #2

Date Composed: 1/2/2013  
Version: 1  
Tied-to: From Surface

Principal: Yes

Site: Bell Lake 24 Fed PAD

Site Position: Northing: 435924.22 ft Latitude: 32 11 47.230 N  
From: Map Easting: 760116.07 ft Longitude: 103 37 33.850 W  
Position Uncertainty: 0.00 ft North Reference: Grid  
Ground Level: 3554.00 ft Grid Convergence: 0.38 deg

Well: Bell Lake 24 Fed 4H

Slot Name:

Well Position: +N/-S -0.83 ft Northing: 435923.39 ft Latitude: 32 11 47.228 N  
+E/-W -99.96 ft Easting: 760016.11 ft Longitude: 103 37 35.013 W  
Position Uncertainty: 0.00 ft

Wellpath: BL 24 Fed 4H

Drilled From: Surface  
Tie-on Depth: 0.00 ft  
Above System Datum: Mean Sea Level  
Declination: 7.30 deg  
Mag Dip Angle: 60.09 deg  
+E/-W Direction  
ft deg

Current Datum: #4 Height 3579.00 ft  
Magnetic Data: 12/15/2013  
Field Strength: 48369 nT  
Vertical Section: Depth From (TVD)  
ft

0.00 0.00 0.00 344.84

### Plan Section Information

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | TFO<br>deg | Target    |
|----------|-------------|-------------|-----------|-------------|-------------|------------------|--------------------|-------------------|------------|-----------|
| 0.00     | 0.00        | 344.84      | 0.00      | 0.00        | 0.00        | 0.00             | 0.00               | 0.00              | 0.00       |           |
| 5345.00  | 0.00        | 344.84      | 5345.00   | 0.00        | 0.00        | 0.00             | 0.00               | 0.00              | 344.84     |           |
| 5678.33  | 10.00       | 247.52      | 5676.64   | -11.09      | -26.81      | 3.00             | 3.00               | 0.00              | 0.00       |           |
| 10686.17 | 10.00       | 247.52      | 10608.41  | -343.59     | -830.32     | 0.00             | 0.00               | 0.00              | 0.00       |           |
| 11462.23 | 90.00       | 355.82      | 11105.00  | 125.84      | -947.95     | 12.00            | 10.31              | 13.96             | 108.04     | LP Tgt 4H |
| 16093.07 | 90.00       | 355.82      | 11105.00  | 4744.39     | -1285.21    | 0.00             | 0.00               | 0.00              | 0.00       | PBHL 4H   |

### Survey

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | N/S<br>ft | E/W<br>ft | VS<br>ft | DLS<br>deg/100ft | MapN<br>ft | MapE<br>ft | Comment |
|----------|-------------|-------------|-----------|-----------|-----------|----------|------------------|------------|------------|---------|
| 5300.00  | 0.00        | 344.84      | 5300.00   | 0.00      | 0.00      | 0.00     | 0.00             | 435923.39  | 760016.11  |         |
| 5345.00  | 0.00        | 344.84      | 5345.00   | 0.00      | 0.00      | 0.00     | 0.00             | 435923.39  | 760016.11  | KOP     |
| 5400.00  | 1.65        | 247.52      | 5399.99   | -0.30     | -0.73     | -0.10    | 3.00             | 435923.09  | 760015.38  |         |
| 5500.00  | 4.65        | 247.52      | 5499.83   | -2.40     | -5.81     | -0.80    | 3.00             | 435920.99  | 760010.30  |         |
| 5600.00  | 7.65        | 247.52      | 5599.24   | -6.50     | -15.71    | -2.17    | 3.00             | 435916.89  | 760000.40  |         |
| 5678.33  | 10.00       | 247.52      | 5676.64   | -11.09    | -26.81    | -3.70    | 3.00             | 435912.30  | 759989.30  | Hold    |
| 5700.00  | 10.00       | 247.52      | 5697.98   | -12.53    | -30.29    | -4.18    | 0.00             | 435910.86  | 759985.82  |         |
| 5800.00  | 10.00       | 247.52      | 5796.46   | -19.17    | -46.33    | -6.39    | 0.00             | 435904.22  | 759969.78  |         |
| 5900.00  | 10.00       | 247.52      | 5894.94   | -25.81    | -62.38    | -8.60    | 0.00             | 435897.58  | 759953.73  |         |
| 6000.00  | 10.00       | 247.52      | 5993.42   | -32.45    | -78.42    | -10.81   | 0.00             | 435890.94  | 759937.69  |         |
| 6100.00  | 10.00       | 247.52      | 6091.90   | -39.09    | -94.47    | -13.03   | 0.00             | 435884.30  | 759921.64  |         |
| 6200.00  | 10.00       | 247.52      | 6190.39   | -45.73    | -110.51   | -15.24   | 0.00             | 435877.66  | 759905.60  |         |
| 6300.00  | 10.00       | 247.52      | 6288.87   | -52.37    | -126.56   | -17.45   | 0.00             | 435871.02  | 759889.55  |         |
| 6400.00  | 10.00       | 247.52      | 6387.35   | -59.01    | -142.60   | -19.66   | 0.00             | 435864.38  | 759873.51  |         |
| 6500.00  | 10.00       | 247.52      | 6485.83   | -65.65    | -158.65   | -21.88   | 0.00             | 435857.74  | 759857.46  |         |
| 6600.00  | 10.00       | 247.52      | 6584.31   | -72.29    | -174.69   | -24.09   | 0.00             | 435851.10  | 759841.42  |         |
| 6700.00  | 10.00       | 247.52      | 6682.79   | -78.93    | -190.74   | -26.30   | 0.00             | 435844.46  | 759825.37  |         |
| 6800.00  | 10.00       | 247.52      | 6781.27   | -85.57    | -206.78   | -28.51   | 0.00             | 435837.82  | 759809.33  |         |
| 6900.00  | 10.00       | 247.52      | 6879.75   | -92.21    | -222.83   | -30.73   | 0.00             | 435831.18  | 759793.28  |         |
| 7000.00  | 10.00       | 247.52      | 6978.23   | -98.85    | -238.87   | -32.94   | 0.00             | 435824.54  | 759777.24  |         |
| 7100.00  | 10.00       | 247.52      | 7076.71   | -105.49   | -254.92   | -35.15   | 0.00             | 435817.90  | 759761.19  |         |



# Weatherford

## Wft Plan Report X Y's.

**Weatherford**

Company: Devon Energy  
Field: Lea County, New Mexico (NAD 83)  
Site: Bell Lake 24 Fed PAD  
Well: Bell Lake 24 Fed 4H  
Wellpath: BL 24 Fed 4H

Date: 1/4/2013 Time: 11:09:22 Page: 2  
Co-ordinate(NE) Reference: Well: Bell Lake 24 Fed 4H, Grid North  
Vertical (TVD) Reference: #4 3579.0  
Section (VS) Reference: Well (0.00N,0.00E,344.84Azi)  
Survey Calculation Method: Minimum Curvature Db: Sybase

### Survey

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | N/S<br>ft | E/W<br>ft | VS<br>ft | DLS<br>deg/100ft | MapN<br>ft | MapE<br>ft | Comments   |
|----------|-------------|-------------|-----------|-----------|-----------|----------|------------------|------------|------------|------------|
| 7200.00  | 10.00       | 247.52      | 7175.19   | -112.13   | -270.96   | -37.36   | 0.00             | 435811.26  | 759745.15  |            |
| 7300.00  | 10.00       | 247.52      | 7273.67   | -118.77   | -287.01   | -39.58   | 0.00             | 435804.62  | 759729.10  |            |
| 7400.00  | 10.00       | 247.52      | 7372.16   | -125.41   | -303.05   | -41.79   | 0.00             | 435797.98  | 759713.06  |            |
| 7500.00  | 10.00       | 247.52      | 7470.64   | -132.05   | -319.10   | -44.00   | 0.00             | 435791.34  | 759697.01  |            |
| 7600.00  | 10.00       | 247.52      | 7569.12   | -138.68   | -335.14   | -46.21   | 0.00             | 435784.71  | 759680.97  |            |
| 7700.00  | 10.00       | 247.52      | 7667.60   | -145.32   | -351.19   | -48.43   | 0.00             | 435778.07  | 759664.92  |            |
| 7800.00  | 10.00       | 247.52      | 7766.08   | -151.96   | -367.23   | -50.64   | 0.00             | 435771.43  | 759648.88  |            |
| 7900.00  | 10.00       | 247.52      | 7864.56   | -158.60   | -383.28   | -52.85   | 0.00             | 435764.79  | 759632.83  |            |
| 8000.00  | 10.00       | 247.52      | 7963.04   | -165.24   | -399.32   | -55.06   | 0.00             | 435758.15  | 759616.79  |            |
| 8100.00  | 10.00       | 247.52      | 8061.52   | -171.88   | -415.37   | -57.28   | 0.00             | 435751.51  | 759600.74  |            |
| 8200.00  | 10.00       | 247.52      | 8160.00   | -178.52   | -431.41   | -59.49   | 0.00             | 435744.87  | 759584.70  |            |
| 8300.00  | 10.00       | 247.52      | 8258.48   | -185.16   | -447.46   | -61.70   | 0.00             | 435738.23  | 759568.65  |            |
| 8400.00  | 10.00       | 247.52      | 8356.96   | -191.80   | -463.50   | -63.91   | 0.00             | 435731.59  | 759552.61  |            |
| 8500.00  | 10.00       | 247.52      | 8455.44   | -198.44   | -479.55   | -66.13   | 0.00             | 435724.95  | 759536.56  |            |
| 8600.00  | 10.00       | 247.52      | 8553.93   | -205.08   | -495.59   | -68.34   | 0.00             | 435718.31  | 759520.52  |            |
| 8700.00  | 10.00       | 247.52      | 8652.41   | -211.72   | -511.64   | -70.55   | 0.00             | 435711.67  | 759504.47  |            |
| 8800.00  | 10.00       | 247.52      | 8750.89   | -218.36   | -527.68   | -72.76   | 0.00             | 435705.03  | 759488.43  |            |
| 8900.00  | 10.00       | 247.52      | 8849.37   | -225.00   | -543.73   | -74.98   | 0.00             | 435698.39  | 759472.38  |            |
| 9000.00  | 10.00       | 247.52      | 8947.85   | -231.64   | -559.77   | -77.19   | 0.00             | 435691.75  | 759456.34  |            |
| 9100.00  | 10.00       | 247.52      | 9046.33   | -238.28   | -575.82   | -79.40   | 0.00             | 435685.11  | 759440.29  |            |
| 9200.00  | 10.00       | 247.52      | 9144.81   | -244.92   | -591.86   | -81.61   | 0.00             | 435678.47  | 759424.25  |            |
| 9300.00  | 10.00       | 247.52      | 9243.29   | -251.56   | -607.91   | -83.83   | 0.00             | 435671.83  | 759408.20  |            |
| 9400.00  | 10.00       | 247.52      | 9341.77   | -258.20   | -623.95   | -86.04   | 0.00             | 435665.19  | 759392.16  |            |
| 9500.00  | 10.00       | 247.52      | 9440.25   | -264.84   | -640.00   | -88.25   | 0.00             | 435658.55  | 759376.11  |            |
| 9600.00  | 10.00       | 247.52      | 9538.73   | -271.48   | -656.04   | -90.46   | 0.00             | 435651.91  | 759360.07  |            |
| 9700.00  | 10.00       | 247.52      | 9637.21   | -278.12   | -672.09   | -92.68   | 0.00             | 435645.27  | 759344.02  |            |
| 9800.00  | 10.00       | 247.52      | 9735.70   | -284.76   | -688.13   | -94.89   | 0.00             | 435638.63  | 759327.98  |            |
| 9900.00  | 10.00       | 247.52      | 9834.18   | -291.40   | -704.18   | -97.10   | 0.00             | 435631.99  | 759311.93  |            |
| 10000.00 | 10.00       | 247.52      | 9932.66   | -298.03   | -720.22   | -99.31   | 0.00             | 435625.36  | 759295.89  |            |
| 10100.00 | 10.00       | 247.52      | 10031.14  | -304.67   | -736.27   | -101.53  | 0.00             | 435618.72  | 759279.84  |            |
| 10200.00 | 10.00       | 247.52      | 10129.62  | -311.31   | -752.31   | -103.74  | 0.00             | 435612.08  | 759263.80  |            |
| 10300.00 | 10.00       | 247.52      | 10228.10  | -317.95   | -768.36   | -105.95  | 0.00             | 435605.44  | 759247.75  |            |
| 10400.00 | 10.00       | 247.52      | 10326.58  | -324.59   | -784.40   | -108.16  | 0.00             | 435598.80  | 759231.71  |            |
| 10500.00 | 10.00       | 247.52      | 10425.06  | -331.23   | -800.45   | -110.38  | 0.00             | 435592.16  | 759215.66  |            |
| 10600.00 | 10.00       | 247.52      | 10523.54  | -337.87   | -816.49   | -112.59  | 0.00             | 435585.52  | 759199.62  |            |
| 10686.17 | 10.00       | 247.52      | 10608.41  | -343.59   | -830.32   | -114.50  | 0.00             | 435579.80  | 759185.79  | Build/Turn |
| 10700.00 | 9.61        | 257.01      | 10622.03  | -344.31   | -832.55   | -114.60  | 12.00            | 435579.08  | 759183.56  |            |
| 10725.00 | 9.63        | 275.03      | 10646.69  | -344.60   | -836.67   | -113.80  | 12.00            | 435578.79  | 759179.44  |            |
| 10750.00 | 10.52       | 291.47      | 10671.31  | -343.58   | -840.88   | -111.72  | 12.00            | 435579.81  | 759175.23  |            |
| 10775.00 | 12.11       | 304.52      | 10695.82  | -341.26   | -845.16   | -108.36  | 12.00            | 435582.13  | 759170.95  |            |
| 10800.00 | 14.15       | 314.22      | 10720.17  | -337.64   | -849.51   | -103.73  | 12.00            | 435585.75  | 759166.60  |            |
| 10825.00 | 16.49       | 321.37      | 10744.28  | -332.74   | -853.92   | -97.85   | 12.00            | 435590.65  | 759162.19  |            |
| 10850.00 | 19.00       | 326.74      | 10768.09  | -326.56   | -858.37   | -90.72   | 12.00            | 435596.83  | 759157.74  |            |
| 10875.00 | 21.64       | 330.87      | 10791.54  | -319.13   | -862.84   | -82.38   | 12.00            | 435604.26  | 759153.27  |            |
| 10900.00 | 24.36       | 334.12      | 10814.55  | -310.46   | -867.34   | -72.84   | 12.00            | 435612.93  | 759148.77  |            |
| 10925.00 | 27.13       | 336.76      | 10837.07  | -300.58   | -871.84   | -62.12   | 12.00            | 435622.81  | 759144.27  |            |
| 10950.00 | 29.95       | 338.93      | 10859.03  | -289.52   | -876.33   | -50.27   | 12.00            | 435633.87  | 759139.78  |            |
| 10975.00 | 32.79       | 340.76      | 10880.37  | -277.30   | -880.81   | -37.31   | 12.00            | 435646.09  | 759135.30  |            |
| 11000.00 | 35.66       | 342.33      | 10901.04  | -263.96   | -885.25   | -23.27   | 12.00            | 435659.43  | 759130.86  |            |
| 11025.00 | 38.54       | 343.69      | 10920.98  | -249.54   | -889.65   | -8.20    | 12.00            | 435673.85  | 759126.46  |            |
| 11050.00 | 41.44       | 344.89      | 10940.13  | -234.08   | -893.99   | 7.86     | 12.00            | 435689.31  | 759122.12  |            |
| 11075.00 | 44.35       | 345.96      | 10958.44  | -217.61   | -898.27   | 24.88    | 12.00            | 435705.78  | 759117.84  |            |
| 11100.00 | 47.27       | 346.93      | 10975.86  | -200.18   | -902.47   | 42.80    | 12.00            | 435723.21  | 759113.64  |            |



# Weatherford

## Wft Plan Report X Y's.

**Weatherford®**

**Company:** Devon Energy  
**Field:** Lea County, New Mexico (NAD 83)  
**Site:** Bell Lake 24 Fed PAD  
**Well:** Bell Lake 24 Fed 4H  
**Wellpath:** BL 24 Fed 4H

**Date:** 1/4/2013 **Time:** 11:09:22 **Page:** 3  
**Co-ordinate(NE) Reference:** Well: Bell Lake 24 Fed 4H, Grid North  
**Vertical (TVD) Reference:** #4 3579.0  
**Section (VS) Reference:** Well (0.00N,0.00E,344.84Azi)  
**Survey Calculation Method:** Minimum Curvature **Db:** Sybase

### Survey

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | N/S<br>ft | E/W<br>ft | VS<br>ft | DLS<br>deg/100ft | MapN<br>ft | MapE<br>ft | Comment   |
|----------|-------------|-------------|-----------|-----------|-----------|----------|------------------|------------|------------|-----------|
| 11125.00 | 50.20       | 347.81      | 10992.35  | -181.84   | -906.57   | 61.57    | 12.00            | 435741.55  | 759109.54  |           |
| 11150.00 | 53.13       | 348.61      | 11007.85  | -162.65   | -910.58   | 81.14    | 12.00            | 435760.74  | 759105.53  |           |
| 11175.00 | 56.07       | 349.36      | 11022.33  | -142.65   | -914.47   | 101.46   | 12.00            | 435780.74  | 759101.64  |           |
| 11200.00 | 59.01       | 350.05      | 11035.75  | -121.89   | -918.24   | 122.48   | 12.00            | 435801.50  | 759097.87  |           |
| 11225.00 | 61.96       | 350.71      | 11048.06  | -100.45   | -921.87   | 144.13   | 12.00            | 435822.94  | 759094.24  |           |
| 11250.00 | 64.91       | 351.33      | 11059.24  | -78.36    | -925.36   | 166.36   | 12.00            | 435845.03  | 759090.75  |           |
| 11275.00 | 67.86       | 351.92      | 11069.26  | -55.70    | -928.69   | 189.10   | 12.00            | 435867.69  | 759087.42  |           |
| 11300.00 | 70.81       | 352.48      | 11078.08  | -32.53    | -931.87   | 212.30   | 12.00            | 435890.86  | 759084.24  |           |
| 11325.00 | 73.77       | 353.03      | 11085.68  | -8.91     | -934.87   | 235.88   | 12.00            | 435914.48  | 759081.24  |           |
| 11350.00 | 76.72       | 353.56      | 11092.05  | 15.10     | -937.69   | 259.79   | 12.00            | 435938.49  | 759078.42  |           |
| 11375.00 | 79.68       | 354.08      | 11097.16  | 39.42     | -940.32   | 283.96   | 12.00            | 435962.81  | 759075.79  |           |
| 11400.00 | 82.64       | 354.58      | 11101.01  | 64.00     | -942.76   | 308.32   | 12.00            | 435987.39  | 759073.35  |           |
| 11425.00 | 85.59       | 355.08      | 11103.57  | 88.77     | -945.00   | 332.81   | 12.00            | 436012.16  | 759071.11  |           |
| 11450.00 | 88.55       | 355.58      | 11104.85  | 113.65    | -947.03   | 357.36   | 12.00            | 436037.04  | 759069.08  |           |
| 11462.23 | 90.00       | 355.82      | 11105.00  | 125.84    | -947.95   | 369.36   | 12.00            | 436049.23  | 759068.16  | LP Tgt 4H |
| 11500.00 | 90.00       | 355.82      | 11105.00  | 163.51    | -950.70   | 406.45   | 0.00             | 436086.90  | 759065.41  |           |
| 11600.00 | 90.00       | 355.82      | 11105.00  | 263.25    | -957.98   | 504.61   | 0.00             | 436186.64  | 759058.13  |           |
| 11700.00 | 90.00       | 355.82      | 11105.00  | 362.98    | -965.27   | 602.78   | 0.00             | 436286.37  | 759050.84  |           |
| 11800.00 | 90.00       | 355.82      | 11105.00  | 462.72    | -972.55   | 700.95   | 0.00             | 436386.11  | 759043.56  |           |
| 11900.00 | 90.00       | 355.82      | 11105.00  | 562.45    | -979.83   | 799.12   | 0.00             | 436485.84  | 759036.28  |           |
| 12000.00 | 90.00       | 355.82      | 11105.00  | 662.19    | -987.12   | 897.29   | 0.00             | 436585.58  | 759028.99  |           |
| 12100.00 | 90.00       | 355.82      | 11105.00  | 761.92    | -994.40   | 995.46   | 0.00             | 436685.31  | 759021.71  |           |
| 12200.00 | 90.00       | 355.82      | 11105.00  | 861.66    | -1001.68  | 1093.62  | 0.00             | 436785.05  | 759014.43  |           |
| 12300.00 | 90.00       | 355.82      | 11105.00  | 961.39    | -1008.96  | 1191.79  | 0.00             | 436884.78  | 759007.15  |           |
| 12400.00 | 90.00       | 355.82      | 11105.00  | 1061.12   | -1016.25  | 1289.96  | 0.00             | 436984.51  | 758999.86  |           |
| 12500.00 | 90.00       | 355.82      | 11105.00  | 1160.86   | -1023.53  | 1388.13  | 0.00             | 437084.25  | 758992.58  |           |
| 12600.00 | 90.00       | 355.82      | 11105.00  | 1260.59   | -1030.81  | 1486.30  | 0.00             | 437183.98  | 758985.30  |           |
| 12700.00 | 90.00       | 355.82      | 11105.00  | 1360.33   | -1038.10  | 1584.47  | 0.00             | 437283.72  | 758978.01  |           |
| 12800.00 | 90.00       | 355.82      | 11105.00  | 1460.06   | -1045.38  | 1682.63  | 0.00             | 437383.45  | 758970.73  |           |
| 12900.00 | 90.00       | 355.82      | 11105.00  | 1559.80   | -1052.66  | 1780.80  | 0.00             | 437483.19  | 758963.45  |           |
| 13000.00 | 90.00       | 355.82      | 11105.00  | 1659.53   | -1059.94  | 1878.97  | 0.00             | 437582.92  | 758956.17  |           |
| 13100.00 | 90.00       | 355.82      | 11105.00  | 1759.27   | -1067.23  | 1977.14  | 0.00             | 437682.66  | 758948.88  |           |
| 13200.00 | 90.00       | 355.82      | 11105.00  | 1859.00   | -1074.51  | 2075.31  | 0.00             | 437782.39  | 758941.60  |           |
| 13300.00 | 90.00       | 355.82      | 11105.00  | 1958.73   | -1081.79  | 2173.47  | 0.00             | 437882.12  | 758934.32  |           |
| 13400.00 | 90.00       | 355.82      | 11105.00  | 2058.47   | -1089.08  | 2271.64  | 0.00             | 437981.86  | 758927.03  |           |
| 13500.00 | 90.00       | 355.82      | 11105.00  | 2158.20   | -1096.36  | 2369.81  | 0.00             | 438081.59  | 758919.75  |           |
| 13600.00 | 90.00       | 355.82      | 11105.00  | 2257.94   | -1103.64  | 2467.98  | 0.00             | 438181.33  | 758912.47  |           |
| 13700.00 | 90.00       | 355.82      | 11105.00  | 2357.67   | -1110.92  | 2566.15  | 0.00             | 438281.06  | 758905.19  |           |
| 13800.00 | 90.00       | 355.82      | 11105.00  | 2457.41   | -1118.21  | 2664.32  | 0.00             | 438380.80  | 758897.90  |           |
| 13900.00 | 90.00       | 355.82      | 11105.00  | 2557.14   | -1125.49  | 2762.48  | 0.00             | 438480.53  | 758890.62  |           |
| 14000.00 | 90.00       | 355.82      | 11105.00  | 2656.88   | -1132.77  | 2860.65  | 0.00             | 438580.27  | 758883.34  |           |
| 14100.00 | 90.00       | 355.82      | 11105.00  | 2756.61   | -1140.06  | 2958.82  | 0.00             | 438680.00  | 758876.05  |           |
| 14200.00 | 90.00       | 355.82      | 11105.00  | 2856.34   | -1147.34  | 3056.99  | 0.00             | 438779.73  | 758868.77  |           |
| 14300.00 | 90.00       | 355.82      | 11105.00  | 2956.08   | -1154.62  | 3155.16  | 0.00             | 438879.47  | 758861.49  |           |
| 14400.00 | 90.00       | 355.82      | 11105.00  | 3055.81   | -1161.91  | 3253.32  | 0.00             | 438979.20  | 758854.20  |           |
| 14500.00 | 90.00       | 355.82      | 11105.00  | 3155.55   | -1169.19  | 3351.49  | 0.00             | 439078.94  | 758846.92  |           |
| 14600.00 | 90.00       | 355.82      | 11105.00  | 3255.28   | -1176.47  | 3449.66  | 0.00             | 439178.67  | 758839.64  |           |
| 14700.00 | 90.00       | 355.82      | 11105.00  | 3355.02   | -1183.75  | 3547.83  | 0.00             | 439278.41  | 758832.36  |           |
| 14800.00 | 90.00       | 355.82      | 11105.00  | 3454.75   | -1191.04  | 3646.00  | 0.00             | 439378.14  | 758825.07  |           |
| 14900.00 | 90.00       | 355.82      | 11105.00  | 3554.49   | -1198.32  | 3744.17  | 0.00             | 439477.88  | 758817.79  |           |
| 15000.00 | 90.00       | 355.82      | 11105.00  | 3654.22   | -1205.60  | 3842.33  | 0.00             | 439577.61  | 758810.51  |           |
| 15100.00 | 90.00       | 355.82      | 11105.00  | 3753.95   | -1212.89  | 3940.50  | 0.00             | 439677.34  | 758803.22  |           |



# Weatherford

## Wft Plan Report X Y's.

**Weatherford**

Company: Devon Energy  
Field: Lea County, New Mexico (NAD 83)  
Site: Bell Lake 24 Fed PAD  
Well: Bell Lake 24 Fed 4H  
Wellpath: BL 24 Fed 4H

Date: 1/4/2013 Time: 11:09:22 Page: 4  
Co-ordinate(NE) Reference: Well: Bell Lake 24 Fed 4H, Grid North  
Vertical (TVD) Reference: #4 3579.0  
Section (VS) Reference: Well (0.00N,0.00E,344.84Azi)  
Survey Calculation Method: Minimum Curvature Db: Sybase

### Survey

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | N/S<br>ft | E/W<br>ft | VS<br>ft | DLS<br>deg/100ft | MapN<br>ft | MapE<br>ft | Comments |
|----------|-------------|-------------|-----------|-----------|-----------|----------|------------------|------------|------------|----------|
| 15200.00 | 90.00       | 355.82      | 11105.00  | 3853.69   | -1220.17  | 4038.67  | 0.00             | 439777.08  | 758795.94  |          |
| 15300.00 | 90.00       | 355.82      | 11105.00  | 3953.42   | -1227.45  | 4136.84  | 0.00             | 439876.81  | 758788.66  |          |
| 15400.00 | 90.00       | 355.82      | 11105.00  | 4053.16   | -1234.73  | 4235.01  | 0.00             | 439976.55  | 758781.38  |          |
| 15500.00 | 90.00       | 355.82      | 11105.00  | 4152.89   | -1242.02  | 4333.17  | 0.00             | 440076.28  | 758774.09  |          |
| 15600.00 | 90.00       | 355.82      | 11105.00  | 4252.63   | -1249.30  | 4431.34  | 0.00             | 440176.02  | 758766.81  |          |
| 15700.00 | 90.00       | 355.82      | 11105.00  | 4352.36   | -1256.58  | 4529.51  | 0.00             | 440275.75  | 758759.53  |          |
| 15800.00 | 90.00       | 355.82      | 11105.00  | 4452.10   | -1263.87  | 4627.68  | 0.00             | 440375.49  | 758752.24  |          |
| 15900.00 | 90.00       | 355.82      | 11105.00  | 4551.83   | -1271.15  | 4725.85  | 0.00             | 440475.22  | 758744.96  |          |
| 16000.00 | 90.00       | 355.82      | 11105.00  | 4651.56   | -1278.43  | 4824.02  | 0.00             | 440574.95  | 758737.68  |          |
| 16093.07 | 90.00       | 355.82      | 11105.00  | 4744.39   | -1285.21  | 4915.38  | 0.00             | 440667.78  | 758730.90  | PBHL 4H  |

### Targets

| Name      | Description<br>Dip. | Dir. | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | Map<br>Northing<br>ft | Map<br>Easting<br>ft | <--- Latitude ---><br>Deg Min Sec | <--- Longitude ---><br>Deg Min Sec |
|-----------|---------------------|------|-----------|-------------|-------------|-----------------------|----------------------|-----------------------------------|------------------------------------|
| PBHL 4H   |                     |      | 11105.00  | 4744.39     | -1285.21    | 440667.78             | 758730.90            | 32 12 34.259 N                    | 103 37 49.609 W                    |
| LP Tgt 4H |                     |      | 11105.00  | 125.84      | -947.95     | 436049.23             | 759068.16            | 32 11 48.535 N                    | 103 37 46.035 W                    |

### Casing Points

| MD | TVD | Diameter | Hole Size | Name |
|----|-----|----------|-----------|------|
|    |     |          |           |      |
|    |     |          |           |      |

### Annotation

| MD<br>ft | TVD<br>ft |            |
|----------|-----------|------------|
| 5345.00  | 5345.00   | KOP        |
| 5678.33  | 5676.64   | Hold       |
| 10686.17 | 10608.40  | Build/Turn |
| 11462.23 | 11105.00  | LP         |
| 16093.07 | 11105.00  | PBHL #4    |

Weatherford  
Wft Plan Report X Y's.

Company: Devon Energy  
Field: Lea County, New Mexico (NAD 83)  
Site: Bell Lake 24 Fed PAD  
Well: Bell Lake 24 Fed 4H  
Wellpath: BL 24 Fed 4H

Date: 1/4/2013 Time: 11:10:12 Page: 1  
Co-ordinate(N/E) Reference: Well: Bell Lake 24 Fed 4H, Grid North  
Vertical (TVD) Reference: #4 3579.0  
Section (VS) Reference: Well (0.00N,0.00E,344.84Azi)  
Survey Calculation Method: Minimum Curvature Db: Sybase

Plan: Plan #2

Date Composed: 1/2/2013  
Version: 1  
Tied-to: From Surface

Principal: Yes

Site: Bell Lake 24 Fed PAD

Site Position: Northing: 435924.22 ft Latitude: 32 11 47.230 N  
From: Map Easting: 760116.07 ft Longitude: 103 37 33.850 W  
Position Uncertainty: 0.00 ft North Reference: Grid  
Ground Level: 3554.00 ft Grid Convergence: 0.38 deg

Well: Bell Lake 24 Fed 4H

Slot Name:

Well Position: +N/-S -0.83 ft Northing: 435923.39 ft Latitude: 32 11 47.228 N  
+E/-W -99.96 ft Easting: 760016.11 ft Longitude: 103 37 35.013 W  
Position Uncertainty: 0.00 ft

Wellpath: BL 24 Fed 4H

Drilled From: Surface  
Tie-on Depth: 0.00 ft  
Above System Datum: Mean Sea Level  
Declination: 7.30 deg  
Mag Dip Angle: 60.09 deg  
+E/-W Direction  
ft deg  
0.00 344.84

Current Datum: #4 Height 3579.00 ft  
Magnetic Data: 12/15/2013  
Field Strength: 48369 nT  
Vertical Section: Depth From (TVD) +N/-S  
ft ft  
0.00 0.00

Plan Section Information

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | TFO<br>deg | Target    |
|----------|-------------|-------------|-----------|-------------|-------------|------------------|--------------------|-------------------|------------|-----------|
| 0.00     | 0.00        | 344.84      | 0.00      | 0.00        | 0.00        | 0.00             | 0.00               | 0.00              | 0.00       |           |
| 5345.00  | 0.00        | 344.84      | 5345.00   | 0.00        | 0.00        | 0.00             | 0.00               | 0.00              | 344.84     |           |
| 5678.33  | 10.00       | 247.52      | 5676.64   | -11.09      | -26.81      | 3.00             | 3.00               | 0.00              | 0.00       |           |
| 10686.17 | 10.00       | 247.52      | 10608.41  | -343.59     | -830.32     | 0.00             | 0.00               | 0.00              | 0.00       |           |
| 11462.23 | 90.00       | 355.82      | 11105.00  | 125.84      | -947.95     | 12.00            | 10.31              | 13.96             | 108.04     | LP Tgt 4H |
| 16093.07 | 90.00       | 355.82      | 11105.00  | 4744.39     | -1285.21    | 0.00             | 0.00               | 0.00              | 0.00       | PBHL 4H   |

Survey

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | N/S<br>ft | E/W<br>ft | VS<br>ft | DLS<br>deg/100ft | MapN<br>ft | MapE<br>ft | Comment |
|----------|-------------|-------------|-----------|-----------|-----------|----------|------------------|------------|------------|---------|
| 5300.00  | 0.00        | 344.84      | 5300.00   | 0.00      | 0.00      | 0.00     | 0.00             | 435923.39  | 760016.11  |         |
| 5345.00  | 0.00        | 344.84      | 5345.00   | 0.00      | 0.00      | 0.00     | 0.00             | 435923.39  | 760016.11  | KOP     |
| 5400.00  | 1.65        | 247.52      | 5399.99   | -0.30     | -0.73     | -0.10    | 3.00             | 435923.09  | 760015.38  |         |
| 5500.00  | 4.65        | 247.52      | 5499.83   | -2.40     | -5.81     | -0.80    | 3.00             | 435920.99  | 760010.30  |         |
| 5600.00  | 7.65        | 247.52      | 5599.24   | -6.50     | -15.71    | -2.17    | 3.00             | 435916.89  | 760000.40  |         |
| 5678.33  | 10.00       | 247.52      | 5676.64   | -11.09    | -26.81    | -3.70    | 3.00             | 435912.30  | 759989.30  | Hold    |
| 5700.00  | 10.00       | 247.52      | 5697.98   | -12.53    | -30.29    | -4.18    | 0.00             | 435910.86  | 759985.82  |         |
| 5800.00  | 10.00       | 247.52      | 5796.46   | -19.17    | -46.33    | -6.39    | 0.00             | 435904.22  | 759969.78  |         |
| 5900.00  | 10.00       | 247.52      | 5894.94   | -25.81    | -62.38    | -8.60    | 0.00             | 435897.58  | 759953.73  |         |
| 6000.00  | 10.00       | 247.52      | 5993.42   | -32.45    | -78.42    | -10.81   | 0.00             | 435890.94  | 759937.69  |         |
| 6100.00  | 10.00       | 247.52      | 6091.90   | -39.09    | -94.47    | -13.03   | 0.00             | 435884.30  | 759921.64  |         |
| 6200.00  | 10.00       | 247.52      | 6190.39   | -45.73    | -110.51   | -15.24   | 0.00             | 435877.66  | 759905.60  |         |
| 6300.00  | 10.00       | 247.52      | 6288.87   | -52.37    | -126.56   | -17.45   | 0.00             | 435871.02  | 759889.55  |         |
| 6400.00  | 10.00       | 247.52      | 6387.35   | -59.01    | -142.60   | -19.66   | 0.00             | 435864.38  | 759873.51  |         |
| 6500.00  | 10.00       | 247.52      | 6485.83   | -65.65    | -158.65   | -21.88   | 0.00             | 435857.74  | 759857.46  |         |
| 6600.00  | 10.00       | 247.52      | 6584.31   | -72.29    | -174.69   | -24.09   | 0.00             | 435851.10  | 759841.42  |         |
| 6700.00  | 10.00       | 247.52      | 6682.79   | -78.93    | -190.74   | -26.30   | 0.00             | 435844.46  | 759825.37  |         |
| 6800.00  | 10.00       | 247.52      | 6781.27   | -85.57    | -206.78   | -28.51   | 0.00             | 435837.82  | 759809.33  |         |
| 6900.00  | 10.00       | 247.52      | 6879.75   | -92.21    | -222.83   | -30.73   | 0.00             | 435831.18  | 759793.28  |         |
| 7000.00  | 10.00       | 247.52      | 6978.23   | -98.85    | -238.87   | -32.94   | 0.00             | 435824.54  | 759777.24  |         |
| 7100.00  | 10.00       | 247.52      | 7076.71   | -105.49   | -254.92   | -35.15   | 0.00             | 435817.90  | 759761.19  |         |
| 7200.00  | 10.00       | 247.52      | 7175.19   | -112.13   | -270.96   | -37.36   | 0.00             | 435811.26  | 759745.15  |         |
| 7300.00  | 10.00       | 247.52      | 7273.67   | -118.77   | -287.01   | -39.58   | 0.00             | 435804.62  | 759729.10  |         |
| 7400.00  | 10.00       | 247.52      | 7372.16   | -125.41   | -303.05   | -41.79   | 0.00             | 435797.98  | 759713.06  |         |
| 7500.00  | 10.00       | 247.52      | 7470.64   | -132.05   | -319.10   | -44.00   | 0.00             | 435791.34  | 759697.01  |         |
| 7600.00  | 10.00       | 247.52      | 7569.12   | -138.68   | -335.14   | -46.21   | 0.00             | 435784.71  | 759680.97  |         |
| 7700.00  | 10.00       | 247.52      | 7667.60   | -145.32   | -351.19   | -48.43   | 0.00             | 435778.07  | 759664.92  |         |
| 7800.00  | 10.00       | 247.52      | 7766.08   | -151.96   | -367.23   | -50.64   | 0.00             | 435771.43  | 759648.88  |         |
| 7900.00  | 10.00       | 247.52      | 7864.56   | -158.60   | -383.28   | -52.85   | 0.00             | 435764.79  | 759632.83  |         |
| 8000.00  | 10.00       | 247.52      | 7963.04   | -165.24   | -399.32   | -55.06   | 0.00             | 435758.15  | 759616.79  |         |
| 8100.00  | 10.00       | 247.52      | 8061.52   | -171.88   | -415.37   | -57.28   | 0.00             | 435751.51  | 759600.74  |         |
| 8200.00  | 10.00       | 247.52      | 8160.00   | -178.52   | -431.41   | -59.49   | 0.00             | 435744.87  | 759584.70  |         |
| 8300.00  | 10.00       | 247.52      | 8258.48   | -185.16   | -447.46   | -61.70   | 0.00             | 435738.23  | 759568.65  |         |
| 8400.00  | 10.00       | 247.52      | 8356.96   | -191.80   | -463.50   | -63.91   | 0.00             | 435731.59  | 759552.61  |         |
| 8500.00  | 10.00       | 247.52      | 8455.44   | -198.44   | -479.55   | -66.13   | 0.00             | 435724.95  | 759536.56  |         |

|          |       |        |          |         |          |         |       |           |           |            |
|----------|-------|--------|----------|---------|----------|---------|-------|-----------|-----------|------------|
| 8600.00  | 10.00 | 247.52 | 8553.93  | -205.08 | -495.59  | -68.34  | 0.00  | 435718.31 | 759520.52 |            |
| 8700.00  | 10.00 | 247.52 | 8652.41  | -211.72 | -511.64  | -70.55  | 0.00  | 435711.67 | 759504.47 |            |
| 8800.00  | 10.00 | 247.52 | 8750.89  | -218.36 | -527.68  | -72.76  | 0.00  | 435705.03 | 759488.43 |            |
| 8900.00  | 10.00 | 247.52 | 8849.37  | -225.00 | -543.73  | -74.98  | 0.00  | 435698.39 | 759472.38 |            |
| 9000.00  | 10.00 | 247.52 | 8947.85  | -231.64 | -559.77  | -77.19  | 0.00  | 435691.75 | 759456.34 |            |
| 9100.00  | 10.00 | 247.52 | 9046.33  | -238.28 | -575.82  | -79.40  | 0.00  | 435685.11 | 759440.29 |            |
| 9200.00  | 10.00 | 247.52 | 9144.81  | -244.92 | -591.86  | -81.61  | 0.00  | 435678.47 | 759424.25 |            |
| 9300.00  | 10.00 | 247.52 | 9243.29  | -251.56 | -607.91  | -83.83  | 0.00  | 435671.83 | 759408.20 |            |
| 9400.00  | 10.00 | 247.52 | 9341.77  | -258.20 | -623.95  | -86.04  | 0.00  | 435665.19 | 759392.16 |            |
| 9500.00  | 10.00 | 247.52 | 9440.25  | -264.84 | -640.00  | -88.25  | 0.00  | 435658.55 | 759376.11 |            |
| 9600.00  | 10.00 | 247.52 | 9538.73  | -271.48 | -656.04  | -90.46  | 0.00  | 435651.91 | 759360.07 |            |
| 9700.00  | 10.00 | 247.52 | 9637.21  | -278.12 | -672.09  | -92.68  | 0.00  | 435645.27 | 759344.02 |            |
| 9800.00  | 10.00 | 247.52 | 9735.70  | -284.76 | -688.13  | -94.89  | 0.00  | 435638.63 | 759327.98 |            |
| 9900.00  | 10.00 | 247.52 | 9834.18  | -291.40 | -704.18  | -97.10  | 0.00  | 435631.99 | 759311.93 |            |
| 10000.00 | 10.00 | 247.52 | 9932.66  | -298.03 | -720.22  | -99.31  | 0.00  | 435625.36 | 759295.89 |            |
| 10100.00 | 10.00 | 247.52 | 10031.14 | -304.67 | -736.27  | -101.53 | 0.00  | 435618.72 | 759279.84 |            |
| 10200.00 | 10.00 | 247.52 | 10129.62 | -311.31 | -752.31  | -103.74 | 0.00  | 435612.08 | 759263.80 |            |
| 10300.00 | 10.00 | 247.52 | 10228.10 | -317.95 | -768.36  | -105.95 | 0.00  | 435605.44 | 759247.75 |            |
| 10400.00 | 10.00 | 247.52 | 10326.58 | -324.59 | -784.40  | -108.16 | 0.00  | 435598.80 | 759231.71 |            |
| 10500.00 | 10.00 | 247.52 | 10425.06 | -331.23 | -800.45  | -110.38 | 0.00  | 435592.16 | 759215.66 |            |
| 10600.00 | 10.00 | 247.52 | 10523.54 | -337.87 | -816.49  | -112.59 | 0.00  | 435585.52 | 759199.62 |            |
| 10686.17 | 10.00 | 247.52 | 10608.41 | -343.59 | -830.32  | -114.50 | 0.00  | 435579.80 | 759185.79 | Build/Turn |
| 10700.00 | 9.61  | 257.01 | 10622.03 | -344.31 | -832.55  | -114.60 | 12.00 | 435579.08 | 759183.56 |            |
| 10725.00 | 9.63  | 275.03 | 10646.69 | -344.60 | -836.67  | -113.80 | 12.00 | 435578.79 | 759179.44 |            |
| 10750.00 | 10.52 | 291.47 | 10671.31 | -343.58 | -840.88  | -111.72 | 12.00 | 435579.81 | 759175.23 |            |
| 10775.00 | 12.11 | 304.52 | 10695.82 | -341.26 | -845.16  | -108.36 | 12.00 | 435582.13 | 759170.95 |            |
| 10800.00 | 14.15 | 314.22 | 10720.17 | -337.64 | -849.51  | -103.73 | 12.00 | 435585.75 | 759166.60 |            |
| 10825.00 | 16.49 | 321.37 | 10744.28 | -332.74 | -853.92  | -97.85  | 12.00 | 435590.65 | 759162.19 |            |
| 10850.00 | 19.00 | 326.74 | 10768.09 | -326.56 | -858.37  | -90.72  | 12.00 | 435596.83 | 759157.74 |            |
| 10875.00 | 21.64 | 330.87 | 10791.54 | -319.13 | -862.84  | -82.38  | 12.00 | 435604.26 | 759153.27 |            |
| 10900.00 | 24.36 | 334.12 | 10814.55 | -310.46 | -867.34  | -72.84  | 12.00 | 435612.93 | 759148.77 |            |
| 10925.00 | 27.13 | 336.76 | 10837.07 | -300.58 | -871.84  | -62.12  | 12.00 | 435622.81 | 759144.27 |            |
| 10950.00 | 29.95 | 338.93 | 10859.03 | -289.52 | -876.33  | -50.27  | 12.00 | 435633.87 | 759139.78 |            |
| 10975.00 | 32.79 | 340.76 | 10880.37 | -277.30 | -880.81  | -37.31  | 12.00 | 435646.09 | 759135.30 |            |
| 11000.00 | 35.66 | 342.33 | 10901.04 | -263.96 | -885.25  | -23.27  | 12.00 | 435659.43 | 759130.86 |            |
| 11025.00 | 38.54 | 343.69 | 10920.98 | -249.54 | -889.65  | -8.20   | 12.00 | 435673.85 | 759126.46 |            |
| 11050.00 | 41.44 | 344.89 | 10940.13 | -234.08 | -893.99  | 7.86    | 12.00 | 435689.31 | 759122.12 |            |
| 11075.00 | 44.35 | 345.96 | 10958.44 | -217.61 | -898.27  | 24.88   | 12.00 | 435705.78 | 759117.84 |            |
| 11100.00 | 47.27 | 346.93 | 10975.86 | -200.18 | -902.47  | 42.80   | 12.00 | 435723.21 | 759113.64 |            |
| 11125.00 | 50.20 | 347.81 | 10992.35 | -181.84 | -906.57  | 61.57   | 12.00 | 435741.55 | 759109.54 |            |
| 11150.00 | 53.13 | 348.61 | 11007.85 | -162.65 | -910.58  | 81.14   | 12.00 | 435760.74 | 759105.53 |            |
| 11175.00 | 56.07 | 349.36 | 11022.33 | -142.65 | -914.47  | 101.46  | 12.00 | 435780.74 | 759101.64 |            |
| 11200.00 | 59.01 | 350.05 | 11035.75 | -121.89 | -918.24  | 122.48  | 12.00 | 435801.50 | 759097.87 |            |
| 11225.00 | 61.96 | 350.71 | 11048.06 | -100.45 | -921.87  | 144.13  | 12.00 | 435822.94 | 759094.24 |            |
| 11250.00 | 64.91 | 351.33 | 11059.24 | -78.36  | -925.36  | 166.36  | 12.00 | 435845.03 | 759090.75 |            |
| 11275.00 | 67.86 | 351.92 | 11069.26 | -55.70  | -928.69  | 189.10  | 12.00 | 435867.69 | 759087.42 |            |
| 11300.00 | 70.81 | 352.48 | 11078.08 | -32.53  | -931.87  | 212.30  | 12.00 | 435890.86 | 759084.24 |            |
| 11325.00 | 73.77 | 353.03 | 11085.68 | -8.91   | -934.87  | 235.88  | 12.00 | 435914.48 | 759081.24 |            |
| 11350.00 | 76.72 | 353.56 | 11092.05 | 15.10   | -937.69  | 259.79  | 12.00 | 435938.49 | 759078.42 |            |
| 11375.00 | 79.68 | 354.08 | 11097.16 | 39.42   | -940.32  | 283.96  | 12.00 | 435962.81 | 759075.79 |            |
| 11400.00 | 82.64 | 354.58 | 11101.01 | 64.00   | -942.76  | 308.32  | 12.00 | 435987.39 | 759073.35 |            |
| 11425.00 | 85.59 | 355.08 | 11103.57 | 88.77   | -945.00  | 332.81  | 12.00 | 436012.16 | 759071.11 |            |
| 11450.00 | 88.55 | 355.58 | 11104.85 | 113.65  | -947.03  | 357.36  | 12.00 | 436037.04 | 759069.08 |            |
| 11462.23 | 90.00 | 355.82 | 11105.00 | 125.84  | -947.95  | 369.36  | 12.00 | 436049.23 | 759068.16 | LP Tgt 4H  |
| 11500.00 | 90.00 | 355.82 | 11105.00 | 163.51  | -950.70  | 406.45  | 0.00  | 436086.90 | 759065.41 |            |
| 11600.00 | 90.00 | 355.82 | 11105.00 | 263.25  | -957.98  | 504.61  | 0.00  | 436186.64 | 759058.13 |            |
| 11700.00 | 90.00 | 355.82 | 11105.00 | 362.98  | -965.27  | 602.78  | 0.00  | 436286.37 | 759050.84 |            |
| 11800.00 | 90.00 | 355.82 | 11105.00 | 462.72  | -972.55  | 700.95  | 0.00  | 436386.11 | 759043.56 |            |
| 11900.00 | 90.00 | 355.82 | 11105.00 | 562.45  | -979.83  | 799.12  | 0.00  | 436485.84 | 759036.28 |            |
| 12000.00 | 90.00 | 355.82 | 11105.00 | 662.19  | -987.12  | 897.29  | 0.00  | 436585.58 | 759028.99 |            |
| 12100.00 | 90.00 | 355.82 | 11105.00 | 761.92  | -994.40  | 995.46  | 0.00  | 436685.31 | 759021.71 |            |
| 12200.00 | 90.00 | 355.82 | 11105.00 | 861.66  | -1001.68 | 1093.62 | 0.00  | 436785.05 | 759014.43 |            |
| 12300.00 | 90.00 | 355.82 | 11105.00 | 961.39  | -1008.96 | 1191.79 | 0.00  | 436884.78 | 759007.15 |            |
| 12400.00 | 90.00 | 355.82 | 11105.00 | 1061.12 | -1016.25 | 1289.96 | 0.00  | 436984.51 | 758999.86 |            |
| 12500.00 | 90.00 | 355.82 | 11105.00 | 1160.86 | -1023.53 | 1388.13 | 0.00  | 437084.25 | 758992.58 |            |
| 12600.00 | 90.00 | 355.82 | 11105.00 | 1260.59 | -1030.81 | 1486.30 | 0.00  | 437183.98 | 758985.30 |            |
| 12700.00 | 90.00 | 355.82 | 11105.00 | 1360.33 | -1038.10 | 1584.47 | 0.00  | 437283.72 | 758978.01 |            |
| 12800.00 | 90.00 | 355.82 | 11105.00 | 1460.06 | -1045.38 | 1682.63 | 0.00  | 437383.45 | 758970.73 |            |
| 12900.00 | 90.00 | 355.82 | 11105.00 | 1559.80 | -1052.66 | 1780.80 | 0.00  | 437483.19 | 758963.45 |            |
| 13000.00 | 90.00 | 355.82 | 11105.00 | 1659.53 | -1059.94 | 1878.97 | 0.00  | 437582.92 | 758956.17 |            |
| 13100.00 | 90.00 | 355.82 | 11105.00 | 1759.27 | -1067.23 | 1977.14 | 0.00  | 437682.66 | 758948.88 |            |
| 13200.00 | 90.00 | 355.82 | 11105.00 | 1859.00 | -1074.51 | 2075.31 | 0.00  | 437782.39 | 758941.60 |            |
| 13300.00 | 90.00 | 355.82 | 11105.00 | 1958.73 | -1081.79 | 2173.47 | 0.00  | 437882.12 | 758934.32 |            |
| 13400.00 | 90.00 | 355.82 | 11105.00 | 2058.47 | -1089.08 | 2271.64 | 0.00  | 437981.86 | 758927.03 |            |
| 13500.00 | 90.00 | 355.82 | 11105.00 | 2158.20 | -1096.36 | 2369.81 | 0.00  | 438081.59 | 758919.75 |            |
| 13600.00 | 90.00 | 355.82 | 11105.00 | 2257.94 | -1103.64 | 2467.98 | 0.00  | 438181.33 | 758912.47 |            |
| 13700.00 | 90.00 | 355.82 | 11105.00 | 2357.67 | -1110.92 | 2566.15 | 0.00  | 438281.06 | 758905.19 |            |

|          |       |        |          |         |          |         |      |           |                   |
|----------|-------|--------|----------|---------|----------|---------|------|-----------|-------------------|
| 13800.00 | 90.00 | 355.82 | 11105.00 | 2457.41 | -1118.21 | 2664.32 | 0.00 | 438380.80 | 758897.90         |
| 13900.00 | 90.00 | 355.82 | 11105.00 | 2557.14 | -1125.49 | 2762.48 | 0.00 | 438480.53 | 758890.62         |
| 14000.00 | 90.00 | 355.82 | 11105.00 | 2656.88 | -1132.77 | 2860.65 | 0.00 | 438580.27 | 758883.34         |
| 14100.00 | 90.00 | 355.82 | 11105.00 | 2756.61 | -1140.06 | 2958.82 | 0.00 | 438680.00 | 758876.05         |
| 14200.00 | 90.00 | 355.82 | 11105.00 | 2856.34 | -1147.34 | 3056.99 | 0.00 | 438779.73 | 758868.77         |
| 14300.00 | 90.00 | 355.82 | 11105.00 | 2956.08 | -1154.62 | 3155.16 | 0.00 | 438879.47 | 758861.49         |
| 14400.00 | 90.00 | 355.82 | 11105.00 | 3055.81 | -1161.91 | 3253.32 | 0.00 | 438979.20 | 758854.20         |
| 14500.00 | 90.00 | 355.82 | 11105.00 | 3155.55 | -1169.19 | 3351.49 | 0.00 | 439078.94 | 758846.92         |
| 14600.00 | 90.00 | 355.82 | 11105.00 | 3255.28 | -1176.47 | 3449.66 | 0.00 | 439178.67 | 758839.64         |
| 14700.00 | 90.00 | 355.82 | 11105.00 | 3355.02 | -1183.75 | 3547.83 | 0.00 | 439278.41 | 758832.36         |
| 14800.00 | 90.00 | 355.82 | 11105.00 | 3454.75 | -1191.04 | 3646.00 | 0.00 | 439378.14 | 758825.07         |
| 14900.00 | 90.00 | 355.82 | 11105.00 | 3554.49 | -1198.32 | 3744.17 | 0.00 | 439477.88 | 758817.79         |
| 15000.00 | 90.00 | 355.82 | 11105.00 | 3654.22 | -1205.60 | 3842.33 | 0.00 | 439577.61 | 758810.51         |
| 15100.00 | 90.00 | 355.82 | 11105.00 | 3753.95 | -1212.89 | 3940.50 | 0.00 | 439677.34 | 758803.22         |
| 15200.00 | 90.00 | 355.82 | 11105.00 | 3853.69 | -1220.17 | 4038.67 | 0.00 | 439777.08 | 758795.94         |
| 15300.00 | 90.00 | 355.82 | 11105.00 | 3953.42 | -1227.45 | 4136.84 | 0.00 | 439876.81 | 758788.66         |
| 15400.00 | 90.00 | 355.82 | 11105.00 | 4053.16 | -1234.73 | 4235.01 | 0.00 | 439976.55 | 758781.38         |
| 15500.00 | 90.00 | 355.82 | 11105.00 | 4152.89 | -1242.02 | 4333.17 | 0.00 | 440076.28 | 758774.09         |
| 15600.00 | 90.00 | 355.82 | 11105.00 | 4252.63 | -1249.30 | 4431.34 | 0.00 | 440176.02 | 758766.81         |
| 15700.00 | 90.00 | 355.82 | 11105.00 | 4352.36 | -1256.58 | 4529.51 | 0.00 | 440275.75 | 758759.53         |
| 15800.00 | 90.00 | 355.82 | 11105.00 | 4452.10 | -1263.87 | 4627.68 | 0.00 | 440375.49 | 758752.24         |
| 15900.00 | 90.00 | 355.82 | 11105.00 | 4551.83 | -1271.15 | 4725.85 | 0.00 | 440475.22 | 758744.96         |
| 16000.00 | 90.00 | 355.82 | 11105.00 | 4651.56 | -1278.43 | 4824.02 | 0.00 | 440574.95 | 758737.68         |
| 16093.07 | 90.00 | 355.82 | 11105.00 | 4744.39 | -1285.21 | 4915.38 | 0.00 | 440667.78 | 758730.90 PBHL 4H |

## Targets

| Name      | Description<br>Dip. | Dir. | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | Map<br>Northing<br>ft | Map<br>Easting<br>ft | <---< Latitude<br>Deg Min Sec | <---< Longitude<br>Deg Min Sec | --- |
|-----------|---------------------|------|-----------|-------------|-------------|-----------------------|----------------------|-------------------------------|--------------------------------|-----|
| PBHL 4H   |                     |      | 11105.00  | 4744.39     | -1285.21    | 440667.78             | 758730.90            | 32 12 34.259 N                | 103 37 49.609 W                |     |
| LP Tgt 4H |                     |      | 11105.00  | 125.84      | -947.95     | 436049.23             | 759068.16            | 32 11 48.535 N                | 103 37 46.035 W                |     |

## Casing Points

| MD | TVD | Diameter | Hole Size | Name |
|----|-----|----------|-----------|------|
|----|-----|----------|-----------|------|

## Annotation

| MD<br>ft | TVD<br>ft |            |
|----------|-----------|------------|
| 5345.00  | 5345.00   | KOP        |
| 5678.33  | 5676.64   | Hold       |
| 10686.17 | 10608.40  | Build/Turn |
| 11462.23 | 11105.00  | LP         |
| 16093.07 | 11105.00  | PBHL #4    |

## NOTES REGARDING BLOWOUT PREVENTERS

Devon Energy Production Company, LP  
**Bell Lake 24 Fed 4H**

Surface Location: 200 FSL & 2030 FEL, Unit O, Sec 24 T24S R32E, Lea, NM  
Bottom Hole Location: 330 FNL & 1980 FWL, Unit C, Sec 24 T24S R32E, 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 3000 psi working pressure.
4. All fittings will be flanged.
5. A full bore safety valve tested to a minimum 3000 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.

# Equipment Schematic

The schematic illustrates the equipment layout for a wellhead and its associated processing units. The wellhead assembly includes a Rotating Head, Annular, Pipe Rams, and Blind Rams. A Fill up line is connected to the Rotating Head. A Flowline to shakers connects the wellhead to the Shakers. The Shakers are connected to Process Tanks, which are connected to Volume Tanks, and finally to Mud Pumps. A Closed Loop Equip Roll Off Bins & Tracks is also connected to the Process Tanks. A 2" Kill Line with a Check Valve and 2-1/16" valves is connected to the wellhead. A 3" Choke Line (Possible Co-Flex Hose) with 4-1/16" valves and an HCR Valve is connected to the wellhead. A Remotely operated Adjustable Choke is connected to the 3" Choke Line. The 3" Choke Line is connected to a manifold with 2" valve & line. The manifold is connected to the Separator. The Separator has three output lines: an 8" line to flare pit (150 ft from wellhead), a 4" line to shakers, and a 6" line to separator. The 4" line to shakers is connected to the Shakers. The 6" line to separator is connected to the Separator. The 4" line to flare pit (150 ft from wellhead) is connected to the Separator. The 6" line to separator is connected to the Separator. The 4" line to flare pit (150 ft from wellhead) is connected to the Separator.

Note: all valves & lines on choke manifold are 3" unless otherwise noted. Exact manifold configuration may vary.

Note: all valves & lines on choke manifold are 3" unless otherwise noted. Exact manifold configuration may vary.

# Continental

## CONTITECH

## Quality Document

### Bank data





Fluid Technology

ContiTech Beattie Corp.  
Website: [www.contitechbeattie.com](http://www.contitechbeattie.com)

Monday, June 14, 2010

RE: Drilling & Production Hoses  
Lifting & Safety Equipment

To Helmerich & Payne,

A Continental ContiTech hose assembly can perform as intended and suitable for the application regardless of whether the hose is secured or unsecured in its configuration. As a manufacturer of High Pressure Hose Assemblies for use in Drilling & Production, we do offer the corresponding lifting and safety equipment, this has the added benefit of easing the lifting and handling of each hose assembly whilst affording hose longevity by ensuring correct handling methods and procedures as well as securing the hose in the unlikely event of a failure; but in no way does the lifting and safety equipment affect the performance of the hoses providing the hoses have been handled and installed correctly. It is good practice to use lifting & safety equipment but not mandatory.

Should you have any questions or require any additional information/clarifications then please do not hesitate to contact us.

ContiTech Beattie is part of the Continental AG Corporation and can offer the full support resources associated with a global organization.

Best regards,

Robin Hodgson  
Sales Manager  
ContiTech Beattie Corp

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