

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
District II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                                |                                                          |                                                             |
|------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------------|
| <sup>1</sup> API Number<br><b>30-015-42625</b> | <sup>2</sup> Pool Code<br><b>96437</b>                   | <sup>3</sup> Pool Name<br><b>Happy Valley, Bone Spring</b>  |
| <sup>4</sup> Property Code<br><b>40354</b>     | <sup>5</sup> Property Name<br><b>98056</b>               | <sup>6</sup> Well Number<br><b>WC-015 G-04 S232628M, BS</b> |
| <sup>7</sup> GRID No.<br><b>6137</b>           | <sup>8</sup> Operator Name<br><b>CLETUS 28 STATE COM</b> | <sup>9</sup> Elevation<br><b>3337.7</b>                     |

<sup>10</sup>Surface Location

| UL or lot no. | Section   | Township    | Range       | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County      |
|---------------|-----------|-------------|-------------|---------|---------------|------------------|---------------|----------------|-------------|
| <b>P</b>      | <b>28</b> | <b>23 S</b> | <b>26 E</b> |         | <b>175</b>    | <b>SOUTH</b>     | <b>660</b>    | <b>EAST</b>    | <b>EDDY</b> |

<sup>11</sup>Bottom Hole Location If Different From Surface

| UL or lot no. | Section   | Township    | Range       | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County      |
|---------------|-----------|-------------|-------------|---------|---------------|------------------|---------------|----------------|-------------|
| <b>A</b>      | <b>28</b> | <b>23 S</b> | <b>26 E</b> |         | <b>330</b>    | <b>NORTH</b>     | <b>660</b>    | <b>EAST</b>    | <b>EDDY</b> |

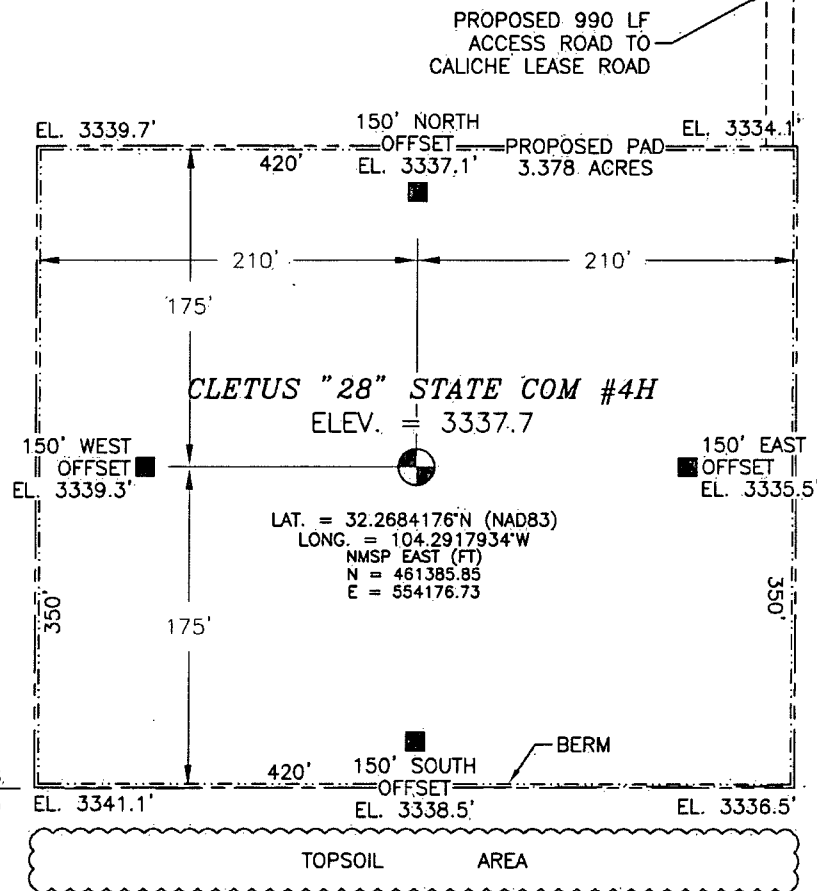
|                                                |                               |                                  |                         |
|------------------------------------------------|-------------------------------|----------------------------------|-------------------------|
| <sup>12</sup> Dedicated Acres<br><b>160.00</b> | <sup>13</sup> Joint or Infill | <sup>14</sup> Consolidation Code | <sup>15</sup> Order No. |
|------------------------------------------------|-------------------------------|----------------------------------|-------------------------|

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83) BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE.</p> <p>W. Q. CORNER SEC. 28<br/>LAT. = 32:2751270"N<br/>LONG. = 104:3068945"W<br/>NMSP EAST (FT)<br/>N = 463825.13<br/>E = 549508.66</p> <p>SW CORNER SEC. 28<br/>LAT. = 32:2678899"N<br/>LONG. = 104:3068859"W<br/>NMSP EAST (FT)<br/>N = 461192.40<br/>E = 549511.96</p> | <p>N. Q. CORNER SEC. 28<br/>LAT. = 32:2824143"N<br/>LONG. = 104:2982744"W<br/>NMSP EAST (FT)<br/>N = 466476.90<br/>E = 552171.91</p> <p>S. Q. CORNER SEC. 28<br/>LAT. = 32:2679167"N<br/>LONG. = 104:2982749"W<br/>NMSP EAST (FT)<br/>N = 461202.91<br/>E = 552173.47</p>                                                                                                                                                | <p>NE CORNER SEC. 28<br/>LAT. = 32:2824346"N<br/>LONG. = 104:2896457"W<br/>NMSP EAST (FT)<br/>N = 463485.28<br/>E = 554838.46</p> <p>SE CORNER SEC. 28<br/>LAT. = 32:2679432"N<br/>LONG. = 104:2895590"W<br/>NMSP EAST (FT)<br/>N = 461213.52<br/>E = 554835.60</p>                                                                                                                                                                              | <p><sup>17</sup> OPERATOR CERTIFICATION<br/>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Linda Good</i> 8/25/2014<br/>Signature Date</p> <p>Linda Good<br/>Printed Name</p> <p><i>linda.good@dmv.com</i><br/>E-mail Address</p> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <p>Lease Line</p> <p>Project Area</p> <p>Completion Interval</p> <p>CLETUS "28" STATE COM. #4H<br/>ELEV. = 3337.7<br/>LAT. = 32:268476"N (NAD83)<br/>LONG. = 104:2917934"W<br/>NMSP EAST (FT)<br/>N = 461385.85<br/>E = 554176.75</p> <p>BOTTOM OF HOLE<br/>LAT. = 32:2815090"N<br/>LONG. = 104:2917755"W<br/>NMSP EAST (FT)<br/>N = 466148.58<br/>E = 554130.42</p> <p>K-3403</p> <p>V-4354</p> <p>SURFACE LOCATION</p> | <p><sup>18</sup> SURVEYOR CERTIFICATION<br/>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>OCTOBER 31, 2014<br/>Date of Survey</p> <p><i>FILMON F. JARAMILLO</i><br/>Signature and Seal of Professional Surveyor</p> <p>Certificate Number: 12797<br/>SURVEY NO. 2415A</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

SECTION 28, TOWNSHIP 23 SOUTH, RANGE 26 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO  
**SITE MAP**

NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE



LAT. = 32.2684176°N (NAD83)  
LONG. = 104.2917934°W  
NMSP EAST (FT)  
N = 461385.85  
E = 554176.73



0 10 50 100 200

SCALE 1" = 100'

**DIRECTIONS TO LOCATION**

FROM MILE MARKER 24 ON STATE HIGHWAY 62-180 GO NORTH  
APPROX. 0.28 MILES TO A LEASE ROAD ON LEFT (WEST), TURN WEST  
ON LEASE ROAD GO APPROX. 0.15 MILES TO A ROAD, LATH WITH RED  
AND WHITE FLAGGING. FOLLOW ROAD LATHS GOING SOUTH APPROX.  
0.20 MILES TO LOCATION.

DEVON ENERGY PRODUCTION COMPANY, L.P.

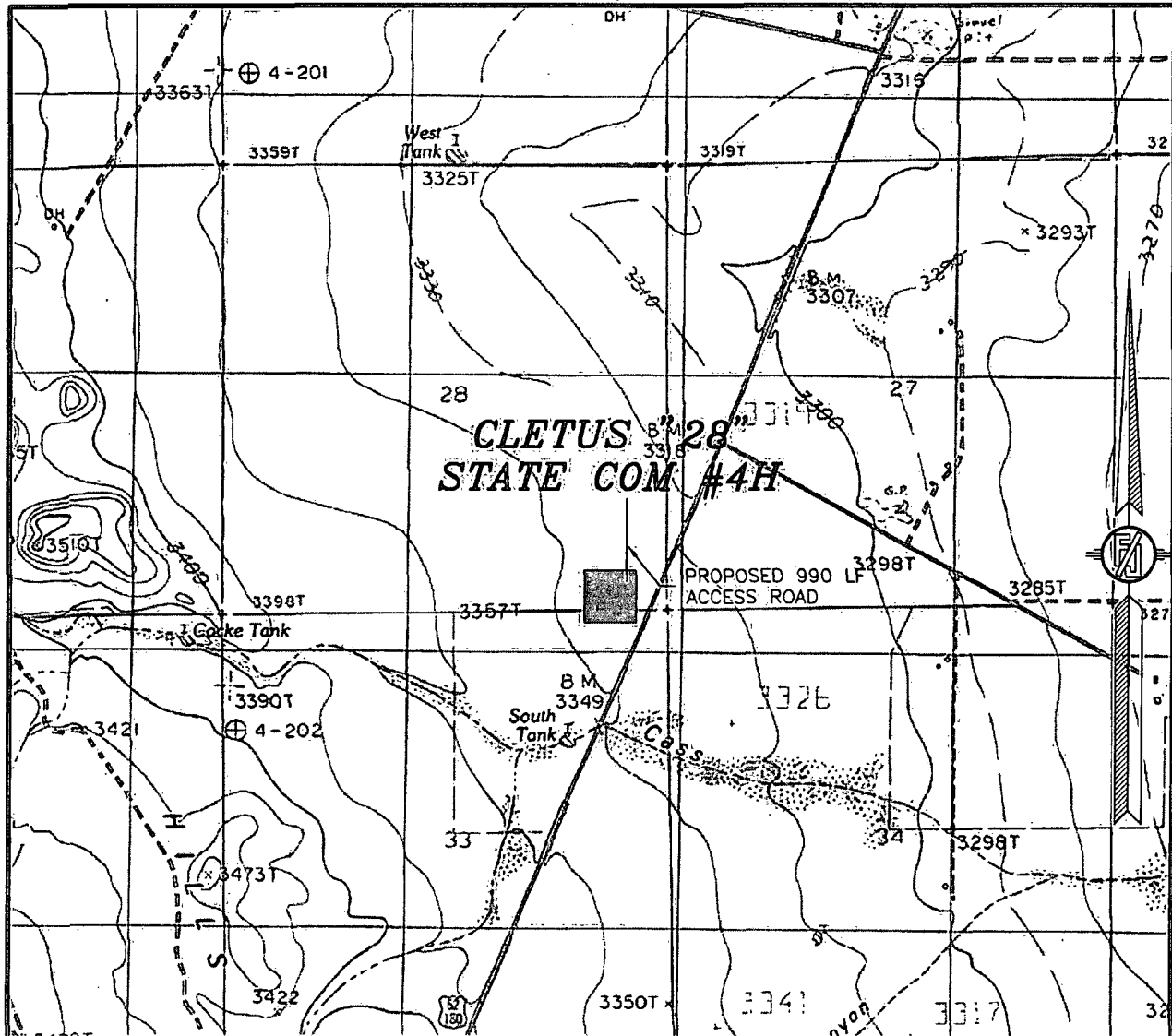
**CLETUS "28" STATE COM #4H**  
LOCATED 175 FT. FROM THE SOUTH LINE  
AND 660 FT. FROM THE EAST LINE OF  
SECTION 28, TOWNSHIP 23 SOUTH,  
RANGE 26 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO

OCTOBER 31, 2013

SURVEY NO. 2415A

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 28, TOWNSHIP 23 SOUTH, RANGE 26 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO  
LOCATION VERIFICATION MAP



USGS QUAD MAP:  
KITCHEN COVE

NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.

**CLETUS "28" STATE COM #4H**

LOCATED 175 FT. FROM THE SOUTH LINE  
AND 660 FT. FROM THE EAST LINE OF  
SECTION 28, TOWNSHIP 23 SOUTH,  
RANGE 26 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO

OCTOBER 31, 2013

MADRON SURVEYING, INC.

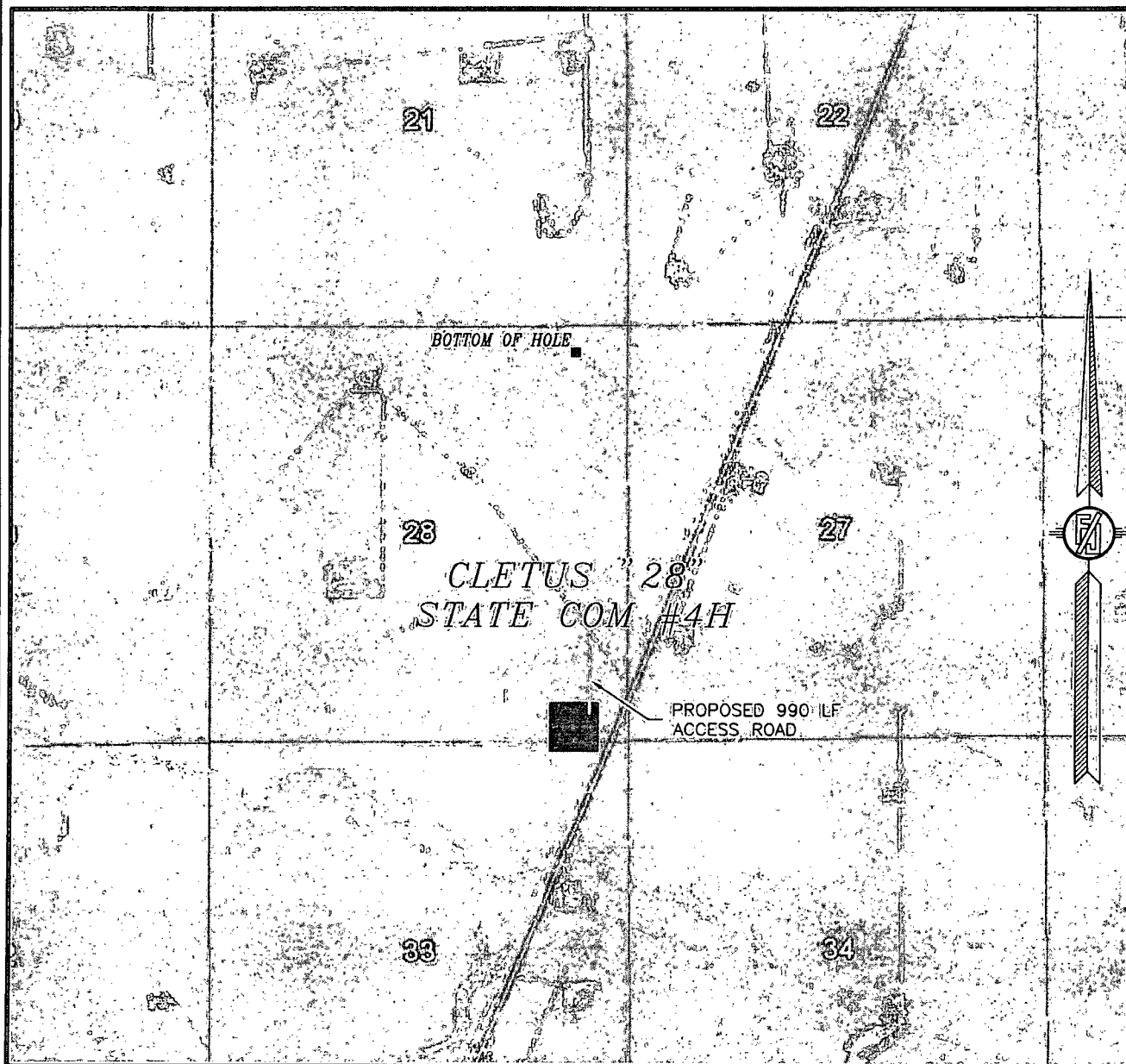
301 SOUTH CANAL  
(575) 234-3341

SURVEY NO. 2415A  
CARLSBAD, NEW MEXICO

A detailed topographic map of the Cletus area in New Mexico. The map features a grid system and various geographical labels. Key locations include Cletus, State Highway 63, and the Cletus Air Terminal. The map also shows several canyons, including Sheep Canyon, Dark Canyon, and Three Mile Canyon. Other features include the Cletus River, Cletus Draw, and Cletus Creek. The map includes a scale bar indicating distances of 0.20 miles, 0.15 miles, and 0.28 miles. A north arrow is located in the upper right corner. The map is titled "CLETUS '28" STATE COM #4H".

*SURVEY NO. 2415A*

SECTION 28, TOWNSHIP 23 SOUTH, RANGE 26 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO  
AERIAL PHOTO



NOT TO SCALE  
AERIAL PHOTO:  
GOOGLE EARTH  
APRIL 2013

DEVON ENERGY PRODUCTION COMPANY, L.P.

**CLETUS "28" STATE COM #4H**

LOCATED 175 FT. FROM THE SOUTH LINE  
AND 660 FT. FROM THE EAST LINE OF  
SECTION 28, TOWNSHIP 23 SOUTH,  
RANGE 26 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO

OCTOBER 31, 2013

SURVEY NO. 2415A

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

## **DRILLING PROGRAM**

Devon Energy Production Company, L.P.  
**Cletus 28 State Com 4H**

**1. Geologic Name of Surface Formation: Quaternary**

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

|                                   |           |           |          |
|-----------------------------------|-----------|-----------|----------|
| a. Fresh Water                    | 400'      |           |          |
| b. Rustler                        | 1290'     | Barren    |          |
| c. Top of Salt                    | 1770'     | Barren    |          |
| d. Base of Salt                   | 5090'     | Barren    |          |
| e. Delaware                       | 5190'     | Oil / Gas |          |
| f. Cherry Canyon                  | 6060'     | Oil / Gas |          |
| g. Brushy Canyon                  | 7640'     | Oil / Gas |          |
| h. Bone Spring Lime               | 9070'     | Oil / Gas |          |
| i. 1 <sup>st</sup> Bone Spring SS | 10065'    | Oil / Gas |          |
| j. 2 <sup>nd</sup> Bone Spring SS | 10771'    | Oil / Gas |          |
| Total Depth                       | 6625' TVD | 11182' MD | 8870' PH |

### 3. 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); **if an H&P rig drills this well. Otherwise no flex line is needed.** The line will be kept as straight as possible with minimal turns.

#### 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.

4. **Casing Program:**

| Hole Size | Hole Interval | Casing OD | Casing Interval | Weight (lb/ft) | Collar | Grade | Collapse Design Factor | Burst Design Factor | Tension Design Factor |
|-----------|---------------|-----------|-----------------|----------------|--------|-------|------------------------|---------------------|-----------------------|
| 17-1/2"   | 0 - 610'      | 13-3/8"   | 0 - 610'        | 48             | STC    | H-40  | 2.82                   | 6.34                | 18.48                 |
| 12-1/4"   | 610-1900'     | 9-5/8"    | 0-1900'         | 36             | LTC    | J-55  | 2.04                   | 3.56                | 6.62                  |
| 8-3/4"    | 1900-11182'   | 5-1/2"    | 0-11182'        | 17             | BTC    | P-110 | 2.71                   | 3.36                | 5.04                  |

**Casing Notes:**

- All casing is new and API approved

**Maximum Lateral TVD: 6625'**

**A Pilot Hole will be drilled to 8870' and plugged back with the cement volumes below**

5. **Proposed mud Circulations System:**

| Depth       | Mud Weight | Viscosity | Fluid Loss | Type System |
|-------------|------------|-----------|------------|-------------|
| 0-610'      | 8.4-9.0    | 30-34     | N/C        | FW          |
| 610-1900'   | 10.0       | 28-32     | N/C        | Brine       |
| 1900-13873' | 8.6-9.0    | 28-32     | N/C        | 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.

## 6. Cementing Table:

| String                                  | Number of sx      | Weight lbs/gal | Water Volume g/sx | Yield cf/sx | Stage; Lead/Tail | Slurry Description                                                                                                                                                 |
|-----------------------------------------|-------------------|----------------|-------------------|-------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13-3/8" Surface                         | 420               | 13.5           | 8.92              | 1.72        | Lead             | Class C Cement + 4% BWOC Bentonite + 2% BWOC CaCl <sub>2</sub>                                                                                                     |
|                                         | 40                | 14.8           | 6.32              | 1.33        | Tail             | Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Fresh Water                                                                                                   |
| 9-5/8" Intermediate Single Stage        | 560               | 12.9           | 9.81              | 1.85        | Lead             | (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake + 70.9 % Fresh Water                              |
|                                         | 280               | 14.8           | 6.32              | 1.33        | Tail             | Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Fresh Water                                                                                                   |
| 9-5/8" Intermediate 2-Stage Option      | 310               | 13.7           | 8.66              | 1.67        | Tail             | Class C Cement + 0.4% BWOC LAP-1 + 0.2% BWOC HR-601 + 0.2 lb/sk D-Air 5000 + 4% BWOC Bentonite + 69.3% Fresh Water                                                 |
|                                         | DV Tool at 1000ft |                |                   |             |                  |                                                                                                                                                                    |
|                                         | 110               | 12.9           | 9.81              | 1.85        | Lead             | (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake + 70.9 % Fresh Water                              |
|                                         | 190               | 14.8           | 6.32              | 1.33        | Tail             | Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Fresh Water                                                                                                   |
| Pilot Hole Plug Back                    | 120               | 15.6           | 5.39              | 1.19        | Plug Cement      | Class H Cement + 0.2% Halad-9 + 0.2% HR-601 + 60.5 % Fresh Water                                                                                                   |
| 5-1/2" Production Casing Single Stage   | 760               | 11.9           | 12.89             | 2.26        | Lead             | (50:50) Class H Cement: Poz (Fly Ash) + 10% BWOC Bentonite + 1 lb/sk of Kol-Seal + 0.3% BWOC HR-601 + 0.5lb/sk D-Air 5000 + 76.4% Fresh Water                      |
|                                         | 260               | 12.5           | 10.86             | 1.96        | Lead             | (65:35) Class H Cement: Poz (Fly Ash) + 6% BWOC Bentonite + 0.25% BWOC HR-601 + 0.125 lbs/sack Poly-E-Flake + 74.1 % Fresh Water                                   |
|                                         | 780               | 14.5           | 5.38              | 1.22        | Tail             | (50:50) Class H Cement: Poz (Fly Ash) + 1 lb/sk Sodium Chloride + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% bwoc HR-601 + 2% bwoc Bentonite + 58.8% Fresh Water |
| 5-1/2" Production Casing 2-Stage Option | 290               | 12.5           | 10.86             | 1.96        | Lead             | (65:35) Class H Cement: Poz (Fly Ash) + 6% BWOC Bentonite + 0.25% BWOC HR-601 + 0.125 lbs/sack Poly-E-Flake + 74.1 % Fresh Water                                   |
|                                         | 1370              | 14.5           | 5.38              | 1.22        | Tail             | (50:50) Class H Cement: Poz (Fly Ash) + 1 lb/sk Sodium Chloride + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% bwoc HR-601 + 2% bwoc Bentonite + 58.8% Fresh Water |
|                                         | DV Tool at 4500ft |                |                   |             |                  |                                                                                                                                                                    |
|                                         | 360               | 11.9           | 12.89             | 2.26        | Lead             | (50:50) Class H Cement: Poz (Fly Ash) + 10% BWOC Bentonite + 1 lb/sk of Kol-Seal + 0.3% BWOC HR-601 + 0.5lb/sk D-Air 5000 + 76.4% Fresh Water                      |
|                                         | 120               | 14.8           | 6.32              | 1.33        | Tail             | Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Fresh Water                                                                                                   |

**TOC for all Strings:**

|              |   |       |
|--------------|---|-------|
| Surface      | @ | 0'    |
| Intermediate | @ | 0'    |
| Production   | @ | 1400' |

**Notes:**

- Cement volumes Surface 100%, Intermediate 50%, Pilot hole 10%, and Production based on at least 25% excess
- Actual cement volumes will be adjusted based on fluid caliper and/or caliper log data
- If lost circulation is encountered while drilling the production and/or the intermediate wellbores, a DV tool will be installed a minimum of 50' below the previous casing shoe and of 200' above the current shoe. If the DV tool has to be moved, the cement volumes will be adjusted proportionately.

**7. 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. Resistivity and porosity logs are planned below the intermediate casing point. Stated logs run will be named in the Completion Report and submitted to the BLM.
- d. No coring program is planned
- e. Additional Testing will be initiated subsequent to setting the production casing. Specific intervals will be targeted based on log evaluation, geological sample shows, and drill stem tests.

**8. Potential Hazards:**

- a. No abnormal pressures or temperatures are expected. There is no known presence of H<sub>2</sub>S in this area, and none is anticipated to be encountered. 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 being used to drill this well. Estimated BHP: 2981 psi, and estimated BHT: 115 degrees.
- b. Hydrogen Sulfide detection equipment will be in operation after drilling out the surface casing shoe until the production string is cemented. Breathing equipment will be on location upon drilling the surface casing shoe until total depth is reached.

**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 after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 20 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.



Azimuths to Grid North  
True North: -0.02°  
Magnetic North: 7.69°  
Magnetic Field  
Strength: 48267.0snT  
Dip Angle: 60.02°  
Date: 02/20/2014  
Model: BGGM2013



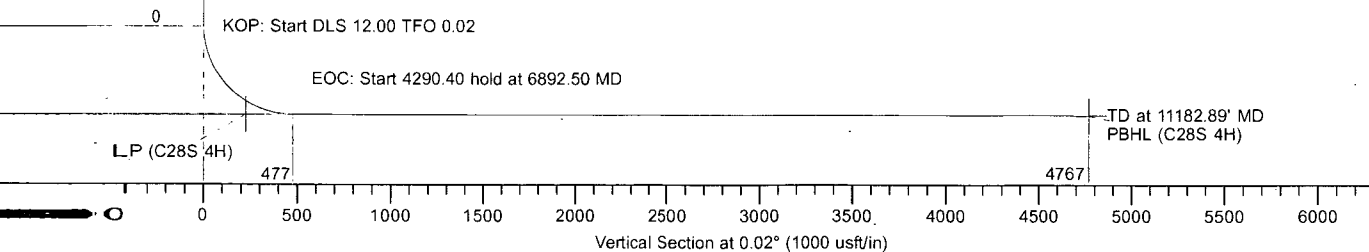
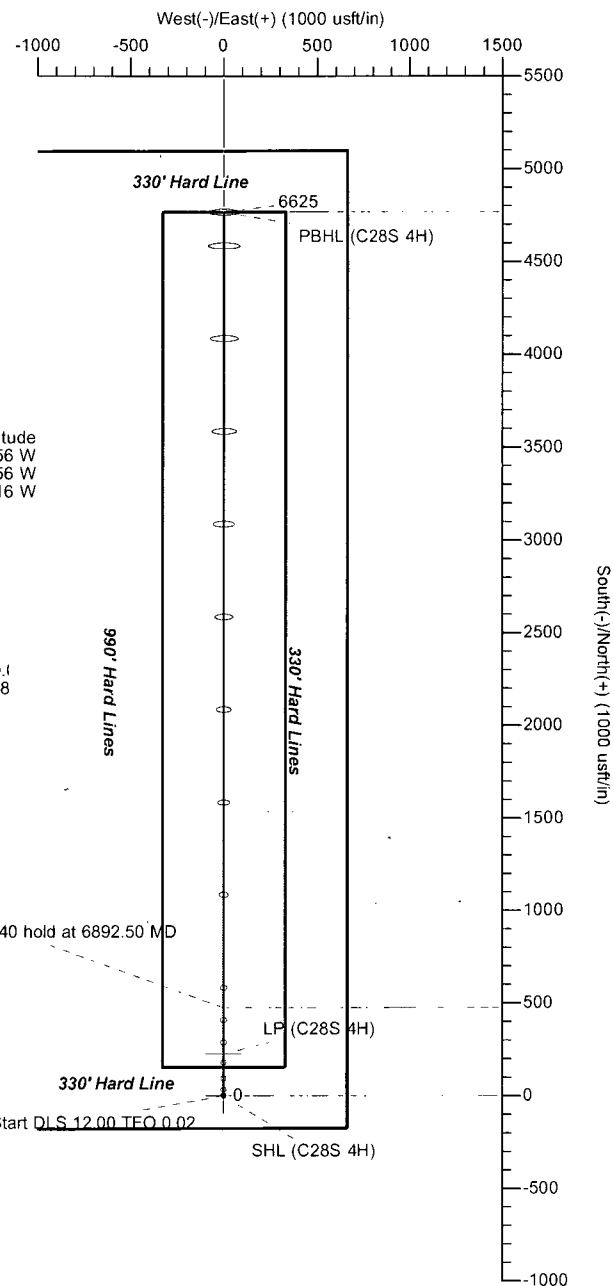
PROJECT DETAILS: Eddy County, NM (NAD-83)  
Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: New Mexico Eastern Zone

#### DESIGN TARGET DETAILS

| Name           | TVD     | +N/-S   | +E/-W | Northing  | Easting   | Latitude         | Longitude         |
|----------------|---------|---------|-------|-----------|-----------|------------------|-------------------|
| SHL (C28S 4H)  | 0.00    | 0.00    | 0.00  | 461385.85 | 554176.73 | 32° 16' 6.303 N  | 104° 17' 30.456 W |
| LP (C28S 4H)   | 6620.00 | 225.04  | -0.08 | 461610.89 | 554176.65 | 32° 16' 8.531 N  | 104° 17' 30.456 W |
| PBHL (C28S 4H) | 6625.00 | 4767.35 | 1.61  | 466153.20 | 554178.34 | 32° 16' 53.481 N | 104° 17' 30.416 W |

#### SECTION DETAILS

| Sec | MD       | Inc   | Azi  | TVD     | +N/-S   | +E/-W | Dleg  | TFace | VSect   | Annotation                    |
|-----|----------|-------|------|---------|---------|-------|-------|-------|---------|-------------------------------|
| 1   | 0.00     | 0.00  | 0.00 | 0.00    | 0.00    | 0.00  | 0.00  | 0.00  | 0.00    |                               |
| 2   | 6143.00  | 0.00  | 0.00 | 6143.00 | 0.00    | 0.00  | 0.00  | 0.00  | 0.00    | KOP: Start DLS 12.00 TFO 0.1  |
| 3   | 6892.50  | 89.94 | 0.02 | 6620.46 | 476.96  | 0.16  | 12.00 | 0.02  | 476.96  | EOC: Start 4290.40 hold at 68 |
| 4   | 11182.89 | 89.94 | 0.02 | 6625.00 | 4767.35 | 1.61  | 0.00  | 0.00  | 4767.35 | TD at 11182.89' MD            |



**LEAM DRILLING SYSTEMS LLC**  
2010 East Davis, Conroe, Texas 77301  
Phone: 936/756-7577, Fax 936/756-7595

Plan: Plan #1 Draft 1 (4H/OH)  
Cletus 28 State  
Created By: Heber Claros Date: 10/23, February 20 2014  
Date: \_\_\_\_\_  
Approved: \_\_\_\_\_ Date: \_\_\_\_\_

# **DEVON ENERGY**

Eddy County, NM (NAD-83)

Cletus 28 State

4H

OH

Plan: Plan #1 Draft 1

## **Standard Planning Report**

20 February, 2014

# Leam Drilling Systems LLC

## Planning Report

|           |                           |                              |                                 |
|-----------|---------------------------|------------------------------|---------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well 4H                         |
| Company:  | DEVON ENERGY              | TVD Reference:               | GE 3338' + KB 25' @ 3363.00usft |
| Project:  | Eddy County, NM (NAD-83)  | MD Reference:                | GE 3338' + KB 25' @ 3363.00usft |
| Site:     | Cletus 28 State           | North Reference:             | Grid                            |
| Well:     | 4H                        | Survey Calculation Method:   | Minimum Curvature               |
| Wellbore: | OH                        |                              |                                 |
| Design:   | Plan #1 Draft 1           |                              |                                 |

|             |                           |               |                |
|-------------|---------------------------|---------------|----------------|
| Project     | Eddy County, NM (NAD-83)  |               |                |
| Map System: | US State Plane 1983       | System Datum: | Mean Sea Level |
| Geo Datum:  | North American Datum 1983 |               |                |
| Map Zone:   | New Mexico Eastern Zone   |               |                |

|                       |                 |                   |                   |
|-----------------------|-----------------|-------------------|-------------------|
| Site                  | Cletus 28 State |                   |                   |
| Site Position:        |                 | Northing:         | 461,369.98 usft   |
| From:                 | Lat/Long        | Easting:          | 550,171.59 usft   |
| Position Uncertainty: | 0.00 usft       | Slot Radius:      | 13-3/16 "         |
|                       |                 | Latitude:         | 32° 16' 6.159 N   |
|                       |                 | Longitude:        | 104° 18' 17.106 W |
|                       |                 | Grid Convergence: | 0.02 °            |

|                      |           |                     |                   |
|----------------------|-----------|---------------------|-------------------|
| Well                 | 4H        |                     |                   |
| Well Position        | +N/-S     | 15.87 usft          | Northing:         |
|                      | +E/-W     | 4,005.14 usft       | Easting:          |
| Position Uncertainty | 0.00 usft | Wellhead Elevation: | 0.00 usft         |
|                      |           | Latitude:           | 32° 16' 6.303 N   |
|                      |           | Longitude:          | 104° 17' 30.456 W |
|                      |           | Ground Level:       | 3,338.00 usft     |

|           |            |             |                |
|-----------|------------|-------------|----------------|
| Wellbore  | OH         |             |                |
| Magnetics | Model Name | Sample Date | Declination    |
|           |            |             | (°)            |
|           | BGGM2013   | 02/20/14    | 7.71           |
|           |            |             | Dip Angle      |
|           |            |             | (°)            |
|           |            |             | 60.02          |
|           |            |             | Field Strength |
|           |            |             | (nT)           |
|           |            |             | 48,267         |

|                   |                  |           |               |
|-------------------|------------------|-----------|---------------|
| Design            | Plan #1 Draft 1  |           |               |
| Audit Notes:      |                  |           |               |
| Version:          | Phase:           | PROTOTYPE | Tie On Depth: |
|                   |                  |           | 0.00          |
| Vertical Section: | Depth From (TVD) | +N/-S     | +E/-W         |
|                   | (usft)           | (usft)    | (usft)        |
|                   | 0.00             | 0.00      | 0.00          |
|                   |                  |           | Direction     |
|                   |                  |           | (°)           |
|                   |                  |           | 0.02          |

|               |             |         |          |          |        |             |             |             |      |                |
|---------------|-------------|---------|----------|----------|--------|-------------|-------------|-------------|------|----------------|
| Plan Sections |             |         |          |          |        |             |             |             |      |                |
| Measured      | Inclination | Azimuth | Vertical | +N/-S    | +E/-W  | Dogleg      | Build       | Turn        | TFO  | Target         |
| Depth         | (°)         | (°)     | Depth    | (usft)   | (usft) | Rate        | Rate        | Rate        | (°)  |                |
| (usft)        |             |         | (usft)   |          |        | (°/100usft) | (°/100usft) | (°/100usft) |      |                |
| 0.00          | 0.00        | 0.00    | 0.00     | 0.00     | 0.00   | 0.00        | 0.00        | 0.00        | 0.00 |                |
| 6,143.00      | 0.00        | 0.00    | 6,143.00 | 0.00     | 0.00   | 0.00        | 0.00        | 0.00        | 0.00 |                |
| 6,892.50      | 89.94       | 0.02    | 6,620.46 | 476.96   | 0.16   | 12.00       | 12.00       | 0.00        | 0.02 |                |
| 11,182.89     | 89.94       | 0.02    | 6,625.00 | 4,767.35 | 1.61   | 0.00        | 0.00        | 0.00        | 0.00 | PBHL (C28S 4H) |

# Leam Drilling Systems LLC

## Planning Report

|           |                           |                              |                                 |
|-----------|---------------------------|------------------------------|---------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well 4H                         |
| Company:  | DEVON ENERGY              | TVD Reference:               | GE 3338' + KB 25' @ 3363.00usft |
| Project:  | Eddy County, NM (NAD-83)  | MD Reference:                | GE 3338' + KB 25' @ 3363.00usft |
| Site:     | Cletus 28 State           | North Reference:             | Grid                            |
| Well:     | 4H                        | Survey Calculation Method:   | Minimum Curvature               |
| Wellbore: | OH                        |                              |                                 |
| Design:   | Plan #1 Draft 1           |                              |                                 |

| Planned Survey                        |                 |             |                       |              |              |                         |                         |                        |                       |
|---------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)                 | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 6,143.00                              | 0.00            | 0.00        | 6,143.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| KOP: Start DLS 12.00 TFO 0.02         |                 |             |                       |              |              |                         |                         |                        |                       |
| 6,150.00                              | 0.84            | 0.02        | 6,150.00              | 0.05         | 0.00         | 0.05                    | 12.00                   | 12.00                  | 0.00                  |
| 6,175.00                              | 3.84            | 0.02        | 6,174.98              | 1.07         | 0.00         | 1.07                    | 12.00                   | 12.00                  | 0.00                  |
| 6,200.00                              | 6.84            | 0.02        | 6,199.86              | 3.40         | 0.00         | 3.40                    | 12.00                   | 12.00                  | 0.00                  |
| 6,225.00                              | 9.84            | 0.02        | 6,224.60              | 7.02         | 0.00         | 7.02                    | 12.00                   | 12.00                  | 0.00                  |
| 6,250.00                              | 12.84           | 0.02        | 6,249.11              | 11.94        | 0.00         | 11.94                   | 12.00                   | 12.00                  | 0.00                  |
| 6,275.00                              | 15.84           | 0.02        | 6,273.33              | 18.13        | 0.01         | 18.13                   | 12.00                   | 12.00                  | 0.00                  |
| 6,300.00                              | 18.84           | 0.02        | 6,297.19              | 25.58        | 0.01         | 25.58                   | 12.00                   | 12.00                  | 0.00                  |
| 6,325.00                              | 21.84           | 0.02        | 6,320.62              | 34.27        | 0.01         | 34.27                   | 12.00                   | 12.00                  | 0.00                  |
| 6,350.00                              | 24.84           | 0.02        | 6,343.58              | 44.17        | 0.01         | 44.17                   | 12.00                   | 12.00                  | 0.00                  |
| 6,375.00                              | 27.84           | 0.02        | 6,365.98              | 55.26        | 0.02         | 55.26                   | 12.00                   | 12.00                  | 0.00                  |
| 6,400.00                              | 30.84           | 0.02        | 6,387.77              | 67.51        | 0.02         | 67.51                   | 12.00                   | 12.00                  | 0.00                  |
| 6,425.00                              | 33.84           | 0.02        | 6,408.89              | 80.88        | 0.03         | 80.88                   | 12.00                   | 12.00                  | 0.00                  |
| 6,450.00                              | 36.84           | 0.02        | 6,429.28              | 95.34        | 0.03         | 95.34                   | 12.00                   | 12.00                  | 0.00                  |
| 6,475.00                              | 39.84           | 0.02        | 6,448.89              | 110.85       | 0.04         | 110.85                  | 12.00                   | 12.00                  | 0.00                  |
| 6,500.00                              | 42.84           | 0.02        | 6,467.65              | 127.36       | 0.04         | 127.36                  | 12.00                   | 12.00                  | 0.00                  |
| 6,525.00                              | 45.84           | 0.02        | 6,485.53              | 144.83       | 0.05         | 144.83                  | 12.00                   | 12.00                  | 0.00                  |
| 6,550.00                              | 48.84           | 0.02        | 6,502.47              | 163.21       | 0.06         | 163.21                  | 12.00                   | 12.00                  | 0.00                  |
| 6,575.00                              | 51.84           | 0.02        | 6,518.43              | 182.46       | 0.06         | 182.46                  | 12.00                   | 12.00                  | 0.00                  |
| 6,600.00                              | 54.84           | 0.02        | 6,533.35              | 202.51       | 0.07         | 202.51                  | 12.00                   | 12.00                  | 0.00                  |
| 6,625.00                              | 57.84           | 0.02        | 6,547.21              | 223.32       | 0.08         | 223.32                  | 12.00                   | 12.00                  | 0.00                  |
| 6,650.00                              | 60.84           | 0.02        | 6,559.95              | 244.82       | 0.08         | 244.82                  | 12.00                   | 12.00                  | 0.00                  |
| 6,660.36                              | 62.08           | 0.02        | 6,564.90              | 253.92       | 0.09         | 253.92                  | 12.00                   | 12.00                  | 0.00                  |
| LP (C28S 4H)                          |                 |             |                       |              |              |                         |                         |                        |                       |
| 6,675.00                              | 63.84           | 0.02        | 6,571.56              | 266.96       | 0.09         | 266.96                  | 12.00                   | 12.00                  | 0.00                  |
| 6,700.00                              | 66.84           | 0.02        | 6,581.99              | 289.68       | 0.10         | 289.68                  | 12.00                   | 12.00                  | 0.00                  |
| 6,725.00                              | 69.84           | 0.02        | 6,591.21              | 312.91       | 0.11         | 312.91                  | 12.00                   | 12.00                  | 0.00                  |
| 6,750.00                              | 72.84           | 0.02        | 6,599.21              | 336.59       | 0.11         | 336.59                  | 12.00                   | 12.00                  | 0.00                  |
| 6,775.00                              | 75.84           | 0.02        | 6,605.96              | 360.66       | 0.12         | 360.66                  | 12.00                   | 12.00                  | 0.00                  |
| 6,800.00                              | 78.84           | 0.02        | 6,611.44              | 385.05       | 0.13         | 385.05                  | 12.00                   | 12.00                  | 0.00                  |
| 6,825.00                              | 81.84           | 0.02        | 6,615.63              | 409.69       | 0.14         | 409.69                  | 12.00                   | 12.00                  | 0.00                  |
| 6,850.00                              | 84.84           | 0.02        | 6,618.53              | 434.52       | 0.15         | 434.52                  | 12.00                   | 12.00                  | 0.00                  |
| 6,875.00                              | 87.84           | 0.02        | 6,620.13              | 459.47       | 0.16         | 459.47                  | 12.00                   | 12.00                  | 0.00                  |
| 6,892.50                              | 89.94           | 0.02        | 6,620.46              | 476.96       | 0.16         | 476.96                  | 12.00                   | 12.00                  | 0.00                  |
| EOC: Start 4290.40 hold at 6892.50 MD |                 |             |                       |              |              |                         |                         |                        |                       |
| 6,900.00                              | 89.94           | 0.02        | 6,620.47              | 484.46       | 0.16         | 484.46                  | 0.00                    | 0.00                   | 0.00                  |
| 7,000.00                              | 89.94           | 0.02        | 6,620.58              | 584.46       | 0.20         | 584.46                  | 0.00                    | 0.00                   | 0.00                  |
| 7,100.00                              | 89.94           | 0.02        | 6,620.68              | 684.46       | 0.23         | 684.46                  | 0.00                    | 0.00                   | 0.00                  |
| 7,200.00                              | 89.94           | 0.02        | 6,620.79              | 784.46       | 0.27         | 784.46                  | 0.00                    | 0.00                   | 0.00                  |
| 7,300.00                              | 89.94           | 0.02        | 6,620.90              | 884.46       | 0.30         | 884.46                  | 0.00                    | 0.00                   | 0.00                  |
| 7,400.00                              | 89.94           | 0.02        | 6,621.00              | 984.46       | 0.33         | 984.46                  | 0.00                    | 0.00                   | 0.00                  |
| 7,500.00                              | 89.94           | 0.02        | 6,621.11              | 1,084.46     | 0.37         | 1,084.46                | 0.00                    | 0.00                   | 0.00                  |
| 7,600.00                              | 89.94           | 0.02        | 6,621.21              | 1,184.46     | 0.40         | 1,184.46                | 0.00                    | 0.00                   | 0.00                  |
| 7,700.00                              | 89.94           | 0.02        | 6,621.32              | 1,284.46     | 0.43         | 1,284.46                | 0.00                    | 0.00                   | 0.00                  |
| 7,800.00                              | 89.94           | 0.02        | 6,621.42              | 1,384.46     | 0.47         | 1,384.46                | 0.00                    | 0.00                   | 0.00                  |
| 7,900.00                              | 89.94           | 0.02        | 6,621.53              | 1,484.46     | 0.50         | 1,484.46                | 0.00                    | 0.00                   | 0.00                  |
| 8,000.00                              | 89.94           | 0.02        | 6,621.64              | 1,584.46     | 0.54         | 1,584.46                | 0.00                    | 0.00                   | 0.00                  |
| 8,100.00                              | 89.94           | 0.02        | 6,621.74              | 1,684.46     | 0.57         | 1,684.46                | 0.00                    | 0.00                   | 0.00                  |
| 8,200.00                              | 89.94           | 0.02        | 6,621.85              | 1,784.46     | 0.60         | 1,784.46                | 0.00                    | 0.00                   | 0.00                  |
| 8,300.00                              | 89.94           | 0.02        | 6,621.95              | 1,884.46     | 0.64         | 1,884.46                | 0.00                    | 0.00                   | 0.00                  |
| 8,400.00                              | 89.94           | 0.02        | 6,622.06              | 1,984.46     | 0.67         | 1,984.46                | 0.00                    | 0.00                   | 0.00                  |
| 8,500.00                              | 89.94           | 0.02        | 6,622.16              | 2,084.46     | 0.70         | 2,084.46                | 0.00                    | 0.00                   | 0.00                  |

# Leam Drilling Systems LLC

## Planning Report

|           |                           |                              |                                 |
|-----------|---------------------------|------------------------------|---------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well 4H                         |
| Company:  | DEVON ENERGY              | TVD Reference:               | GE 3338' + KB 25' @ 3363.00usft |
| Project:  | Eddy County, NM (NAD-83)  | MD Reference:                | GE 3338' + KB 25' @ 3363.00usft |
| Site:     | Cletus 28 State           | North Reference:             | Grid                            |
| Well:     | 4H                        | Survey Calculation Method:   | Minimum Curvature               |
| Wellbore: | OH                        |                              |                                 |
| Design:   | Plan #1 Draft 1           |                              |                                 |

| Planned Survey                      |                 |             |                       |              |              |                         |                         |                        |                       |  |
|-------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft)               | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 8,600.00                            | 89.94           | 0.02        | 6,622.27              | 2,184.46     | 0.74         | 2,184.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 8,700.00                            | 89.94           | 0.02        | 6,622.38              | 2,284.46     | 0.77         | 2,284.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 8,800.00                            | 89.94           | 0.02        | 6,622.48              | 2,384.46     | 0.81         | 2,384.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 8,900.00                            | 89.94           | 0.02        | 6,622.59              | 2,484.46     | 0.84         | 2,484.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 9,000.00                            | 89.94           | 0.02        | 6,622.69              | 2,584.46     | 0.87         | 2,584.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 9,100.00                            | 89.94           | 0.02        | 6,622.80              | 2,684.46     | 0.91         | 2,684.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 9,200.00                            | 89.94           | 0.02        | 6,622.90              | 2,784.46     | 0.94         | 2,784.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 9,300.00                            | 89.94           | 0.02        | 6,623.01              | 2,884.46     | 0.98         | 2,884.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 9,400.00                            | 89.94           | 0.02        | 6,623.12              | 2,984.46     | 1.01         | 2,984.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 9,500.00                            | 89.94           | 0.02        | 6,623.22              | 3,084.46     | 1.04         | 3,084.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 9,600.00                            | 89.94           | 0.02        | 6,623.33              | 3,184.46     | 1.08         | 3,184.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 9,700.00                            | 89.94           | 0.02        | 6,623.43              | 3,284.46     | 1.11         | 3,284.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 9,800.00                            | 89.94           | 0.02        | 6,623.54              | 3,384.46     | 1.14         | 3,384.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 9,900.00                            | 89.94           | 0.02        | 6,623.64              | 3,484.46     | 1.18         | 3,484.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,000.00                           | 89.94           | 0.02        | 6,623.75              | 3,584.46     | 1.21         | 3,584.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,100.00                           | 89.94           | 0.02        | 6,623.86              | 3,684.46     | 1.25         | 3,684.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,200.00                           | 89.94           | 0.02        | 6,623.96              | 3,784.46     | 1.28         | 3,784.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,300.00                           | 89.94           | 0.02        | 6,624.07              | 3,884.46     | 1.31         | 3,884.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,400.00                           | 89.94           | 0.02        | 6,624.17              | 3,984.46     | 1.35         | 3,984.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,500.00                           | 89.94           | 0.02        | 6,624.28              | 4,084.46     | 1.38         | 4,084.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,600.00                           | 89.94           | 0.02        | 6,624.38              | 4,184.46     | 1.41         | 4,184.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,700.00                           | 89.94           | 0.02        | 6,624.49              | 4,284.46     | 1.45         | 4,284.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,800.00                           | 89.94           | 0.02        | 6,624.60              | 4,384.46     | 1.48         | 4,384.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,900.00                           | 89.94           | 0.02        | 6,624.70              | 4,484.46     | 1.52         | 4,484.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,000.00                           | 89.94           | 0.02        | 6,624.81              | 4,584.46     | 1.55         | 4,584.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,100.00                           | 89.94           | 0.02        | 6,624.91              | 4,684.46     | 1.58         | 4,684.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,182.89                           | 89.94           | 0.02        | 6,625.00              | 4,767.35     | 1.61         | 4,767.35                | 0.00                    | 0.00                   | 0.00                  |  |
| TD at 11182.89' MD - PBHL (C28S 4H) |                 |             |                       |              |              |                         |                         |                        |                       |  |

| Design Targets                                                                             |               |             |            |              |              |                 |                |                  |                   |  |
|--------------------------------------------------------------------------------------------|---------------|-------------|------------|--------------|--------------|-----------------|----------------|------------------|-------------------|--|
| Target Name                                                                                | Dip Angle (°) | Dip Dir (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude         | Longitude         |  |
| SHL (C28S 4H)                                                                              | 0.00          | 0.00        | 0.00       | 0.00         | 0.00         | 461,385.85      | 554,176.73     | 32° 16' 6.303 N  | 104° 17' 30.456 W |  |
| - hit/miss target                                                                          |               |             |            |              |              |                 |                |                  |                   |  |
| - Shape                                                                                    |               |             |            |              |              |                 |                |                  |                   |  |
| - plan misses target center by 6143.00usft at 6143.00usft MD (6143.00 TVD, 0.00 N, 0.00 E) |               |             |            |              |              |                 |                |                  |                   |  |
| - Point                                                                                    |               |             |            |              |              |                 |                |                  |                   |  |
| LP (C28S 4H)                                                                               | 0.00          | 0.00        | 6,620.00   | 225.04       | -0.08        | 461,610.89      | 554,176.66     | 32° 16' 8.531 N  | 104° 17' 30.456 W |  |
| - plan misses target center by 62.21usft at 6660.36usft MD (6564.90 TVD, 253.92 N, 0.09 E) |               |             |            |              |              |                 |                |                  |                   |  |
| - Point                                                                                    |               |             |            |              |              |                 |                |                  |                   |  |
| PBHL (C28S 4H)                                                                             | 0.00          | 0.00        | 6,625.00   | 4,767.35     | 1.61         | 466,153.20      | 554,178.34     | 32° 16' 53.481 N | 104° 17' 30.416 W |  |
| - plan hits target center                                                                  |               |             |            |              |              |                 |                |                  |                   |  |
| - Point                                                                                    |               |             |            |              |              |                 |                |                  |                   |  |

| Plan Annotations      |                       |                   |              |                                       |  |
|-----------------------|-----------------------|-------------------|--------------|---------------------------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              |                                       |  |
|                       |                       | +N/-S (usft)      | +E/-W (usft) | Comment                               |  |
| 6,143.00              | 6,143.00              | 0.00              | 0.00         | KOP: Start DLS 12.00 TFO 0.02         |  |
| 6,892.50              | 6,620.46              | 476.96            | 0.16         | EOC: Start 4290.40 hold at 6892.50 MD |  |
| 11,182.89             | 6,625.00              | 4,767.35          | 1.61         | TD at 11182.89' MD                    |  |

# **DEVON ENERGY**

Eddy County, NM (NAD-83)

Cletus 28 State

4H

OH

Plan #1 Draft 1

## **Anticollision Report**

20 February, 2014

# Leam Drilling Systems LLC

## Anticollision Report

|                    |                          |                              |                                 |
|--------------------|--------------------------|------------------------------|---------------------------------|
| Company:           | DEVON ENERGY             | Local Co-ordinate Reference: | Well 4H                         |
| Project:           | Eddy County, NM (NAD-83) | TVD Reference:               | GE 3338' + KB 25' @ 3363.00usft |
| Reference Site:    | Cletus.28 State          | MD Reference:                | GE 3338' + KB 25' @ 3363.00usft |
| Site Error:        | 0.00 usft                | North Reference:             | Grid                            |
| Reference Well:    | 4H                       | Survey Calculation Method:   | Minimum Curvature               |
| Well Error:        | 0.00 usft                | Output errors are at         | 2.00 sigma                      |
| Reference Wellbore | OH                       | Database:                    | EDM 5000.1 Single User Db       |
| Reference Design:  | Plan #1 Draft 1          | Offset TVD Reference:        | Reference Datum                 |

|                              |                                                                     |                |                     |
|------------------------------|---------------------------------------------------------------------|----------------|---------------------|
| Reference                    | Plan #1 Draft 1                                                     |                |                     |
| Filter type:                 | NO GLOBAL FILTER: Using user defined selection & filtering criteria |                |                     |
| Interpolation Method:        | MD + Stations Interval 100.00usft                                   | Error Model:   | ISCWSA              |
| Depth Range:                 | 0.00 to 11,182.89usft                                               | Scan Method:   | Closest Approach 3D |
| Results Limited by:          | Maximum center-center distance of 10,000.00 usft                    | Error Surface: | Elliptical Conic    |
| Warning Levels Evaluated at: | 2.00 Sigma                                                          | Casing Method: | Not applied         |

|                     |               |                      |
|---------------------|---------------|----------------------|
| Survey Tool Program | Date 02/20/14 |                      |
| From (usft)         | To (usft)     | Survey (Wellbore)    |
| 0.00                | 11,182.89     | Plan #1 Draft 1 (OH) |
|                     |               | Tool Name            |
|                     |               | LEAM MWD-ADJ         |
|                     |               | Description          |
|                     |               | MWD - Standard       |

|                                 |                                 |                              |                                 |                                  |                   |         |
|---------------------------------|---------------------------------|------------------------------|---------------------------------|----------------------------------|-------------------|---------|
| Summary                         |                                 |                              |                                 |                                  |                   |         |
| Site Name                       | Reference Measured Depth (usft) | Offset Measured Depth (usft) | Distance Between Centres (usft) | Distance Between Ellipses (usft) | Separation Factor | Warning |
| Offset Well - Wellbore - Design |                                 |                              |                                 |                                  |                   |         |
| Cletus 28 State                 |                                 |                              |                                 |                                  |                   |         |
| 1H - OH - Plan #1 Draft1        | 6,009.67                        | 6,056.33                     | 4,005.16                        | 3,978.32                         | 149.258           | CC      |
| 1H - OH - Plan #1 Draft1        | 11,182.89                       | 11,044.54                    | 4,016.13                        | 3,840.20                         | 22.828            | ES, SF  |

|                       |                                            |                       |                       |                  |               |                       |                                    |             |                        |                         |                           |                   |
|-----------------------|--------------------------------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|------------------------------------|-------------|------------------------|-------------------------|---------------------------|-------------------|
| Offset Design         | Cletus 28 State - 1H - OH - Plan #1 Draft1 |                       |                       |                  |               |                       |                                    |             |                        |                         | Offset Site Error:        | 0.00usft          |
| Survey Program:       | 0-LEAM MWD-ADJ                             |                       |                       |                  |               |                       |                                    |             |                        |                         | Offset Well Error:        | 0.00usft          |
| Reference             | Offset                                     | Semi Major Axis       |                       | Distance         |               | Minimum Separation    |                                    | Warning     |                        |                         |                           |                   |
| Measured Depth (usft) | Vertical Depth (usft)                      | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N-S (usft) | +E-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor |
| 0.00                  | 0.00                                       | 46.00                 | 0.00                  | 0.00             | 0.04          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               |                         |                           |                   |
| 100.00                | 100.00                                     | 146.00                | 100.00                | 0.08             | 0.19          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 4,004.90                | 0.27                      | N/A               |
| 200.00                | 200.00                                     | 246.00                | 200.00                | 0.31             | 0.41          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 4,004.45                | 0.72                      | 5,551.177         |
| 300.00                | 300.00                                     | 346.00                | 300.00                | 0.53             | 0.64          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 4,004.00                | 1.17                      | 3,420.207         |
| 400.00                | 400.00                                     | 446.00                | 400.00                | 0.76             | 0.86          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 4,003.55                | 1.62                      | 2,471.468         |
| 500.00                | 500.00                                     | 546.00                | 500.00                | 0.98             | 1.09          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 4,003.10                | 2.07                      | 1,934.775         |
| 600.00                | 600.00                                     | 646.00                | 600.00                | 1.21             | 1.31          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 4,002.65                | 2.52                      | 1,589.588         |
| 700.00                | 700.00                                     | 746.00                | 700.00                | 1.43             | 1.54          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 4,002.20                | 2.97                      | 1,348.924         |
| 800.00                | 800.00                                     | 846.00                | 800.00                | 1.66             | 1.76          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 4,001.75                | 3.42                      | 1,171.550         |
| 900.00                | 900.00                                     | 946.00                | 900.00                | 1.88             | 1.99          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 4,001.30                | 3.87                      | 1,035.403         |
| 1,000.00              | 1,000.00                                   | 1,046.00              | 1,000.00              | 2.11             | 2.21          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 4,000.85                | 4.32                      | 927.605           |
| 1,100.00              | 1,100.00                                   | 1,146.00              | 1,100.00              | 2.33             | 2.44          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 4,000.40                | 4.77                      | 840.136           |
| 1,200.00              | 1,200.00                                   | 1,246.00              | 1,200.00              | 2.56             | 2.66          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,999.95                | 5.22                      | 767.742           |
| 1,300.00              | 1,300.00                                   | 1,346.00              | 1,300.00              | 2.78             | 2.88          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,999.50                | 5.67                      | 706.834           |
| 1,400.00              | 1,400.00                                   | 1,446.00              | 1,400.00              | 3.01             | 3.11          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,999.05                | 6.12                      | 654.880           |
| 1,500.00              | 1,500.00                                   | 1,546.00              | 1,500.00              | 3.23             | 3.33          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,998.60                | 6.57                      | 610.041           |
| 1,600.00              | 1,600.00                                   | 1,646.00              | 1,600.00              | 3.46             | 3.56          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,998.15                | 7.01                      | 570.948           |
| 1,700.00              | 1,700.00                                   | 1,746.00              | 1,700.00              | 3.68             | 3.78          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,997.71                | 7.46                      | 536.564           |
| 1,800.00              | 1,800.00                                   | 1,846.00              | 1,800.00              | 3.91             | 4.01          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,997.26                | 7.91                      | 506.086           |
| 1,900.00              | 1,900.00                                   | 1,946.00              | 1,900.00              | 4.13             | 4.23          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,996.81                | 8.36                      | 478.884           |
| 2,000.00              | 2,000.00                                   | 2,046.00              | 2,000.00              | 4.35             | 4.46          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,996.36                | 8.81                      | 454.458           |
| 2,100.00              | 2,100.00                                   | 2,146.00              | 2,100.00              | 4.58             | 4.68          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,995.91                | 9.26                      | 432.402           |
| 2,200.00              | 2,200.00                                   | 2,246.00              | 2,200.00              | 4.80             | 4.91          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,995.46                | 9.71                      | 412.388           |
| 2,300.00              | 2,300.00                                   | 2,346.00              | 2,300.00              | 5.03             | 5.13          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,995.01                | 10.16                     | 394.145           |
| 2,400.00              | 2,400.00                                   | 2,446.00              | 2,400.00              | 5.25             | 5.36          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,994.56                | 10.61                     | 377.447           |

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

# Leam Drilling Systems LLC

## Anticollision Report

|                     |                         |                              |                                |
|---------------------|-------------------------|------------------------------|--------------------------------|
| Company:            | DEVON ENERGY            | Local Co-ordinate Reference: | Well 4H                        |
| Project:            | Eddy County NM (NAD-83) | TVD Reference:               | GE 3338 + KB 25' @ 3363.00usft |
| Reference Site:     | Cletus 28 State         | MD Reference:                | GE 3338 + KB 25' @ 3363.00usft |
| Site Error:         | 0.00 usft               | North Reference:             | Grid                           |
| Reference Well:     | 4H                      | Survey Calculation Method:   | Minimum Curvature              |
| Well Error:         | 0.00 usft               | Output errors are at:        | 2.00 sigma                     |
| Reference Wellbore: | OH                      | Database:                    | EDM 5000.1 Single User Db      |
| Reference Design:   | Plan #1 Draft 1         | Offset TVD Reference:        | Reference Datum                |

| Offset Design: Cletus 28 State 1H - OH - Plan #1 Draft 1 |                       |                       |                       |                  |               |                       |                                    |             |                        |                         |                           |                   |  | Offset Site Error: | 0.00 usft |
|----------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|------------------------------------|-------------|------------------------|-------------------------|---------------------------|-------------------|--|--------------------|-----------|
| Survey Program: D-LEAM MWD-ADJ                           |                       |                       |                       |                  |               |                       |                                    |             |                        |                         |                           |                   |  | Offset Well Error: | 0.00 usft |
| Reference                                                | Offset                | Semi Major Axis       |                       | Distance         |               | Minimum Separation    |                                    | Warning     |                        |                         |                           |                   |  |                    |           |
| Measured Depth (usft)                                    | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N-S (usft) | +E-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor |  |                    |           |
| 2,500.00                                                 | 2,500.00              | 2,546.00              | 2,500.00              | 5.48             | 5.58          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,994.11                | 11.06                     | 362.107           |  |                    |           |
| 2,600.00                                                 | 2,600.00              | 2,646.00              | 2,600.00              | 5.70             | 5.81          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,993.66                | 11.51                     | 347.965           |  |                    |           |
| 2,700.00                                                 | 2,700.00              | 2,746.00              | 2,700.00              | 5.93             | 6.03          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,993.21                | 11.96                     | 334.886           |  |                    |           |
| 2,800.00                                                 | 2,800.00              | 2,846.00              | 2,800.00              | 6.15             | 6.26          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,992.76                | 12.41                     | 322.755           |  |                    |           |
| 2,900.00                                                 | 2,900.00              | 2,946.00              | 2,900.00              | 6.38             | 6.48          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,992.31                | 12.86                     | 311.471           |  |                    |           |
| 3,000.00                                                 | 3,000.00              | 3,046.00              | 3,000.00              | 6.60             | 6.71          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,991.86                | 13.31                     | 300.951           |  |                    |           |
| 3,100.00                                                 | 3,100.00              | 3,146.00              | 3,100.00              | 6.83             | 6.93          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,991.41                | 13.76                     | 291.117           |  |                    |           |
| 3,200.00                                                 | 3,200.00              | 3,246.00              | 3,200.00              | 7.05             | 7.16          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,990.96                | 14.21                     | 281.906           |  |                    |           |
| 3,300.00                                                 | 3,300.00              | 3,346.00              | 3,300.00              | 7.28             | 7.38          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,990.51                | 14.66                     | 273.260           |  |                    |           |
| 3,400.00                                                 | 3,400.00              | 3,446.00              | 3,400.00              | 7.50             | 7.60          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,990.06                | 15.11                     | 265.128           |  |                    |           |
| 3,500.00                                                 | 3,500.00              | 3,546.00              | 3,500.00              | 7.73             | 7.83          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,989.61                | 15.56                     | 257.467           |  |                    |           |
| 3,600.00                                                 | 3,600.00              | 3,646.00              | 3,600.00              | 7.95             | 8.05          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,989.16                | 16.01                     | 250.236           |  |                    |           |
| 3,700.00                                                 | 3,700.00              | 3,746.00              | 3,700.00              | 8.18             | 8.28          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,988.71                | 16.46                     | 243.400           |  |                    |           |
| 3,800.00                                                 | 3,800.00              | 3,846.00              | 3,800.00              | 8.40             | 8.50          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,988.27                | 16.90                     | 236.927           |  |                    |           |
| 3,900.00                                                 | 3,900.00              | 3,946.00              | 3,900.00              | 8.63             | 8.73          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,987.82                | 17.35                     | 230.790           |  |                    |           |
| 4,000.00                                                 | 4,000.00              | 4,046.00              | 4,000.00              | 8.85             | 8.95          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,987.37                | 17.80                     | 224.963           |  |                    |           |
| 4,100.00                                                 | 4,100.00              | 4,146.00              | 4,100.00              | 9.07             | 9.18          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,986.92                | 18.25                     | 219.422           |  |                    |           |
| 4,200.00                                                 | 4,200.00              | 4,246.00              | 4,200.00              | 9.30             | 9.40          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,986.47                | 18.70                     | 214.148           |  |                    |           |
| 4,300.00                                                 | 4,300.00              | 4,346.00              | 4,300.00              | 9.52             | 9.63          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,986.02                | 19.15                     | 209.122           |  |                    |           |
| 4,400.00                                                 | 4,400.00              | 4,446.00              | 4,400.00              | 9.75             | 9.85          | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,985.57                | 19.60                     | 204.326           |  |                    |           |
| 4,500.00                                                 | 4,500.00              | 4,546.00              | 4,500.00              | 9.97             | 10.08         | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,985.12                | 20.05                     | 199.745           |  |                    |           |
| 4,600.00                                                 | 4,600.00              | 4,646.00              | 4,600.00              | 10.20            | 10.30         | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,984.67                | 20.50                     | 195.365           |  |                    |           |
| 4,700.00                                                 | 4,700.00              | 4,746.00              | 4,700.00              | 10.42            | 10.53         | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,984.22                | 20.95                     | 191.174           |  |                    |           |
| 4,800.00                                                 | 4,800.00              | 4,846.00              | 4,800.00              | 10.65            | 10.75         | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,983.77                | 21.40                     | 187.158           |  |                    |           |
| 4,900.00                                                 | 4,900.00              | 4,946.00              | 4,900.00              | 10.87            | 10.98         | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,983.32                | 21.85                     | 183.307           |  |                    |           |
| 5,000.00                                                 | 5,000.00              | 5,046.00              | 5,000.00              | 11.10            | 11.20         | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,982.87                | 22.30                     | 179.612           |  |                    |           |
| 5,100.00                                                 | 5,100.00              | 5,146.00              | 5,100.00              | 11.32            | 11.43         | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,982.42                | 22.75                     | 176.062           |  |                    |           |
| 5,200.00                                                 | 5,200.00              | 5,246.00              | 5,200.00              | 11.55            | 11.65         | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,981.97                | 23.20                     | 172.651           |  |                    |           |
| 5,300.00                                                 | 5,300.00              | 5,346.00              | 5,300.00              | 11.77            | 11.88         | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,981.52                | 23.65                     | 169.369           |  |                    |           |
| 5,400.00                                                 | 5,400.00              | 5,446.00              | 5,400.00              | 12.00            | 12.10         | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,981.07                | 24.10                     | 166.209           |  |                    |           |
| 5,500.00                                                 | 5,500.00              | 5,546.00              | 5,500.00              | 12.22            | 12.33         | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,980.62                | 24.55                     | 163.165           |  |                    |           |
| 5,600.00                                                 | 5,600.00              | 5,646.00              | 5,600.00              | 12.45            | 12.55         | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,980.17                | 25.00                     | 160.231           |  |                    |           |
| 5,700.00                                                 | 5,700.00              | 5,746.00              | 5,700.00              | 12.67            | 12.77         | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,979.72                | 25.45                     | 157.400           |  |                    |           |
| 5,800.00                                                 | 5,800.00              | 5,846.00              | 5,800.00              | 12.90            | 13.00         | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,979.27                | 25.90                     | 154.668           |  |                    |           |
| 5,900.00                                                 | 5,900.00              | 5,946.00              | 5,900.00              | 13.12            | 13.22         | -90.23                | -15.87                             | -4,005.14   | 4,005.17               | 3,978.83                | 26.34                     | 152.029           |  |                    |           |
| 6,000.00                                                 | 6,000.00              | 6,046.81              | 6,000.30              | 13.35            | 13.45         | -90.10                | -7.21                              | -4,005.15   | 4,005.16               | 3,978.37                | 26.79                     | 149.494           |  |                    |           |
| 6,009.67                                                 | 6,009.67              | 6,056.33              | 6,009.67              | 13.37            | 13.48         | -90.08                | -5.48                              | -4,005.15   | 4,005.16               | 3,978.32                | 26.83                     | 149.258 CC        |  |                    |           |
| 6,100.00                                                 | 6,100.00              | 6,141.81              | 6,092.08              | 13.57            | 13.67         | -89.76                | 16.92                              | -4,005.18   | 4,005.23               | 3,978.00                | 27.22                     | 147.131           |  |                    |           |
| 6,143.00                                                 | 6,143.00              | 6,179.77              | 6,127.42              | 13.67            | 13.75         | -89.56                | 30.75                              | -4,005.20   | 4,005.35               | 3,977.95                | 27.40                     | 146.155           |  |                    |           |
| 6,150.00                                                 | 6,150.00              | 6,185.77              | 6,132.93              | 13.68            | 13.77         | -89.54                | 33.15                              | -4,005.21   | 4,005.38               | 3,977.94                | 27.43                     | 145.999           |  |                    |           |
| 6,175.00                                                 | 6,174.98              | 6,207.10              | 6,152.27              | 13.74            | 13.81         | -89.41                | 42.14                              | -4,005.22   | 4,005.49               | 3,977.95                | 27.54                     | 145.443           |  |                    |           |
| 6,200.00                                                 | 6,199.86              | 6,228.25              | 6,171.09              | 13.80            | 13.86         | -89.28                | 51.76                              | -4,005.23   | 4,005.63               | 3,977.98                | 27.65                     | 144.884           |  |                    |           |
| 6,225.00                                                 | 6,224.60              | 6,250.00              | 6,190.08              | 13.85            | 13.91         | -89.15                | 62.38                              | -4,005.25   | 4,005.78               | 3,978.02                | 27.76                     | 144.325           |  |                    |           |
| 6,250.00                                                 | 6,249.11              | 6,270.02              | 6,207.19              | 13.91            | 13.96         | -89.04                | 72.78                              | -4,005.26   | 4,005.95               | 3,978.08                | 27.86                     | 143.767           |  |                    |           |
| 6,275.00                                                 | 6,273.33              | 6,290.68              | 6,224.45              | 13.97            | 14.02         | -88.92                | 84.13                              | -4,005.28   | 4,006.12               | 3,978.15                | 27.97                     | 143.206           |  |                    |           |
| 6,300.00                                                 | 6,297.19              | 6,311.21              | 6,241.18              | 14.03            | 14.08         | -88.81                | 96.02                              | -4,005.29   | 4,006.31               | 3,978.22                | 28.09                     | 142.628           |  |                    |           |
| 6,325.00                                                 | 6,320.62              | 6,331.61              | 6,257.38              | 14.08            | 14.15         | -88.70                | 108.42                             | -4,005.31   | 4,006.51               | 3,978.30                | 28.21                     | 142.036           |  |                    |           |
| 6,350.00                                                 | 6,343.58              | 6,350.00              | 6,271.59              | 14.14            | 14.20         | -88.60                | 120.08                             | -4,005.32   | 4,006.71               | 3,978.38                | 28.32                     | 141.475           |  |                    |           |
| 6,375.00                                                 | 6,365.98              | 6,372.09              | 6,288.16              | 14.20            | 14.29         | -88.49                | 134.69                             | -4,005.34   | 4,006.91               | 3,978.45                | 28.46                     | 140.797           |  |                    |           |
| 6,400.00                                                 | 6,387.77              | 6,392.18              | 6,302.73              | 14.25            | 14.36         | -88.40                | 148.52                             | -4,005.36   | 4,007.11               | 3,978.52                | 28.59                     | 140.150           |  |                    |           |
| 6,425.00                                                 | 6,408.89              | 6,412.19              | 6,316.75              | 14.30            | 14.44         | -88.31                | 162.80                             | -4,005.38   | 4,007.31               | 3,978.57                | 28.73                     | 139.458           |  |                    |           |
| 6,450.00                                                 | 6,429.28              | 6,432.12              | 6,330.21              | 14.37            | 14.53         | -88.23                | 177.49                             | -4,005.40   | 4,007.50               | 3,978.62                | 28.89                     | 138.733           |  |                    |           |

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

# Leam Drilling Systems LLC

## Anticollision Report

|                           |                          |                                     |                                 |
|---------------------------|--------------------------|-------------------------------------|---------------------------------|
| <b>Company:</b>           | DEVON ENERGY             | <b>Local Co-ordinate Reference:</b> | Well 4H                         |
| <b>Project:</b>           | Eddy County, NM (NAD-83) | <b>TVD Reference:</b>               | GE 3338' + KB 25' @ 3363.00usft |
| <b>Reference Site:</b>    | Cletus 28 State          | <b>MD Reference:</b>                | GE 3338' + KB 25' @ 3363.00usft |
| <b>Site Error:</b>        | 0.00 usft                | <b>North Reference:</b>             | Grid                            |
| <b>Reference Well:</b>    | 4H                       | <b>Survey Calculation Method:</b>   | Minimum Curvature               |
| <b>Well Error:</b>        | 0.00 usft                | <b>Output errors are at</b>         | 2.00 sigma                      |
| <b>Reference Wellbore</b> | OH                       | <b>Database:</b>                    | EDM 5000.1 Single User Db       |
| <b>Reference Design:</b>  | Plan #1 Draft 1          | <b>Offset TVD Reference:</b>        | Reference Datum                 |

| Offset Design                              |                       |                       |                       |                  |               |                       |                                     |                                     |                        |                         |                           | Offset Site Error: | 0.00 usft |
|--------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|-------------------------------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Cletus 28 State - 1H - OH - Plan #1 Draft1 |                       |                       |                       |                  |               |                       |                                     |                                     |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Survey Program: D-LEAM MWD-ADJ             |                       |                       |                       |                  |               |                       |                                     |                                     |                        |                         |                           |                    |           |
| Reference                                  |                       | Offset                |                       | Semi Major Axis  |               | Distance              |                                     |                                     |                        |                         |                           |                    |           |
| Measured Depth (usft)                      | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | Offset Wellbore Centre +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  | Warning   |
| 6,475.00                                   | 6,448.89              | 6,450.00              | 6,341.85              | 14.44            | 14.60         | -88.15                | 191.07                              | -4,005.42                           | 4,007.69               | 3,978.66                | 29.03                     | 138.033            |           |
| 6,500.00                                   | 6,467.65              | 6,471.77              | 6,355.43              | 14.52            | 14.71         | -88.08                | 208.08                              | -4,005.44                           | 4,007.87               | 3,978.65                | 29.22                     | 137.166            |           |
| 6,525.00                                   | 6,485.53              | 6,491.51              | 6,367.18              | 14.60            | 14.81         | -88.01                | 223.94                              | -4,005.47                           | 4,008.04               | 3,978.64                | 29.40                     | 136.326            |           |
| 6,550.00                                   | 6,502.47              | 6,511.20              | 6,378.36              | 14.69            | 14.91         | -87.95                | 240.15                              | -4,005.49                           | 4,008.20               | 3,978.61                | 29.60                     | 135.425            |           |
| 6,575.00                                   | 6,518.43              | 6,530.85              | 6,388.94              | 14.79            | 15.03         | -87.90                | 256.70                              | -4,005.51                           | 4,008.35               | 3,978.54                | 29.81                     | 134.471            |           |
| 6,600.00                                   | 6,533.35              | 6,550.00              | 6,398.71              | 14.90            | 15.14         | -87.86                | 273.18                              | -4,005.53                           | 4,008.49               | 3,978.46                | 30.02                     | 133.505            |           |
| 6,625.00                                   | 6,547.21              | 6,570.04              | 6,408.33              | 15.02            | 15.27         | -87.82                | 290.75                              | -4,005.56                           | 4,008.61               | 3,978.34                | 30.27                     | 132.420            |           |
| 6,650.00                                   | 6,559.95              | 6,589.59              | 6,417.13              | 15.15            | 15.39         | -87.78                | 308.22                              | -4,005.58                           | 4,008.71               | 3,978.19                | 30.53                     | 131.323            |           |
| 6,675.00                                   | 6,571.56              | 6,609.13              | 6,425.31              | 15.28            | 15.53         | -87.76                | 325.96                              | -4,005.61                           | 4,008.80               | 3,978.00                | 30.80                     | 130.170            |           |
| 6,700.00                                   | 6,581.99              | 6,628.66              | 6,432.88              | 15.43            | 15.67         | -87.74                | 343.95                              | -4,005.63                           | 4,008.87               | 3,977.78                | 31.09                     | 128.960            |           |
| 6,725.00                                   | 6,591.21              | 6,650.00              | 6,440.45              | 15.59            | 15.83         | -87.73                | 363.91                              | -4,005.66                           | 4,008.92               | 3,977.52                | 31.40                     | 127.674            |           |
| 6,750.00                                   | 6,599.21              | 6,667.69              | 6,446.16              | 15.76            | 15.97         | -87.73                | 380.65                              | -4,005.68                           | 4,008.96               | 3,977.25                | 31.71                     | 126.421            |           |
| 6,775.00                                   | 6,605.96              | 6,687.21              | 6,451.85              | 15.94            | 16.13         | -87.73                | 399.32                              | -4,005.71                           | 4,008.98               | 3,976.93                | 32.05                     | 125.094            |           |
| 6,800.00                                   | 6,611.44              | 6,706.74              | 6,456.91              | 16.12            | 16.29         | -87.74                | 418.19                              | -4,005.73                           | 4,008.98               | 3,976.58                | 32.40                     | 123.736            |           |
| 6,825.00                                   | 6,615.63              | 6,726.29              | 6,461.32              | 16.32            | 16.47         | -87.76                | 437.23                              | -4,005.76                           | 4,008.96               | 3,976.19                | 32.77                     | 122.333            |           |
| 6,850.00                                   | 6,618.53              | 6,750.00              | 6,465.80              | 16.53            | 16.68         | -87.79                | 460.51                              | -4,005.79                           | 4,008.93               | 3,975.74                | 33.19                     | 120.794            |           |
| 6,875.00                                   | 6,620.13              | 6,765.45              | 6,468.20              | 16.74            | 16.83         | -87.82                | 475.77                              | -4,005.81                           | 4,008.88               | 3,975.33                | 33.55                     | 119.485            |           |
| 6,892.50                                   | 6,620.46              | 6,779.18              | 6,469.98              | 16.90            | 16.96         | -87.85                | 489.39                              | -4,005.83                           | 4,008.84               | 3,975.00                | 33.84                     | 118.472            |           |
| 6,900.00                                   | 6,620.47              | 6,785.08              | 6,470.65              | 16.97            | 17.01         | -87.86                | 495.25                              | -4,005.84                           | 4,008.82               | 3,974.85                | 33.96                     | 118.038            |           |
| 6,943.96                                   | 6,620.52              | 6,819.87              | 6,473.35              | 17.40            | 17.36         | -87.90                | 529.93                              | -4,005.88                           | 4,008.77               | 3,974.03                | 34.74                     | 115.406            |           |
| 7,000.00                                   | 6,620.58              | 6,868.94              | 6,474.00              | 17.94            | 17.87         | -87.90                | 578.99                              | -4,005.95                           | 4,008.83               | 3,973.04                | 35.79                     | 111.999            |           |
| 7,100.00                                   | 6,620.68              | 6,968.94              | 6,474.00              | 19.05            | 19.00         | -87.90                | 678.99                              | -4,006.09                           | 4,009.01               | 3,970.98                | 38.03                     | 105.423            |           |
| 7,200.00                                   | 6,620.79              | 7,068.94              | 6,474.00              | 20.25            | 20.23         | -87.90                | 778.99                              | -4,006.23                           | 4,009.18               | 3,968.72                | 40.46                     | 99.087             |           |
| 7,300.00                                   | 6,620.90              | 7,168.94              | 6,474.00              | 21.55            | 21.54         | -87.90                | 878.98                              | -4,006.36                           | 4,009.36               | 3,966.29                | 43.07                     | 93.092             |           |
| 7,400.00                                   | 6,621.00              | 7,268.94              | 6,474.00              | 22.92            | 22.93         | -87.90                | 978.98                              | -4,006.50                           | 4,009.53               | 3,963.71                | 45.82                     | 87.507             |           |
| 7,500.00                                   | 6,621.11              | 7,368.94              | 6,474.00              | 24.35            | 24.37         | -87.90                | 1,078.98                            | -4,006.64                           | 4,009.71               | 3,961.02                | 48.69                     | 82.351             |           |
| 7,600.00                                   | 6,621.21              | 7,468.94              | 6,474.00              | 25.83            | 25.86         | -87.90                | 1,178.98                            | -4,006.77                           | 4,009.88               | 3,958.22                | 51.66                     | 77.620             |           |
| 7,700.00                                   | 6,621.32              | 7,568.94              | 6,474.00              | 27.35            | 27.39         | -87.89                | 1,278.98                            | -4,006.91                           | 4,010.05               | 3,955.34                | 54.71                     | 73.291             |           |
| 7,800.00                                   | 6,621.42              | 7,668.94              | 6,474.00              | 28.91            | 28.96         | -87.89                | 1,378.98                            | -4,007.05                           | 4,010.23               | 3,952.39                | 57.84                     | 69.336             |           |
| 7,900.00                                   | 6,621.53              | 7,768.94              | 6,474.00              | 30.50            | 30.56         | -87.89                | 1,478.98                            | -4,007.18                           | 4,010.40               | 3,949.38                | 61.02                     | 65.722             |           |
| 8,000.00                                   | 6,621.64              | 7,868.94              | 6,474.00              | 32.11            | 32.18         | -87.89                | 1,578.98                            | -4,007.32                           | 4,010.58               | 3,946.32                | 64.25                     | 62.417             |           |
| 8,100.00                                   | 6,621.74              | 7,968.94              | 6,474.00              | 33.75            | 33.82         | -87.89                | 1,678.98                            | -4,007.46                           | 4,010.75               | 3,943.22                | 67.53                     | 59.391             |           |
| 8,200.00                                   | 6,621.85              | 8,068.94              | 6,474.00              | 35.40            | 35.48         | -87.89                | 1,778.98                            | -4,007.59                           | 4,010.93               | 3,940.08                | 70.85                     | 56.615             |           |
| 8,300.00                                   | 6,621.95              | 8,168.94              | 6,474.00              | 37.07            | 37.16         | -87.89                | 1,878.98                            | -4,007.73                           | 4,011.10               | 3,936.91                | 74.19                     | 54.064             |           |
| 8,400.00                                   | 6,622.06              | 8,268.94              | 6,474.00              | 38.76            | 38.85         | -87.88                | 1,978.98                            | -4,007.87                           | 4,011.27               | 3,933.71                | 77.57                     | 51.714             |           |
| 8,500.00                                   | 6,622.16              | 8,368.94              | 6,474.00              | 40.46            | 40.56         | -87.88                | 2,078.98                            | -4,008.00                           | 4,011.45               | 3,930.48                | 80.97                     | 49.545             |           |
| 8,600.00                                   | 6,622.27              | 8,468.94              | 6,474.00              | 42.17            | 42.27         | -87.88                | 2,178.98                            | -4,008.14                           | 4,011.62               | 3,927.24                | 84.39                     | 47.539             |           |
| 8,700.00                                   | 6,622.38              | 8,568.94              | 6,474.00              | 43.89            | 43.99         | -87.88                | 2,278.98                            | -4,008.28                           | 4,011.80               | 3,923.97                | 87.83                     | 45.679             |           |
| 8,800.00                                   | 6,622.48              | 8,668.94              | 6,474.00              | 45.61            | 45.72         | -87.88                | 2,378.98                            | -4,008.41                           | 4,011.97               | 3,920.69                | 91.28                     | 43.951             |           |
| 8,900.00                                   | 6,622.59              | 8,768.94              | 6,474.00              | 47.35            | 47.46         | -87.88                | 2,478.98                            | -4,008.55                           | 4,012.15               | 3,917.39                | 94.75                     | 42.343             |           |
| 9,000.00                                   | 6,622.69              | 8,868.94              | 6,474.00              | 49.09            | 49.21         | -87.88                | 2,578.98                            | -4,008.69                           | 4,012.32               | 3,914.08                | 98.24                     | 40.842             |           |
| 9,100.00                                   | 6,622.80              | 8,968.93              | 6,474.00              | 50.84            | 50.96         | -87.87                | 2,678.98                            | -4,008.82                           | 4,012.50               | 3,910.76                | 101.74                    | 39.440             |           |
| 9,200.00                                   | 6,622.90              | 9,068.93              | 6,474.00              | 52.59            | 52.72         | -87.87                | 2,778.98                            | -4,008.96                           | 4,012.67               | 3,907.42                | 105.24                    | 38.127             |           |
| 9,300.00                                   | 6,623.01              | 9,168.93              | 6,474.00              | 54.35            | 54.48         | -87.87                | 2,878.98                            | -4,009.10                           | 4,012.84               | 3,904.08                | 108.76                    | 36.895             |           |
| 9,400.00                                   | 6,623.12              | 9,268.93              | 6,474.00              | 56.11            | 56.24         | -87.87                | 2,978.98                            | -4,009.23                           | 4,013.02               | 3,900.73                | 112.29                    | 35.738             |           |
| 9,500.00                                   | 6,623.22              | 9,368.93              | 6,474.00              | 57.88            | 58.01         | -87.87                | 3,078.98                            | -4,009.37                           | 4,013.19               | 3,897.37                | 115.82                    | 34.649             |           |
| 9,600.00                                   | 6,623.33              | 9,468.93              | 6,474.00              | 59.65            | 59.79         | -87.87                | 3,178.98                            | -4,009.51                           | 4,013.37               | 3,894.00                | 119.37                    | 33.622             |           |
| 9,700.00                                   | 6,623.43              | 9,568.93              | 6,474.00              | 61.43            | 61.56         | -87.87                | 3,278.98                            | -4,009.64                           | 4,013.54               | 3,890.63                | 122.92                    | 32.653             |           |
| 9,800.00                                   | 6,623.54              | 9,668.93              | 6,474.00              | 63.20            | 63.34         | -87.86                | 3,378.98                            | -4,009.78                           | 4,013.72               | 3,887.24                | 126.47                    | 31.736             |           |
| 9,900.00                                   | 6,623.64              | 9,768.93              | 6,474.00              | 64.98            | 65.13         | -87.86                | 3,478.98                            | -4,009.92                           | 4,013.89               | 3,883.86                | 130.03                    | 30.869             |           |
| 10,000.00                                  | 6,623.75              | 9,868.93              | 6,474.00              | 66.77            | 66.91         | -87.86                | 3,578.98                            | -4,010.06                           | 4,014.06               | 3,880.47                | 133.60                    | 30.046             |           |
| 10,100.00                                  | 6,623.86              | 9,968.93              | 6,474.00              | 68.55            | 68.70         | -87.86                | 3,678.98                            | -4,010.19                           | 4,014.24               | 3,877.07                | 137.17                    | 29.265             |           |

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

# Leam Drilling Systems LLC

## Anticollision Report

|                    |                          |                              |                                 |
|--------------------|--------------------------|------------------------------|---------------------------------|
| Company:           | DEVON ENERGY             | Local Co-ordinate Reference: | Well: 4H                        |
| Project:           | Eddy County, NM (NAD-83) | TVD Reference:               | GE 3338' + KB 25' @ 3363.00usft |
| Reference Site:    | Cletus 28 State          | MD Reference:                | GE 3338' + KB 25' @ 3363.00usft |
| Site Error:        | 0.00 usft                | North Reference:             | Grid                            |
| Reference Well:    | 4H                       | Survey Calculation Method:   | Minimum Curvature               |
| Well Error:        | 0.00 usft                | Output errors are at         | 2.00 sigma                      |
| Reference Wellbore | OH                       | Database:                    | EDM 5000.1 Single User Db       |
| Reference Design:  | Plan #1 Draft 1          | Offset TVD Reference:        | Reference Datum                 |

| Offset Design Cletus 28 State - 1H - OH - Plan #1 Draft1 |                       |                       |                       |                  |               |                        |                       |                                    |                                    |                        |                         |                           |                   | Offset Site Error | 0.00 usft |
|----------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|------------------------|-----------------------|------------------------------------|------------------------------------|------------------------|-------------------------|---------------------------|-------------------|-------------------|-----------|
| Survey Program: 0-LEAM-MWD-ADJ                           |                       |                       |                       |                  |               |                        |                       |                                    |                                    |                        |                         |                           |                   | Offset Well Error | 0.00 usft |
| Measured Depth (usft)                                    | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Semi-Major Axis (usft) | Highside Toolface (°) | Offset Wellbore Centre +N-S (usft) | Offset Wellbore Centre +E-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor | Warning           |           |
| 10,200.00                                                | 6,623.96              | 10,068.93             | 6,474.00              | 70.34            | 70.49         | -87.86                 |                       | 3,778.98                           | -4,010.33                          | 4,014.41               | 3,873.67                | 140.74                    | 28.523            |                   |           |
| 10,300.00                                                | 6,624.07              | 10,168.93             | 6,474.00              | 72.13            | 72.28         | -87.86                 |                       | 3,878.98                           | -4,010.47                          | 4,014.59               | 3,870.26                | 144.32                    | 27.817            |                   |           |
| 10,400.00                                                | 6,624.17              | 10,268.93             | 6,474.00              | 73.92            | 74.07         | -87.86                 |                       | 3,978.98                           | -4,010.60                          | 4,014.76               | 3,866.86                | 147.91                    | 27.144            |                   |           |
| 10,500.00                                                | 6,624.28              | 10,368.93             | 6,474.00              | 75.71            | 75.87         | -87.86                 |                       | 4,078.98                           | -4,010.74                          | 4,014.94               | 3,863.44                | 151.49                    | 26.502            |                   |           |
| 10,600.00                                                | 6,624.38              | 10,468.93             | 6,474.00              | 77.51            | 77.67         | -87.85                 |                       | 4,178.98                           | -4,010.88                          | 4,015.11               | 3,860.03                | 155.08                    | 25.890            |                   |           |
| 10,700.00                                                | 6,624.49              | 10,568.93             | 6,474.00              | 79.31            | 79.47         | -87.85                 |                       | 4,278.97                           | -4,011.01                          | 4,015.29               | 3,856.61                | 158.68                    | 25.305            |                   |           |
| 10,800.00                                                | 6,624.60              | 10,668.93             | 6,474.00              | 81.11            | 81.27         | -87.85                 |                       | 4,378.97                           | -4,011.15                          | 4,015.46               | 3,853.19                | 162.27                    | 24.745            |                   |           |
| 10,900.00                                                | 6,624.70              | 10,768.93             | 6,474.00              | 82.90            | 83.07         | -87.85                 |                       | 4,478.97                           | -4,011.29                          | 4,015.63               | 3,849.76                | 165.87                    | 24.209            |                   |           |
| 11,000.00                                                | 6,624.81              | 10,868.93             | 6,474.00              | 84.71            | 84.87         | -87.85                 |                       | 4,578.97                           | -4,011.42                          | 4,015.81               | 3,846.34                | 169.47                    | 23.696            |                   |           |
| 11,100.00                                                | 6,624.91              | 10,968.93             | 6,474.00              | 86.51            | 86.67         | -87.85                 |                       | 4,678.97                           | -4,011.56                          | 4,015.98               | 3,842.91                | 173.07                    | 23.204            |                   |           |
| 11,182.89                                                | 6,625.00              | 11,044.54             | 6,474.00              | 88.00            | 88.04         | -87.85                 |                       | 4,754.59                           | -4,011.66                          | 4,016.13               | 3,840.20                | 175.93                    | 22.828 ES, SF     |                   |           |

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

# Leam Drilling Systems LLC

## Anticollision Report

|                     |                          |                              |                                 |
|---------------------|--------------------------|------------------------------|---------------------------------|
| Company:            | DEVON ENERGY             | Local Co-ordinate Reference: | Well 4H                         |
| Project:            | Eddy County, NM (NAD-83) | TVD Reference:               | GE 3338' + KB 25' @ 3363.00usft |
| Reference Site:     | Cletus 28 State          | MD Reference:                | GE 3338' + KB 25' @ 3363.00usft |
| Site Error:         | 0.00' usft               | North Reference:             | Grid                            |
| Reference Well:     | 4H                       | Survey Calculation Method:   | Minimum Curvature               |
| Well Error:         | 0.00' usft               | Output errors are at:        | 2.00' sigma                     |
| Reference Wellbore: | OH                       | Database:                    | EDM 5000.1 Single User Db       |
| Reference Design:   | Plan #1 Draft 1          | Offset TVD Reference:        | Reference Datum                 |

Reference Depths are relative to GE 3338' + KB 25' @ 3363.00usft

Offset Depths are relative to Offset Datum

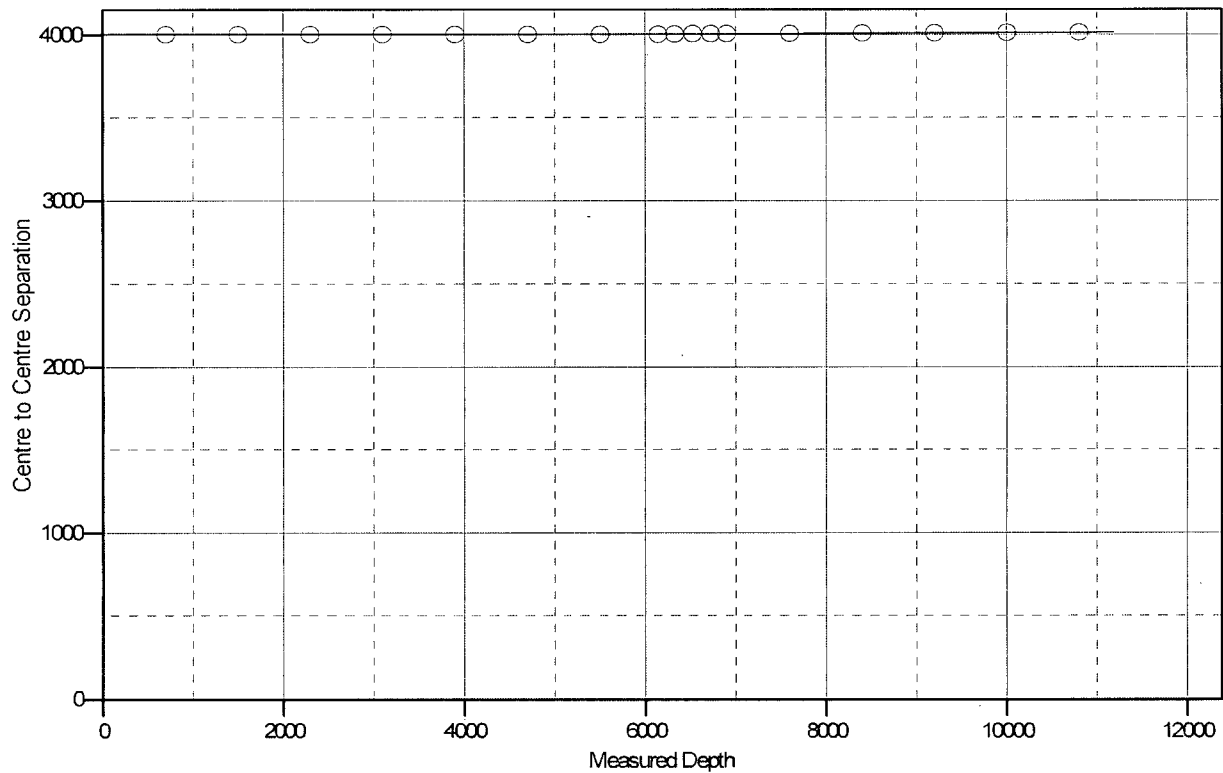
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: 4H

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

Grid Convergence at Surface is: 0.02°

### Ladder Plot



### LEGEND

—●— 1H, OH, Plan #1 Draft 1 V0

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

# Leam Drilling Systems LLC

## Anticollision Report

|                     |                          |                              |                                 |
|---------------------|--------------------------|------------------------------|---------------------------------|
| Company:            | DEVON ENERGY             | Local Co-ordinate Reference: | Well 4H                         |
| Project:            | Eddy County, NM (NAD-83) | TVD Reference:               | GE 3338' + KB 25' @ 3363.00usft |
| Reference Site:     | Cletus 28 State          | MD Reference:                | GE 3338' + KB 25' @ 3363.00usft |
| Site Error:         | 0.00 usft                | North Reference:             | Grid                            |
| Reference Well:     | 4H                       | Survey Calculation Method:   | Minimum Curvature               |
| Well Error:         | 0.00 usft                | Output errors are at         | 2.00 sigma                      |
| Reference Wellbore: | OH                       | Database:                    | EDM 5000.1 Single User Db       |
| Reference Design:   | Plan #1 Draft 1          | Offset TVD Reference:        | Reference Datum                 |

Reference Depths are relative to GE 3338' + KB 25' @ 3363.00usft

Offset Depths are relative to Offset Datum

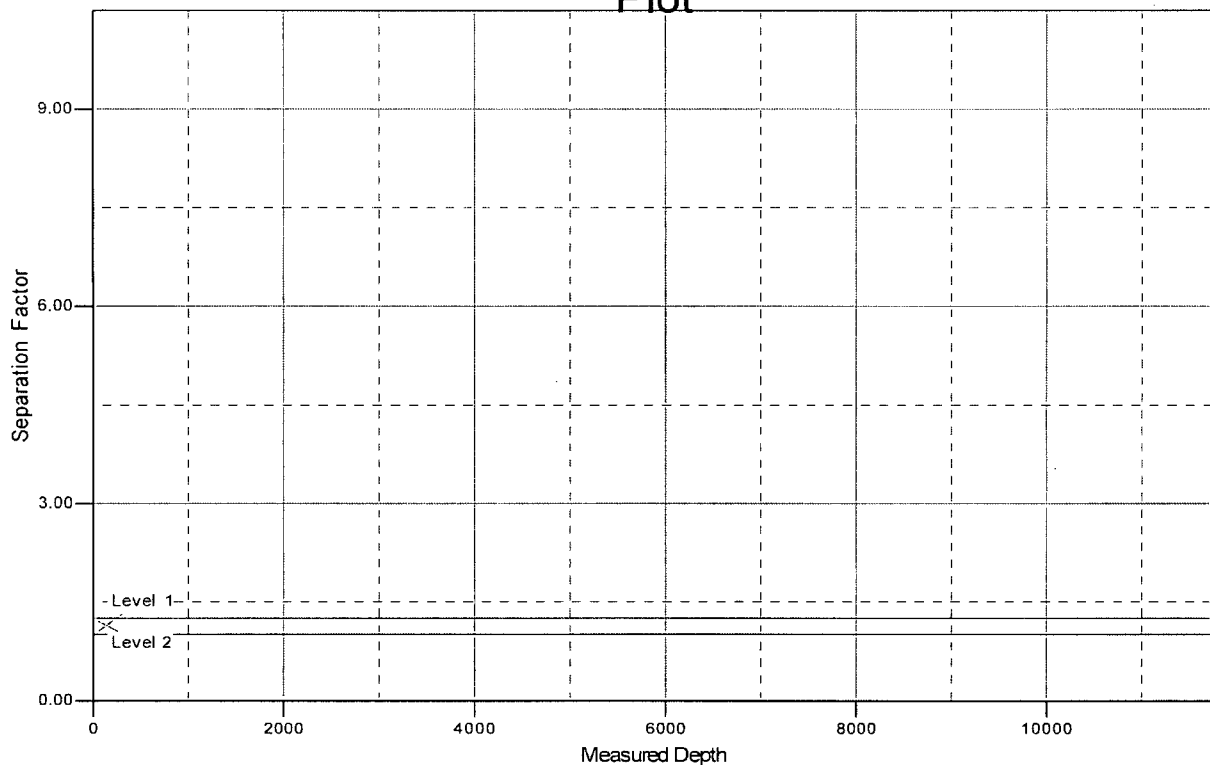
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: 4H

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

Grid Convergence at Surface is: 0.02°

### Separation Factor Plot



### LEGEND

1H, OH, Plan #1 Draft 1 V0

| MD      | INC  | AZI  | TVD     | NS   | EW   | DLS  | BUILD | TURN | VSECT |
|---------|------|------|---------|------|------|------|-------|------|-------|
| 0.00    | 0.00 | 0.00 | 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 | 0.00  | 0.00 | 0.00  |
| 200.00  | 0.00 | 0.00 | 200.00  | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 300.00  | 0.00 | 0.00 | 300.00  | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 400.00  | 0.00 | 0.00 | 400.00  | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 500.00  | 0.00 | 0.00 | 500.00  | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 600.00  | 0.00 | 0.00 | 600.00  | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 700.00  | 0.00 | 0.00 | 700.00  | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 800.00  | 0.00 | 0.00 | 800.00  | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 900.00  | 0.00 | 0.00 | 900.00  | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 1000.00 | 0.00 | 0.00 | 1000.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 1100.00 | 0.00 | 0.00 | 1100.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 1200.00 | 0.00 | 0.00 | 1200.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 1300.00 | 0.00 | 0.00 | 1300.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 1400.00 | 0.00 | 0.00 | 1400.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 1500.00 | 0.00 | 0.00 | 1500.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 1600.00 | 0.00 | 0.00 | 1600.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 1700.00 | 0.00 | 0.00 | 1700.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 1800.00 | 0.00 | 0.00 | 1800.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 1900.00 | 0.00 | 0.00 | 1900.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 2000.00 | 0.00 | 0.00 | 2000.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 2100.00 | 0.00 | 0.00 | 2100.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 2200.00 | 0.00 | 0.00 | 2200.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 2300.00 | 0.00 | 0.00 | 2300.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 2400.00 | 0.00 | 0.00 | 2400.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 2500.00 | 0.00 | 0.00 | 2500.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 2600.00 | 0.00 | 0.00 | 2600.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 2700.00 | 0.00 | 0.00 | 2700.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 2800.00 | 0.00 | 0.00 | 2800.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 2900.00 | 0.00 | 0.00 | 2900.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 3000.00 | 0.00 | 0.00 | 3000.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 3100.00 | 0.00 | 0.00 | 3100.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 3200.00 | 0.00 | 0.00 | 3200.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 3300.00 | 0.00 | 0.00 | 3300.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 3400.00 | 0.00 | 0.00 | 3400.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 3500.00 | 0.00 | 0.00 | 3500.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 3600.00 | 0.00 | 0.00 | 3600.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 3700.00 | 0.00 | 0.00 | 3700.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 3800.00 | 0.00 | 0.00 | 3800.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 3900.00 | 0.00 | 0.00 | 3900.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 4000.00 | 0.00 | 0.00 | 4000.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 4100.00 | 0.00 | 0.00 | 4100.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 4200.00 | 0.00 | 0.00 | 4200.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 4300.00 | 0.00 | 0.00 | 4300.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 4400.00 | 0.00 | 0.00 | 4400.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |
| 4500.00 | 0.00 | 0.00 | 4500.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  |

|         |       |      |         |        |      |       |       |      |        |
|---------|-------|------|---------|--------|------|-------|-------|------|--------|
| 4600.00 | 0.00  | 0.00 | 4600.00 | 0.00   | 0.00 | 0.00  | 0.00  | 0.00 | 0.00   |
| 4700.00 | 0.00  | 0.00 | 4700.00 | 0.00   | 0.00 | 0.00  | 0.00  | 0.00 | 0.00   |
| 4800.00 | 0.00  | 0.00 | 4800.00 | 0.00   | 0.00 | 0.00  | 0.00  | 0.00 | 0.00   |
| 4900.00 | 0.00  | 0.00 | 4900.00 | 0.00   | 0.00 | 0.00  | 0.00  | 0.00 | 0.00   |
| 5000.00 | 0.00  | 0.00 | 5000.00 | 0.00   | 0.00 | 0.00  | 0.00  | 0.00 | 0.00   |
| 5100.00 | 0.00  | 0.00 | 5100.00 | 0.00   | 0.00 | 0.00  | 0.00  | 0.00 | 0.00   |
| 5200.00 | 0.00  | 0.00 | 5200.00 | 0.00   | 0.00 | 0.00  | 0.00  | 0.00 | 0.00   |
| 5300.00 | 0.00  | 0.00 | 5300.00 | 0.00   | 0.00 | 0.00  | 0.00  | 0.00 | 0.00   |
| 5400.00 | 0.00  | 0.00 | 5400.00 | 0.00   | 0.00 | 0.00  | 0.00  | 0.00 | 0.00   |
| 5500.00 | 0.00  | 0.00 | 5500.00 | 0.00   | 0.00 | 0.00  | 0.00  | 0.00 | 0.00   |
| 5600.00 | 0.00  | 0.00 | 5600.00 | 0.00   | 0.00 | 0.00  | 0.00  | 0.00 | 0.00   |
| 5700.00 | 0.00  | 0.00 | 5700.00 | 0.00   | 0.00 | 0.00  | 0.00  | 0.00 | 0.00   |
| 5800.00 | 0.00  | 0.00 | 5800.00 | 0.00   | 0.00 | 0.00  | 0.00  | 0.00 | 0.00   |
| 5900.00 | 0.00  | 0.00 | 5900.00 | 0.00   | 0.00 | 0.00  | 0.00  | 0.00 | 0.00   |
| 6000.00 | 0.00  | 0.00 | 6000.00 | 0.00   | 0.00 | 0.00  | 0.00  | 0.00 | 0.00   |
| 6100.00 | 0.00  | 0.00 | 6100.00 | 0.00   | 0.00 | 0.00  | 0.00  | 0.00 | 0.00   |
| 6143.00 | 0.00  | 0.00 | 6143.00 | 0.00   | 0.00 | 0.00  | 0.00  | 0.00 | 0.00   |
| 6150.00 | 0.84  | 0.02 | 6150.00 | 0.05   | 0.00 | 12.00 | 12.00 | 0.00 | 0.05   |
| 6175.00 | 3.84  | 0.02 | 6174.98 | 1.07   | 0.00 | 12.00 | 12.00 | 0.00 | 1.07   |
| 6200.00 | 6.84  | 0.02 | 6199.86 | 3.40   | 0.00 | 12.00 | 12.00 | 0.00 | 3.40   |
| 6225.00 | 9.84  | 0.02 | 6224.60 | 7.02   | 0.00 | 12.00 | 12.00 | 0.00 | 7.02   |
| 6250.00 | 12.84 | 0.02 | 6249.11 | 11.94  | 0.00 | 12.00 | 12.00 | 0.00 | 11.94  |
| 6275.00 | 15.84 | 0.02 | 6273.32 | 18.13  | 0.01 | 12.00 | 12.00 | 0.00 | 18.13  |
| 6300.00 | 18.84 | 0.02 | 6297.19 | 25.58  | 0.01 | 12.00 | 12.00 | 0.00 | 25.58  |
| 6325.00 | 21.84 | 0.02 | 6320.62 | 34.27  | 0.01 | 12.00 | 12.00 | 0.00 | 34.27  |
| 6350.00 | 24.84 | 0.02 | 6343.58 | 44.17  | 0.01 | 12.00 | 12.00 | 0.00 | 44.17  |
| 6375.00 | 27.84 | 0.02 | 6365.98 | 55.26  | 0.02 | 12.00 | 12.00 | 0.00 | 55.26  |
| 6400.00 | 30.84 | 0.02 | 6387.77 | 67.51  | 0.02 | 12.00 | 12.00 | 0.00 | 67.51  |
| 6425.00 | 33.84 | 0.02 | 6408.89 | 80.88  | 0.03 | 12.00 | 12.00 | 0.00 | 80.88  |
| 6450.00 | 36.84 | 0.02 | 6429.28 | 95.34  | 0.03 | 12.00 | 12.00 | 0.00 | 95.34  |
| 6475.00 | 39.84 | 0.02 | 6448.89 | 110.85 | 0.04 | 12.00 | 12.00 | 0.00 | 110.85 |
| 6500.00 | 42.84 | 0.02 | 6467.65 | 127.36 | 0.04 | 12.00 | 12.00 | 0.00 | 127.36 |
| 6525.00 | 45.84 | 0.02 | 6485.53 | 144.83 | 0.05 | 12.00 | 12.00 | 0.00 | 144.83 |
| 6550.00 | 48.84 | 0.02 | 6502.47 | 163.21 | 0.06 | 12.00 | 12.00 | 0.00 | 163.21 |
| 6575.00 | 51.84 | 0.02 | 6518.43 | 182.46 | 0.06 | 12.00 | 12.00 | 0.00 | 182.46 |
| 6600.00 | 54.84 | 0.02 | 6533.35 | 202.51 | 0.07 | 12.00 | 12.00 | 0.00 | 202.51 |
| 6625.00 | 57.84 | 0.02 | 6547.21 | 223.32 | 0.08 | 12.00 | 12.00 | 0.00 | 223.32 |
| 6650.00 | 60.84 | 0.02 | 6559.95 | 244.82 | 0.08 | 12.00 | 12.00 | 0.00 | 244.82 |
| 6675.00 | 63.84 | 0.02 | 6571.56 | 266.96 | 0.09 | 12.00 | 12.00 | 0.00 | 266.96 |
| 6700.00 | 66.84 | 0.02 | 6581.99 | 289.68 | 0.10 | 12.00 | 12.00 | 0.00 | 289.68 |
| 6725.00 | 69.84 | 0.02 | 6591.21 | 312.91 | 0.11 | 12.00 | 12.00 | 0.00 | 312.91 |
| 6750.00 | 72.84 | 0.02 | 6599.21 | 336.59 | 0.11 | 12.00 | 12.00 | 0.00 | 336.59 |
| 6775.00 | 75.84 | 0.02 | 6605.96 | 360.66 | 0.12 | 12.00 | 12.00 | 0.00 | 360.66 |
| 6800.00 | 78.84 | 0.02 | 6611.44 | 385.05 | 0.13 | 12.00 | 12.00 | 0.00 | 385.05 |
| 6825.00 | 81.84 | 0.02 | 6615.63 | 409.69 | 0.14 | 12.00 | 12.00 | 0.00 | 409.69 |
| 6850.00 | 84.84 | 0.02 | 6618.53 | 434.52 | 0.15 | 12.00 | 12.00 | 0.00 | 434.52 |
| 6875.00 | 87.84 | 0.02 | 6620.13 | 459.47 | 0.16 | 12.00 | 12.00 | 0.00 | 459.47 |

|          |       |      |         |         |      |       |       |      |         |
|----------|-------|------|---------|---------|------|-------|-------|------|---------|
| 6892.50  | 89.94 | 0.02 | 6620.46 | 476.96  | 0.16 | 12.00 | 12.00 | 0.00 | 476.96  |
| 6900.00  | 89.94 | 0.02 | 6620.47 | 484.46  | 0.16 | 0.00  | 0.00  | 0.00 | 484.46  |
| 7000.00  | 89.94 | 0.02 | 6620.58 | 584.46  | 0.20 | 0.00  | 0.00  | 0.00 | 584.46  |
| 7100.00  | 89.94 | 0.02 | 6620.68 | 684.46  | 0.23 | 0.00  | 0.00  | 0.00 | 684.46  |
| 7200.00  | 89.94 | 0.02 | 6620.79 | 784.46  | 0.27 | 0.00  | 0.00  | 0.00 | 784.46  |
| 7300.00  | 89.94 | 0.02 | 6620.90 | 884.46  | 0.30 | 0.00  | 0.00  | 0.00 | 884.46  |
| 7400.00  | 89.94 | 0.02 | 6621.00 | 984.46  | 0.33 | 0.00  | 0.00  | 0.00 | 984.46  |
| 7500.00  | 89.94 | 0.02 | 6621.11 | 1084.46 | 0.37 | 0.00  | 0.00  | 0.00 | 1084.46 |
| 7600.00  | 89.94 | 0.02 | 6621.21 | 1184.46 | 0.40 | 0.00  | 0.00  | 0.00 | 1184.46 |
| 7700.00  | 89.94 | 0.02 | 6621.32 | 1284.46 | 0.43 | 0.00  | 0.00  | 0.00 | 1284.46 |
| 7800.00  | 89.94 | 0.02 | 6621.42 | 1384.46 | 0.47 | 0.00  | 0.00  | 0.00 | 1384.46 |
| 7900.00  | 89.94 | 0.02 | 6621.53 | 1484.46 | 0.50 | 0.00  | 0.00  | 0.00 | 1484.46 |
| 8000.00  | 89.94 | 0.02 | 6621.64 | 1584.46 | 0.54 | 0.00  | 0.00  | 0.00 | 1584.46 |
| 8100.00  | 89.94 | 0.02 | 6621.74 | 1684.46 | 0.57 | 0.00  | 0.00  | 0.00 | 1684.46 |
| 8200.00  | 89.94 | 0.02 | 6621.85 | 1784.46 | 0.60 | 0.00  | 0.00  | 0.00 | 1784.46 |
| 8300.00  | 89.94 | 0.02 | 6621.95 | 1884.46 | 0.64 | 0.00  | 0.00  | 0.00 | 1884.46 |
| 8400.00  | 89.94 | 0.02 | 6622.06 | 1984.46 | 0.67 | 0.00  | 0.00  | 0.00 | 1984.46 |
| 8500.00  | 89.94 | 0.02 | 6622.16 | 2084.46 | 0.70 | 0.00  | 0.00  | 0.00 | 2084.46 |
| 8600.00  | 89.94 | 0.02 | 6622.27 | 2184.46 | 0.74 | 0.00  | 0.00  | 0.00 | 2184.46 |
| 8700.00  | 89.94 | 0.02 | 6622.38 | 2284.46 | 0.77 | 0.00  | 0.00  | 0.00 | 2284.46 |
| 8800.00  | 89.94 | 0.02 | 6622.48 | 2384.46 | 0.81 | 0.00  | 0.00  | 0.00 | 2384.46 |
| 8900.00  | 89.94 | 0.02 | 6622.59 | 2484.46 | 0.84 | 0.00  | 0.00  | 0.00 | 2484.46 |
| 9000.00  | 89.94 | 0.02 | 6622.69 | 2584.46 | 0.87 | 0.00  | 0.00  | 0.00 | 2584.46 |
| 9100.00  | 89.94 | 0.02 | 6622.80 | 2684.46 | 0.91 | 0.00  | 0.00  | 0.00 | 2684.46 |
| 9200.00  | 89.94 | 0.02 | 6622.90 | 2784.46 | 0.94 | 0.00  | 0.00  | 0.00 | 2784.46 |
| 9300.00  | 89.94 | 0.02 | 6623.01 | 2884.46 | 0.98 | 0.00  | 0.00  | 0.00 | 2884.46 |
| 9400.00  | 89.94 | 0.02 | 6623.12 | 2984.46 | 1.01 | 0.00  | 0.00  | 0.00 | 2984.46 |
| 9500.00  | 89.94 | 0.02 | 6623.22 | 3084.46 | 1.04 | 0.00  | 0.00  | 0.00 | 3084.46 |
| 9600.00  | 89.94 | 0.02 | 6623.33 | 3184.46 | 1.08 | 0.00  | 0.00  | 0.00 | 3184.46 |
| 9700.00  | 89.94 | 0.02 | 6623.43 | 3284.46 | 1.11 | 0.00  | 0.00  | 0.00 | 3284.46 |
| 9800.00  | 89.94 | 0.02 | 6623.54 | 3384.46 | 1.14 | 0.00  | 0.00  | 0.00 | 3384.46 |
| 9900.00  | 89.94 | 0.02 | 6623.64 | 3484.46 | 1.18 | 0.00  | 0.00  | 0.00 | 3484.46 |
| 10000.00 | 89.94 | 0.02 | 6623.75 | 3584.46 | 1.21 | 0.00  | 0.00  | 0.00 | 3584.46 |
| 10100.00 | 89.94 | 0.02 | 6623.86 | 3684.46 | 1.25 | 0.00  | 0.00  | 0.00 | 3684.46 |
| 10200.00 | 89.94 | 0.02 | 6623.96 | 3784.46 | 1.28 | 0.00  | 0.00  | 0.00 | 3784.46 |
| 10300.00 | 89.94 | 0.02 | 6624.07 | 3884.46 | 1.31 | 0.00  | 0.00  | 0.00 | 3884.46 |
| 10400.00 | 89.94 | 0.02 | 6624.17 | 3984.46 | 1.35 | 0.00  | 0.00  | 0.00 | 3984.46 |
| 10500.00 | 89.94 | 0.02 | 6624.28 | 4084.46 | 1.38 | 0.00  | 0.00  | 0.00 | 4084.46 |
| 10600.00 | 89.94 | 0.02 | 6624.38 | 4184.46 | 1.41 | 0.00  | 0.00  | 0.00 | 4184.46 |
| 10700.00 | 89.94 | 0.02 | 6624.49 | 4284.46 | 1.45 | 0.00  | 0.00  | 0.00 | 4284.46 |
| 10800.00 | 89.94 | 0.02 | 6624.60 | 4384.46 | 1.48 | 0.00  | 0.00  | 0.00 | 4384.46 |
| 10900.00 | 89.94 | 0.02 | 6624.70 | 4484.46 | 1.52 | 0.00  | 0.00  | 0.00 | 4484.46 |
| 11000.00 | 89.94 | 0.02 | 6624.81 | 4584.46 | 1.55 | 0.00  | 0.00  | 0.00 | 4584.46 |
| 11100.00 | 89.94 | 0.02 | 6624.91 | 4684.46 | 1.58 | 0.00  | 0.00  | 0.00 | 4684.46 |
| 11182.89 | 89.94 | 0.02 | 6625.00 | 4767.35 | 1.61 | 0.00  | 0.00  | 0.00 | 4767.35 |