

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-0720

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (505) 748-1283 Fax: (505) 748-9720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. 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, New Mexico 87505

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

Rec'd 9/23/2020 - NMOCD ☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|-----------------------------------|---|---|
| API Number 30-025-43727 | Pool Code 96689 | Pool Name BRINNINSTOOL; WOLFCAMP WEST |
| Property Code | Property Name THISTLE UNIT | Well Number 108H |
| OGRID No. 6137 | Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P. | Elevation 3724.0' |

Surface Location

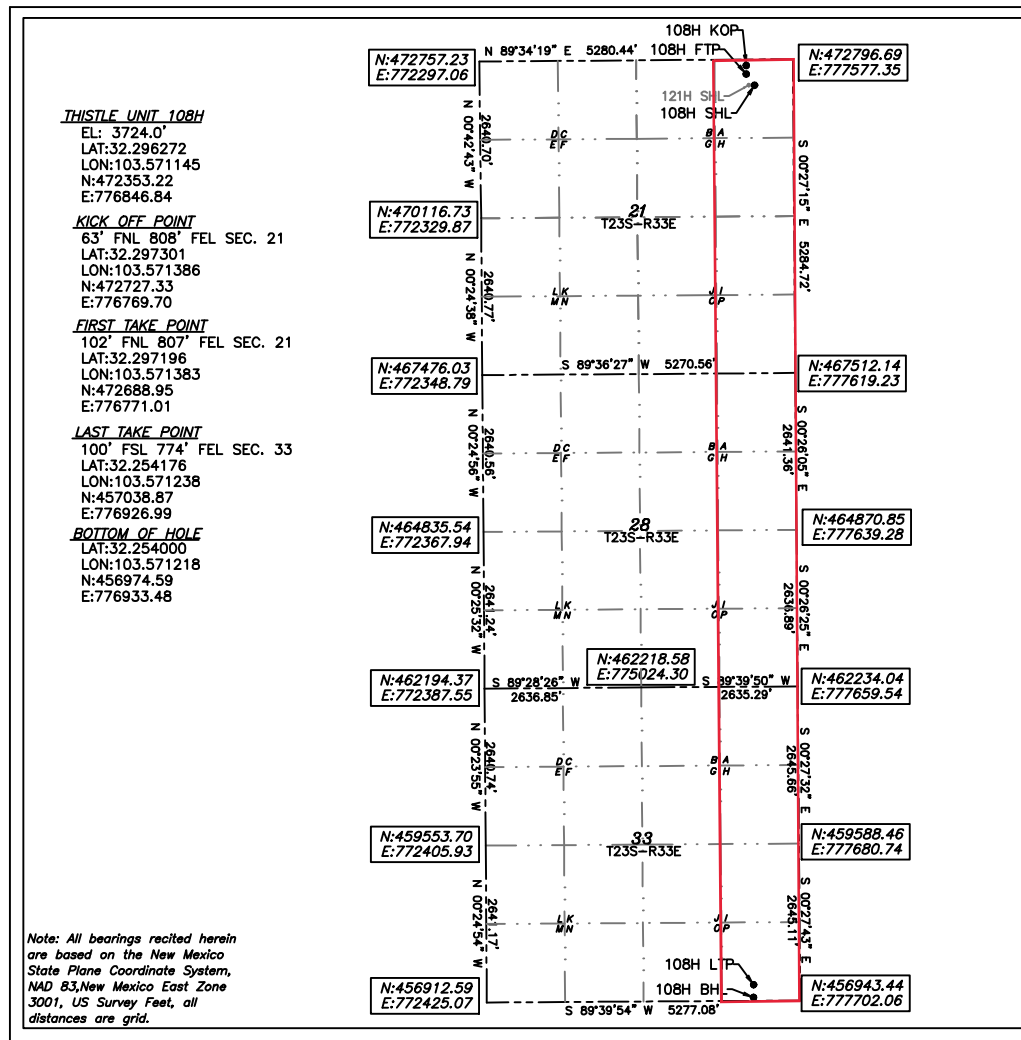
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| A | 21 | 23-S | 33-E | | 438 | NORTH | 734 | EAST | LEA |

Bottom Hole Location If Different From Surface **SL**

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| P | 33 | 23-S | 33-E | | 36 | SOUTH | 768 | EAST | LEA |

| | | | |
|-------------------------------|-----------------|--------------------|-----------|
| Dedicated Acres 480 | Joint or Infill | Consolidation Code | 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**



Note: All bearings recited herein
are based on the New Mexico
State Plane Coordinate System,
NAD 83, New Mexico East Zone
3001, US Survey Feet, all
distances are grid.

OPERATOR CERTIFICATION

I hereby certify that the information
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 mineral or working interest,
or to a voluntary pooling agreement or a
compulsory pooling order heretofore entered
by the division.

Rebecca Deal 8/25/2020
Signature Date

Rebecca Deal, Regulatory Analyst

Printed Name

rebecca.deal@dvn.com

E-mail Address

SURVEYOR CERTIFICATION

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.

April 22, 2020

Date of Survey

Signature & Seal of Professional Surveyor



08/25/20

Certificate No. 22404

B.L. LAMAN

W.O. #

DRAWN BY: CM

Intent ☐ As Drilled ☒

Rec'd 9/23/2020 - NMOCD

API #
30-025-43727

| | | |
|---|---------------------------------------|----------------------------|
| Operator Name: DEVON ENERGY PRODUCTION COMPANY, LP. | Property Name: THISTLE UNIT | Well Number 108H |
|---|---------------------------------------|----------------------------|

Kick Off Point (KOP)

| | | | | | | | | | |
|------------------------------|----------------------|------------------------|---------------------|-----|--------------------------------|--------------------------|--------------------|-------------------------|----------------------|
| UL A | Section 21 | Township 23S | Range 33E | Lot | Feet 63 | From N/S NORTH | Feet 808 | From E/W EAST | County LEA |
| Latitude 32.297301 | | | | | Longitude 103.571386 | | | | NAD 83 |

First Take Point (FTP)

| | | | | | | | | | |
|------------------------------|----------------------|------------------------|---------------------|-----|--------------------------------|--------------------------|--------------------|-------------------------|----------------------|
| UL A | Section 21 | Township 23S | Range 33E | Lot | Feet 102 | From N/S NORTH | Feet 807 | From E/W EAST | County LEA |
| Latitude 32.297196 | | | | | Longitude 103.571383 | | | | NAD 83 |

Last Take Point (LTP)

| | | | | | | | | | |
|------------------------------|----------------------|------------------------|---------------------|-----|--------------------------------|--------------------------|--------------------|-------------------------|----------------------|
| UL P | Section 33 | Township 23S | Range 33E | Lot | Feet 100 | From N/S SOUTH | Feet 774 | From E/W EAST | County LEA |
| Latitude 32.254176 | | | | | Longitude 103.571238 | | | | NAD 83 |

Is this well the defining well for the Horizontal Spacing Unit? ☐

Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #

| | | |
|----------------|----------------|-------------|
| Operator Name: | Property Name: | Well Number |
|----------------|----------------|-------------|

KZ 06/29/2018



Devon Energy

Lea Co., NM (Nad83 - East Zone)

Thistle Unit

#108H

OH

Design: OH

End Of Well Report

22 April, 2020



Wellbenders

End Of Well Report

| | | |
|--|--|--|
| Company: Devon Energy | Local Co-ordinate Reference: Well #108H RKB=30' @ 3754.00usft (Cactus 108) RKB=30' @ 3754.00usft (Cactus 108) Grid Minimum Curvature WBDS_SQL_2 | |
| Project: Lea Co., NM (Nad83 - East Zone) | TVD Reference: | |
| Site: Thistle Unit | MD Reference: | |
| Well: #108H | North Reference: | |
| Wellbore: OH | Survey Calculation Method: | |
| Design: OH | Database: | |

| | | | | |
|--------------------|---------------------------------|--|----------------|--|
| Project | Lea Co., NM (Nad83 - East Zone) | | Mean Sea Level | |
| Map System: | US State Plane 1983 | | | |
| Geo Datum: | North American Datum 1983 | | | |
| Map Zone: | New Mexico Eastern Zone | | | |

| | | | | |
|------------------------------|--------------|-------------------------------------|-------------------------------------|--|
| Site | Thistle Unit | | | |
| Site Position: | | | | |
| From: | Map | Northing: 472,353.22 usft | Latitude: 32.296272 | |
| Position Uncertainty: | 0.00 usft | Easting: 776,846.84 usft | Longitude: -103.571145 | |
| | | Slot Radius: 13.200 in | Grid Convergence: 0.407 ° | |

| | | | | |
|-----------------------------|---------------------------|-------------------------------------|---------------------------------------|--|
| Well | #108H | | | |
| Well Position | +N/-S 0.00 usft | Northing: 472,353.22 usft | Latitude: 32.296272 | |
| | +E/-W 0.00 usft | Easting: 776,846.84 usft | Longitude: -103.571145 | |
| Position Uncertainty | 0.00 usft | Wellhead Elevation: usft | Ground Level: 3,724.00 usft | |

| | | | | |
|-----------------|----|--|--|--|
| Wellbore | OH | | | |
| | | | | |

| | | | | | |
|------------------|-------------------|--------------------|---------------------------|-------------------------|-------------------------------|
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2015 | 1/18/2020 | 6.677 | 60.095 | 47,712.38340612 |

| | | | | |
|--------------------------|-----------------------------------|------------------------|------------------------|-------------------------|
| Design | OH | | | |
| Audit Notes: | | | | |
| Version: | 1.0 | Phase: | ACTUAL | Tie On Depth: |
| | | | | 0.00 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) |
| | 0.00 | 0.00 | 0.00 | 179.56 |

| | | | | |
|-----------------------|---------------------|--------------------------|------------------|------------------------|
| Survey Program | Date | 4/22/2020 | | |
| From (usft) | To (usft) | Survey (Wellbore) | Tool Name | Description |
| 174.00 | 28,045.00 | Survey #1 (OH) | MWD+IGRF | OWSG MWD + IGRF or WMM |



Wellbenders

End Of Well Report

| | | | |
|------------------|---------------------------------|-------------------------------------|-----------------------------------|
| Company: | Devon Energy | Local Co-ordinate Reference: | Well #108H |
| Project: | Lea Co., NM (Nad83 - East Zone) | TVD Reference: | RKB=30' @ 3754.00uft (Cactus 108) |
| Site: | Thistle Unit | MD Reference: | RKB=30' @ 3754.00uft (Cactus 108) |
| Well: | #108H | North Reference: | Grid |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | WBDS_SQL_2 |

| Survey | | | | | | | | | | |
|-------------|------------|----------------------|--------------|--------------|--------------|-----------------|-------------|---------------|-------------------|------|
| MD (uft) | Inc (°) | Azi (azimuth) (°) | TVD (uft) | N/S (uft) | E/W (uft) | V. Sec (uft) | CL (uft) | CL Azi (°) | DLeg (°/100ft) | |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 174.00 | 0.92 | 86.95 | 173.99 | 0.07 | 1.39 | -0.06 | 174.00 | 86.95 | 0.53 | |
| 267.00 | 1.01 | 88.36 | 266.98 | 0.14 | 2.96 | -0.11 | 93.00 | 87.69 | 0.10 | |
| 362.00 | 1.01 | 82.91 | 361.96 | 0.26 | 4.63 | -0.23 | 95.00 | 85.64 | 0.10 | |
| 457.00 | 0.88 | 90.47 | 456.95 | 0.36 | 6.19 | -0.31 | 95.00 | 86.43 | 0.19 | |
| 552.00 | 0.79 | 89.15 | 551.94 | 0.37 | 7.57 | -0.31 | 95.00 | 89.85 | 0.10 | |
| 646.00 | 0.57 | 80.89 | 645.93 | 0.45 | 8.68 | -0.38 | 94.00 | 85.69 | 0.26 | |
| 740.00 | 0.44 | 92.40 | 739.93 | 0.51 | 9.50 | -0.44 | 94.00 | 85.90 | 0.17 | |
| 835.00 | 0.44 | 93.72 | 834.93 | 0.47 | 10.23 | -0.39 | 95.00 | 93.06 | 0.01 | |
| 929.00 | 0.44 | 81.94 | 928.93 | 0.50 | 10.95 | -0.41 | 94.00 | 87.83 | 0.10 | |
| 1,024.00 | 0.62 | 86.87 | 1,023.92 | 0.58 | 11.82 | -0.49 | 95.00 | 84.82 | 0.20 | |
| 1,119.00 | 0.44 | 93.28 | 1,118.92 | 0.58 | 12.70 | -0.49 | 95.00 | 89.53 | 0.20 | |
| 1,213.00 | 0.57 | 87.66 | 1,212.91 | 0.58 | 13.53 | -0.48 | 94.00 | 90.11 | 0.15 | |
| 1,308.00 | 0.57 | 57.25 | 1,307.91 | 0.86 | 14.40 | -0.75 | 95.00 | 72.45 | 0.31 | |
| 1,359.00 | 0.57 | 70.17 | 1,358.91 | 1.08 | 14.85 | -0.97 | 51.00 | 63.71 | 0.25 | |
| 1,562.00 | 0.31 | 49.86 | 1,561.90 | 1.78 | 16.22 | -1.65 | 203.00 | 63.04 | 0.15 | |
| 1,659.00 | 0.66 | 340.78 | 1,658.90 | 2.47 | 16.24 | -2.35 | 97.00 | 1.37 | 0.64 | |
| 1,754.00 | 0.40 | 318.81 | 1,753.89 | 3.24 | 15.84 | -3.12 | 95.00 | 332.52 | 0.34 | |
| 1,848.00 | 0.44 | 301.93 | 1,847.89 | 3.68 | 15.32 | -3.56 | 94.00 | 309.97 | 0.14 | |
| 1,943.00 | 0.31 | 300.00 | 1,942.89 | 4.00 | 14.78 | -3.88 | 95.00 | 301.13 | 0.14 | |
| 2,038.00 | 0.48 | 328.65 | 2,037.89 | 4.47 | 14.35 | -4.36 | 95.00 | 317.47 | 0.27 | |
| 2,132.00 | 0.57 | 329.27 | 2,131.88 | 5.20 | 13.91 | -5.10 | 94.00 | 328.99 | 0.10 | |
| 2,227.00 | 1.49 | 341.13 | 2,226.87 | 6.78 | 13.27 | -6.68 | 95.00 | 337.86 | 0.99 | |
| 2,322.00 | 2.81 | 339.29 | 2,321.80 | 10.13 | 12.05 | -10.03 | 95.00 | 339.93 | 1.39 | |
| 2,417.00 | 2.90 | 334.37 | 2,416.68 | 14.47 | 10.18 | -14.39 | 95.00 | 336.79 | 0.27 | |
| 2,512.00 | 3.56 | 343.24 | 2,511.53 | 19.46 | 8.29 | -19.40 | 95.00 | 339.26 | 0.87 | |
| 2,606.00 | 4.53 | 346.76 | 2,605.29 | 25.87 | 6.60 | -25.82 | 94.00 | 345.21 | 1.06 | |



Wellbenders

End Of Well Report

Company: Devon Energy
Project: Lea Co., NM (Nad83 - East Zone)
Site: Thistle Unit
Well: #108H
Wellbore: OH
Design: OH

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

Well #108H
RKB=30' @ 3754.00uft (Cactus 108)
RKB=30' @ 3754.00uft (Cactus 108)
Grid
Minimum Curvature
WBDS_SQL_2

| Survey | MD (usft) | Inc (°) | Azi (azimuth) (°) | TVD (usft) | N/S (usft) | E/W (usft) | V. Sec (usft) | CL (usft) | CL Azi (°) | DLeg (°/100ft) |
|--------|--------------|------------|----------------------|---------------|---------------|---------------|------------------|--------------|---------------|-------------------|
| | 2,701.00 | 4.31 | 345.97 | 2,700.01 | 32.99 | 4.88 | -32.95 | 95.00 | 346.37 | 0.24 |
| | 2,796.00 | 4.35 | 345.88 | 2,794.74 | 39.94 | 3.13 | -39.92 | 95.00 | 345.92 | 0.04 |
| | 2,890.00 | 4.35 | 345.79 | 2,888.47 | 46.86 | 1.39 | -46.84 | 94.00 | 345.83 | 0.01 |
| | 2,985.00 | 4.40 | 345.62 | 2,983.19 | 53.88 | -0.40 | -53.88 | 95.00 | 345.70 | 0.05 |
| | 3,080.00 | 4.48 | 345.44 | 3,077.91 | 61.00 | -2.24 | -61.02 | 95.00 | 345.53 | 0.09 |
| | 3,174.00 | 4.44 | 345.62 | 3,171.62 | 68.08 | -4.07 | -68.11 | 94.00 | 345.53 | 0.05 |
| | 3,269.00 | 4.35 | 345.35 | 3,266.34 | 75.13 | -5.89 | -75.17 | 95.00 | 345.49 | 0.10 |
| | 3,364.00 | 4.35 | 346.85 | 3,361.07 | 82.12 | -7.62 | -82.18 | 95.00 | 346.10 | 0.12 |
| | 3,459.00 | 4.40 | 347.46 | 3,455.79 | 89.19 | -9.23 | -89.25 | 95.00 | 347.16 | 0.07 |
| | 3,555.00 | 4.31 | 350.54 | 3,551.52 | 96.34 | -10.62 | -96.42 | 96.00 | 348.98 | 0.26 |
| | 3,650.00 | 4.22 | 351.15 | 3,646.25 | 103.31 | -11.75 | -103.40 | 95.00 | 350.84 | 0.11 |
| | 3,744.00 | 4.40 | 352.56 | 3,739.99 | 110.31 | -12.75 | -110.40 | 94.00 | 351.87 | 0.22 |
| | 3,839.00 | 4.35 | 351.15 | 3,834.71 | 117.48 | -13.77 | -117.58 | 95.00 | 351.86 | 0.12 |
| | 3,934.00 | 4.31 | 349.13 | 3,929.44 | 124.54 | -15.00 | -124.66 | 95.00 | 350.14 | 0.17 |
| | 4,029.00 | 3.91 | 346.41 | 4,024.19 | 131.20 | -16.44 | -131.32 | 95.00 | 347.84 | 0.47 |
| | 4,124.00 | 3.78 | 343.59 | 4,118.98 | 137.35 | -18.08 | -137.49 | 95.00 | 345.02 | 0.24 |
| | 4,219.00 | 3.47 | 343.15 | 4,213.79 | 143.11 | -19.80 | -143.25 | 95.00 | 343.38 | 0.33 |
| | 4,315.00 | 2.95 | 347.81 | 4,309.64 | 148.30 | -21.16 | -148.46 | 96.00 | 345.29 | 0.61 |
| | 4,410.00 | 2.86 | 6.62 | 4,404.52 | 153.05 | -21.41 | -153.21 | 95.00 | 357.07 | 1.00 |
| | 4,505.00 | 3.16 | 23.15 | 4,499.39 | 157.81 | -20.10 | -157.96 | 95.00 | 15.30 | 0.96 |
| | 4,599.00 | 3.08 | 30.26 | 4,593.25 | 162.37 | -17.81 | -162.50 | 94.00 | 26.66 | 0.42 |
| | 4,694.00 | 2.86 | 42.74 | 4,688.13 | 166.32 | -14.92 | -166.43 | 95.00 | 36.27 | 0.72 |
| | 4,789.00 | 3.03 | 40.81 | 4,783.00 | 169.96 | -11.67 | -170.04 | 95.00 | 41.75 | 0.21 |
| | 4,884.00 | 3.82 | 46.61 | 4,877.83 | 174.03 | -7.73 | -174.09 | 95.00 | 44.04 | 0.91 |
| | 4,979.00 | 3.69 | 40.20 | 4,972.63 | 178.54 | -3.45 | -178.56 | 95.00 | 43.46 | 0.46 |
| | 5,074.00 | 3.34 | 28.07 | 5,067.45 | 183.32 | -0.18 | -183.31 | 95.00 | 34.44 | 0.86 |
| | 5,169.00 | 3.60 | 12.07 | 5,162.28 | 188.68 | 1.75 | -188.66 | 95.00 | 19.77 | 1.05 |



Wellbenders

End Of Well Report

| Company: Devon Energy | | | Local Co-ordinate Reference: | | | | | | |
|--|---------|-------------------|--|-----------|-----------|--------------|----------|------------|----------------|
| Project: Lea Co., NM (Nad83 - East Zone) | | | TVD Reference: RKB=30' @ 3754.00uft (Cactus 108) | | | | | | |
| Site: Thistle Unit | | | MD Reference: RKB=30' @ 3754.00uft (Cactus 108) | | | | | | |
| Well: #108H | | | North Reference: Grid | | | | | | |
| Wellbore: OH | | | Survey Calculation Method: Minimum Curvature | | | | | | |
| Design: OH | | | Database: WBDS_SQL_2 | | | | | | |
| Survey | | | | | | | | | |
| MD (uft) | Inc (°) | Azi (azimuth) (°) | TVD (uft) | N/S (uft) | E/W (uft) | V. Sec (uft) | CL (uft) | CL Azi (°) | DLeg (°/100ft) |
| 5,263.00 | 3.96 | 353.79 | 5,256.08 | 194.79 | 2.01 | -194.77 | 94.00 | 2.49 | 1.33 |
| 5,357.00 | 3.91 | 352.56 | 5,349.85 | 201.19 | 1.25 | -201.18 | 94.00 | 353.18 | 0.10 |
| 5,452.00 | 3.96 | 351.42 | 5,444.63 | 207.65 | 0.34 | -207.64 | 95.00 | 351.99 | 0.10 |
| 5,547.00 | 3.96 | 351.59 | 5,539.40 | 214.14 | -0.63 | -214.14 | 95.00 | 351.50 | 0.01 |
| 5,642.00 | 3.82 | 353.00 | 5,634.18 | 220.52 | -1.50 | -220.53 | 95.00 | 352.28 | 0.18 |
| 5,737.00 | 3.78 | 352.56 | 5,728.98 | 226.77 | -2.29 | -226.78 | 95.00 | 352.78 | 0.05 |
| 5,832.00 | 3.91 | 350.01 | 5,823.76 | 233.06 | -3.26 | -233.08 | 95.00 | 351.26 | 0.23 |
| 5,927.00 | 4.09 | 347.73 | 5,918.53 | 239.57 | -4.54 | -239.59 | 95.00 | 348.84 | 0.25 |
| 6,022.00 | 3.74 | 337.71 | 6,013.31 | 245.74 | -6.43 | -245.78 | 95.00 | 342.94 | 0.81 |
| 6,117.00 | 3.47 | 347.73 | 6,108.12 | 251.42 | -8.22 | -251.47 | 95.00 | 342.53 | 0.72 |
| 6,211.00 | 3.47 | 346.14 | 6,201.95 | 256.96 | -9.50 | -257.03 | 94.00 | 346.93 | 0.10 |
| 6,306.00 | 3.43 | 344.82 | 6,296.78 | 262.49 | -10.94 | -262.57 | 95.00 | 345.48 | 0.09 |
| 6,401.00 | 3.30 | 343.86 | 6,391.61 | 267.86 | -12.44 | -267.95 | 95.00 | 344.35 | 0.15 |
| 6,496.00 | 3.25 | 343.68 | 6,486.46 | 273.07 | -13.96 | -273.17 | 95.00 | 343.77 | 0.05 |
| 6,591.00 | 3.30 | 343.33 | 6,581.30 | 278.28 | -15.50 | -278.39 | 95.00 | 343.50 | 0.06 |
| 6,686.00 | 3.34 | 339.99 | 6,676.14 | 283.50 | -17.23 | -283.62 | 95.00 | 341.65 | 0.21 |
| 6,782.00 | 3.34 | 337.53 | 6,771.98 | 288.71 | -19.26 | -288.85 | 96.00 | 338.76 | 0.15 |
| 6,876.00 | 3.21 | 333.66 | 6,865.83 | 293.60 | -21.47 | -293.76 | 94.00 | 335.63 | 0.27 |
| 6,971.00 | 2.99 | 327.86 | 6,960.69 | 298.08 | -23.97 | -298.26 | 95.00 | 330.86 | 0.40 |
| 7,066.00 | 3.21 | 327.77 | 7,055.55 | 302.43 | -26.71 | -302.62 | 95.00 | 327.81 | 0.23 |
| 7,161.00 | 3.60 | 326.10 | 7,150.38 | 307.15 | -29.79 | -307.37 | 95.00 | 326.89 | 0.42 |
| 7,256.00 | 4.31 | 335.68 | 7,245.16 | 312.88 | -32.92 | -313.13 | 95.00 | 331.32 | 1.02 |
| 7,351.00 | 4.79 | 339.46 | 7,339.86 | 319.85 | -35.78 | -320.12 | 95.00 | 337.67 | 0.60 |
| 7,446.00 | 4.62 | 335.68 | 7,434.54 | 327.05 | -38.75 | -327.34 | 95.00 | 337.60 | 0.37 |
| 7,540.00 | 4.00 | 343.15 | 7,528.27 | 333.64 | -41.26 | -333.95 | 94.00 | 339.15 | 0.89 |
| 7,635.00 | 3.78 | 350.10 | 7,623.05 | 339.89 | -42.76 | -340.21 | 95.00 | 346.53 | 0.55 |
| 7,730.00 | 3.21 | 346.85 | 7,717.88 | 345.57 | -43.90 | -345.90 | 95.00 | 348.61 | 0.63 |



Wellbenders

End Of Well Report

Company:
Project:
Site:
Well:
Wellbore:
Design:

Devon Energy
Lea Co., NM (Nad83 - East Zone)
Thistle Unit
#108H
OH
OH

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

Well #108H
RKB=30' @ 3754.00ustf (Cactus 108)
RKB=30' @ 3754.00ustf (Cactus 108)
Grid
Minimum Curvature
WBDS_SQL_2

| Survey | | | | | | | | | | |
|--------------|------------|----------------------|---------------|---------------|---------------|------------------|--------------|---------------|-------------------|--|
| MD (ustf) | Inc (°) | Azi (azimuth) (°) | TVD (ustf) | N/S (ustf) | E/W (ustf) | V. Sec (ustf) | CL (ustf) | CL Azi (°) | DLeg (°/100ft) | |
| 7,825.00 | 2.86 | 344.39 | 7,812.74 | 350.44 | -45.15 | -350.78 | 95.00 | 345.69 | 0.39 | |
| 7,920.00 | 2.64 | 339.90 | 7,907.63 | 354.78 | -46.53 | -355.13 | 95.00 | 342.23 | 0.32 | |
| 8,015.00 | 2.33 | 334.98 | 8,002.54 | 358.58 | -48.10 | -358.94 | 95.00 | 337.59 | 0.40 | |
| 8,110.00 | 2.07 | 329.88 | 8,097.47 | 361.82 | -49.78 | -362.19 | 95.00 | 332.58 | 0.34 | |
| 8,205.00 | 1.98 | 324.17 | 8,192.41 | 364.63 | -51.60 | -365.02 | 95.00 | 327.09 | 0.23 | |
| 8,300.00 | 1.71 | 318.98 | 8,287.37 | 367.03 | -53.49 | -367.43 | 95.00 | 321.76 | 0.33 | |
| 8,395.00 | 1.67 | 310.28 | 8,382.32 | 369.00 | -55.48 | -369.41 | 95.00 | 314.68 | 0.27 | |
| 8,490.00 | 1.14 | 297.36 | 8,477.30 | 370.33 | -57.38 | -370.76 | 95.00 | 305.04 | 0.65 | |
| 8,585.00 | 1.19 | 285.50 | 8,572.28 | 371.02 | -59.17 | -371.47 | 95.00 | 291.30 | 0.26 | |
| 8,680.00 | 1.19 | 277.59 | 8,667.26 | 371.42 | -61.09 | -371.88 | 95.00 | 281.55 | 0.17 | |
| 8,775.00 | 1.19 | 273.11 | 8,762.24 | 371.60 | -63.06 | -372.08 | 95.00 | 275.35 | 0.10 | |
| 8,871.00 | 1.14 | 268.01 | 8,858.22 | 371.62 | -65.01 | -372.11 | 96.00 | 270.61 | 0.12 | |
| 8,967.00 | 1.63 | 260.98 | 8,954.19 | 371.38 | -67.31 | -371.88 | 96.00 | 263.87 | 0.54 | |
| 9,062.00 | 1.71 | 259.13 | 9,049.15 | 370.90 | -70.04 | -371.42 | 95.00 | 260.03 | 0.10 | |
| 9,157.00 | 1.71 | 264.58 | 9,144.10 | 370.50 | -72.84 | -371.04 | 95.00 | 261.85 | 0.17 | |
| 9,252.00 | 1.80 | 265.20 | 9,239.06 | 370.24 | -75.74 | -370.81 | 95.00 | 264.90 | 0.10 | |
| 9,346.00 | 1.54 | 277.24 | 9,333.02 | 370.27 | -78.46 | -370.86 | 94.00 | 270.75 | 0.46 | |
| 9,441.00 | 1.89 | 277.32 | 9,427.98 | 370.63 | -81.28 | -371.25 | 95.00 | 277.28 | 0.37 | |
| 9,536.00 | 2.15 | 284.62 | 9,522.92 | 371.28 | -84.56 | -371.92 | 95.00 | 281.21 | 0.38 | |
| 9,632.00 | 2.07 | 287.34 | 9,618.85 | 372.25 | -87.96 | -372.92 | 96.00 | 285.95 | 0.13 | |
| 9,727.00 | 1.58 | 294.55 | 9,713.81 | 373.31 | -90.79 | -374.00 | 95.00 | 290.46 | 0.57 | |
| 9,822.00 | 1.27 | 318.72 | 9,808.78 | 374.64 | -92.67 | -375.34 | 95.00 | 305.30 | 0.70 | |
| 9,916.00 | 1.85 | 14.88 | 9,902.75 | 376.89 | -92.97 | -377.60 | 94.00 | 352.46 | 1.65 | |
| 10,011.00 | 2.29 | 18.57 | 9,997.68 | 380.17 | -91.97 | -380.87 | 95.00 | 16.92 | 0.48 | |
| 10,106.00 | 1.89 | 5.57 | 10,092.62 | 383.53 | -91.21 | -384.22 | 95.00 | 12.69 | 0.65 | |
| 10,201.00 | 1.67 | 344.65 | 10,187.58 | 386.43 | -91.43 | -387.12 | 95.00 | 355.76 | 0.72 | |
| 10,296.00 | 1.71 | 340.78 | 10,282.53 | 389.10 | -92.26 | -389.80 | 95.00 | 342.69 | 0.13 | |



Wellbenders

End Of Well Report

Company: Devon Energy
Project: Lea Co., NM (Nad83 - East Zone)
Site: Thistle Unit
Well: #108H
Wellbore: OH
Design: OH

Local Co-ordinate Reference:
TVD Reference: RKB=30' @ 3754.00uft (Cactus 108)
MD Reference: RKB=30' @ 3754.00uft (Cactus 108)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WBDS_SQL_2

| Survey | MD (uft) | Inc (°) | Azi (azimuth) (°) | TVD (uft) | N/S (uft) | E/W (uft) | V. Sec (uft) | CL (uft) | CL Azi (°) | DLeg (°/100ft) |
|--|-------------|------------|----------------------|--------------|--------------|--------------|-----------------|-------------|---------------|-------------------|
| | 10,391.00 | 0.62 | 99.70 | 10,377.52 | 390.35 | -92.22 | -391.05 | 95.00 | 1.83 | 2.19 |
| | 10,487.00 | 0.75 | 104.00 | 10,473.51 | 390.11 | -91.10 | -390.80 | 96.00 | 102.05 | 0.15 |
| | 10,582.00 | 0.88 | 98.38 | 10,568.50 | 389.86 | -89.78 | -390.53 | 95.00 | 100.97 | 0.16 |
| | 10,677.00 | 0.66 | 118.51 | 10,663.50 | 389.49 | -88.57 | -390.16 | 95.00 | 106.99 | 0.36 |
| | 10,772.00 | 0.84 | 119.47 | 10,758.49 | 388.89 | -87.49 | -389.55 | 95.00 | 119.05 | 0.19 |
| | 10,867.00 | 1.14 | 134.15 | 10,853.47 | 387.88 | -86.20 | -388.53 | 95.00 | 127.93 | 0.41 |
| | 10,963.00 | 0.97 | 144.70 | 10,949.46 | 386.56 | -85.05 | -387.20 | 96.00 | 139.00 | 0.27 |
| | 11,058.00 | 0.97 | 146.90 | 11,044.44 | 385.23 | -84.14 | -385.86 | 95.00 | 145.80 | 0.04 |
| | 11,152.00 | 1.14 | 153.57 | 11,138.43 | 383.72 | -83.29 | -384.35 | 94.00 | 150.50 | 0.22 |
| | 11,247.00 | 1.19 | 155.86 | 11,233.41 | 381.98 | -82.47 | -382.60 | 95.00 | 154.74 | 0.07 |
| | 11,342.00 | 1.19 | 153.57 | 11,328.39 | 380.19 | -81.63 | -380.81 | 95.00 | 154.71 | 0.05 |
| | 11,437.00 | 1.27 | 140.83 | 11,423.37 | 378.49 | -80.52 | -379.10 | 95.00 | 146.99 | 0.30 |
| | 11,532.00 | 0.84 | 140.83 | 11,518.35 | 377.14 | -79.42 | -377.74 | 95.00 | 140.83 | 0.45 |
| | 11,626.00 | 0.62 | 135.38 | 11,612.34 | 376.24 | -78.62 | -376.83 | 94.00 | 138.52 | 0.25 |
| | 11,721.00 | 0.62 | 138.11 | 11,707.34 | 375.49 | -77.92 | -376.08 | 95.00 | 136.75 | 0.03 |
| | 11,817.00 | 0.48 | 166.06 | 11,803.33 | 374.71 | -77.48 | -375.30 | 96.00 | 150.27 | 0.31 |
| | 11,900.00 | 0.51 | 136.38 | 11,886.33 | 374.11 | -77.14 | -374.69 | 83.00 | 150.69 | 0.31 |
| KOP @ 11900.00' MD 61.55' FNL/808.15' FEL SEC 21 | | | | | | | | | | |
| | 11,912.00 | 0.53 | 132.66 | 11,898.33 | 374.03 | -77.06 | -374.61 | 12.00 | 134.49 | 0.31 |
| | 12,007.00 | 3.69 | 198.57 | 11,993.26 | 370.83 | -77.71 | -371.42 | 95.00 | 191.50 | 3.69 |
| | 12,101.00 | 13.89 | 178.01 | 12,086.05 | 356.65 | -78.28 | -357.24 | 94.00 | 182.31 | 11.18 |
| | 12,174.82 | 19.36 | 169.90 | 12,156.76 | 335.73 | -75.83 | -336.31 | 73.82 | 173.30 | 8.03 |
| FTP @ 12174.82' MD 100' FNL/806.90' FEL SEC 21 | | | | | | | | | | |
| | 12,196.00 | 20.97 | 168.34 | 12,176.65 | 328.57 | -74.44 | -329.13 | 21.18 | 169.09 | 8.03 |
| | 12,292.00 | 26.29 | 174.32 | 12,264.58 | 290.55 | -68.86 | -291.07 | 96.00 | 171.65 | 6.07 |
| | 12,385.00 | 41.01 | 172.30 | 12,341.78 | 239.54 | -62.70 | -240.01 | 93.00 | 173.11 | 15.87 |

Company: Devon Energy
Project: Lea Co., NM (Nad83 - East Zone)
Site: Thistle Unit
Well: #108H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #108H
TVD Reference: RKB=30' @ 3754.00ust (Cactus 108)
MD Reference: RKB=30' @ 3754.00ust (Cactus 108)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WBDS_SQL_2

| MD (ustf) | Inc (°) | Azi (azimuth) (°) | TVD (ustf) | N/S (ustf) | E/W (ustf) | V. Sec (ustf) | CL (ustf) | CL Azi (°) | DLeg (°/100ft) |
|---|------------|----------------------|---------------|---------------|---------------|------------------|--------------|---------------|-------------------|
| 12,479.00 | 60.00 | 175.81 | 12,401.31 | 167.71 | -55.53 | -168.13 | 94.00 | 174.30 | 20.40 |
| 60° INC @ 12479.00' MD 268.20' FNL/788.75' FEL SEC 21 | | | | | | | | | |
| 12,574.00 | 79.87 | 180.47 | 12,433.75 | 78.99 | -52.88 | -79.40 | 95.00 | 178.29 | 21.41 |
| 12,669.00 | 88.04 | 181.00 | 12,443.75 | -15.39 | -54.09 | 14.98 | 95.00 | 180.74 | 8.62 |
| 12,764.00 | 90.20 | 182.05 | 12,445.21 | -110.34 | -56.62 | 109.90 | 95.00 | 181.53 | 2.53 |
| 12,859.00 | 90.07 | 182.67 | 12,444.98 | -205.26 | -60.53 | 204.79 | 95.00 | 182.36 | 0.67 |
| 12,954.00 | 89.89 | 179.94 | 12,445.02 | -300.23 | -62.70 | 299.73 | 95.00 | 181.31 | 2.88 |
| 13,049.00 | 90.07 | 179.77 | 12,445.05 | -395.22 | -62.46 | 394.73 | 95.00 | 179.85 | 0.26 |
| 13,143.00 | 89.80 | 179.68 | 12,445.16 | -489.22 | -62.01 | 488.73 | 94.00 | 179.73 | 0.30 |
| 13,238.00 | 89.36 | 179.24 | 12,445.85 | -584.22 | -61.11 | 583.73 | 95.00 | 179.46 | 0.65 |
| 13,333.00 | 88.53 | 177.39 | 12,447.60 | -679.15 | -58.32 | 678.69 | 95.00 | 178.32 | 2.13 |
| 13,428.00 | 87.65 | 175.64 | 12,450.77 | -773.92 | -52.55 | 773.49 | 95.00 | 176.52 | 2.06 |
| 13,523.00 | 88.62 | 178.01 | 12,453.86 | -868.72 | -47.29 | 868.33 | 95.00 | 176.83 | 2.69 |
| 13,618.00 | 87.74 | 177.04 | 12,456.88 | -963.58 | -43.19 | 963.22 | 95.00 | 177.53 | 1.38 |
| 13,713.00 | 86.64 | 176.43 | 12,461.54 | -1,058.31 | -37.78 | 1,057.99 | 95.00 | 176.74 | 1.32 |
| 13,808.00 | 87.60 | 177.13 | 12,466.31 | -1,153.04 | -32.46 | 1,152.75 | 95.00 | 176.78 | 1.25 |
| 13,904.00 | 86.33 | 175.64 | 12,471.39 | -1,248.71 | -26.41 | 1,248.47 | 96.00 | 176.39 | 2.04 |
| 13,999.00 | 87.60 | 177.83 | 12,476.42 | -1,343.41 | -21.01 | 1,343.21 | 95.00 | 176.74 | 2.66 |
| 14,095.00 | 87.74 | 178.36 | 12,480.32 | -1,439.28 | -17.82 | 1,439.10 | 96.00 | 178.10 | 0.57 |
| 14,190.00 | 88.62 | 178.71 | 12,483.34 | -1,534.20 | -15.39 | 1,534.04 | 95.00 | 178.54 | 1.00 |
| 14,286.00 | 89.89 | 179.59 | 12,484.59 | -1,630.18 | -13.97 | 1,630.02 | 96.00 | 179.15 | 1.61 |
| 14,382.00 | 90.20 | 179.77 | 12,484.51 | -1,726.18 | -13.43 | 1,726.02 | 96.00 | 179.68 | 0.37 |
| 14,477.00 | 89.36 | 178.98 | 12,484.88 | -1,821.17 | -12.40 | 1,821.02 | 95.00 | 179.38 | 1.21 |
| 14,573.00 | 88.62 | 178.98 | 12,486.57 | -1,917.14 | -10.69 | 1,917.00 | 96.00 | 178.98 | 0.77 |
| 14,669.00 | 90.11 | 181.00 | 12,487.64 | -2,013.12 | -10.67 | 2,012.98 | 96.00 | 179.99 | 2.61 |
| 14,765.00 | 89.85 | 180.12 | 12,487.67 | -2,109.12 | -11.61 | 2,108.97 | 96.00 | 180.56 | 0.96 |
| 14,860.00 | 90.07 | 180.38 | 12,487.74 | -2,204.12 | -12.03 | 2,203.96 | 95.00 | 180.25 | 0.36 |



Wellbenders

End Of Well Report

| | | | |
|------------------|---------------------------------|-------------------------------------|------------------------------------|
| Company: | Devon Energy | Local Co-ordinate Reference: | Well #108H |
| Project: | Lea Co., NM (Nad83 - East Zone) | TVD Reference: | RKB=30' @ 3754.00ustf (Cactus 108) |
| Site: | Thistle Unit | MD Reference: | RKB=30' @ 3754.00ustf (Cactus 108) |
| Well: | #108H | North Reference: | Grid |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | WBDS_SQL_2 |

| Survey | MD (ustf) | Inc (°) | Azi (azimuth) (°) | TVD (ustf) | N/S (ustf) | E/W (ustf) | V. Sec (ustf) | CL (ustf) | CL Azi (°) | DLeg (°/100ft) |
|--------|--------------|------------|----------------------|---------------|---------------|---------------|------------------|--------------|---------------|-------------------|
| | 14,956.00 | 87.65 | 178.45 | 12,489.65 | -2,300.08 | -11.05 | 2,299.93 | 96.00 | 179.42 | 3.22 |
| | 15,052.00 | 86.59 | 177.66 | 12,494.47 | -2,395.90 | -7.79 | 2,395.77 | 96.00 | 178.06 | 1.38 |
| | 15,147.00 | 88.13 | 177.39 | 12,498.84 | -2,490.71 | -3.69 | 2,490.61 | 95.00 | 177.52 | 1.65 |
| | 15,243.00 | 88.00 | 176.69 | 12,502.09 | -2,586.53 | 1.26 | 2,586.46 | 96.00 | 177.04 | 0.74 |
| | 15,293.00 | 87.25 | 176.87 | 12,504.16 | -2,636.40 | 4.07 | 2,636.36 | 50.00 | 176.78 | 1.54 |
| | 15,389.00 | 88.31 | 178.01 | 12,507.88 | -2,732.23 | 8.35 | 2,732.22 | 96.00 | 177.44 | 1.62 |
| | 15,484.00 | 87.38 | 177.57 | 12,511.45 | -2,827.10 | 12.01 | 2,827.10 | 95.00 | 177.79 | 1.08 |
| | 15,579.00 | 88.48 | 179.33 | 12,514.88 | -2,921.99 | 14.58 | 2,922.02 | 95.00 | 178.45 | 2.18 |
| | 15,675.00 | 88.26 | 178.89 | 12,517.61 | -3,017.94 | 16.07 | 3,017.98 | 96.00 | 179.11 | 0.51 |
| | 15,770.00 | 89.10 | 180.56 | 12,519.80 | -3,112.91 | 16.52 | 3,112.95 | 95.00 | 179.73 | 1.97 |
| | 15,865.00 | 88.26 | 180.29 | 12,521.99 | -3,207.88 | 15.82 | 3,207.91 | 95.00 | 180.43 | 0.93 |
| | 15,959.00 | 90.20 | 180.82 | 12,523.25 | -3,301.87 | 14.91 | 3,301.88 | 94.00 | 180.56 | 2.14 |
| | 16,054.00 | 90.02 | 180.56 | 12,523.07 | -3,396.86 | 13.77 | 3,396.86 | 95.00 | 180.69 | 0.33 |
| | 16,149.00 | 89.19 | 180.29 | 12,523.72 | -3,491.85 | 13.06 | 3,491.85 | 95.00 | 180.43 | 0.92 |
| | 16,243.00 | 88.44 | 179.68 | 12,525.67 | -3,585.83 | 13.08 | 3,585.83 | 94.00 | 179.99 | 1.03 |
| | 16,323.00 | 88.04 | 179.59 | 12,528.13 | -3,665.79 | 13.59 | 3,665.79 | 80.00 | 179.64 | 0.51 |
| | 16,417.00 | 89.67 | 180.73 | 12,530.00 | -3,759.77 | 13.33 | 3,759.76 | 94.00 | 180.16 | 2.12 |
| | 16,512.00 | 89.14 | 180.65 | 12,530.99 | -3,854.76 | 12.19 | 3,854.74 | 95.00 | 180.69 | 0.56 |
| | 16,607.00 | 88.18 | 180.56 | 12,533.21 | -3,949.72 | 11.18 | 3,949.69 | 95.00 | 180.61 | 1.01 |
| | 16,702.00 | 87.96 | 179.85 | 12,536.41 | -4,044.67 | 10.85 | 4,044.63 | 95.00 | 180.21 | 0.78 |
| | 16,797.00 | 89.76 | 180.29 | 12,538.30 | -4,139.64 | 10.73 | 4,139.61 | 95.00 | 180.07 | 1.95 |
| | 16,892.00 | 89.80 | 179.59 | 12,538.67 | -4,234.64 | 10.83 | 4,234.60 | 95.00 | 179.94 | 0.74 |
| | 16,987.00 | 89.23 | 178.89 | 12,539.47 | -4,329.63 | 12.09 | 4,329.60 | 95.00 | 179.24 | 0.95 |
| | 17,082.00 | 88.48 | 178.71 | 12,541.37 | -4,424.59 | 14.08 | 4,424.57 | 95.00 | 178.80 | 0.81 |
| | 17,176.00 | 87.03 | 178.62 | 12,545.05 | -4,518.49 | 16.27 | 4,518.48 | 94.00 | 178.67 | 1.55 |
| | 17,271.00 | 89.10 | 180.03 | 12,548.26 | -4,613.42 | 17.38 | 4,613.42 | 95.00 | 179.33 | 2.64 |
| | 17,366.00 | 88.92 | 179.59 | 12,549.90 | -4,708.41 | 17.70 | 4,708.40 | 95.00 | 179.81 | 0.50 |



Wellbenders

End Of Well Report

| | | | |
|------------------|---------------------------------|-------------------------------------|-----------------------------------|
| Company: | Devon Energy | Local Co-ordinate Reference: | Well #108H |
| Project: | Lea Co., NM (Nad83 - East Zone) | TVD Reference: | RKB=30' @ 3754.00ust (Cactus 108) |
| Site: | Thistle Unit | MD Reference: | RKB=30' @ 3754.00ust (Cactus 108) |
| Well: | #108H | North Reference: | Grid |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | WBDS_SQL_2 |

| Survey | | | | | | | | | |
|---|------------|----------------------|---------------|---------------|---------------|------------------|--------------|---------------|--------------------|
| MD (ustf) | Inc (°) | Azi (azimuth) (°) | TVD (ustf) | N/S (ustf) | E/W (ustf) | V. Sec (ustf) | CL (ustf) | CL Azi (°) | D Leg (°/100ft) |
| 17,461.00 | 90.33 | 180.21 | 12,550.52 | -4,803.40 | 17.86 | 4,803.40 | 95.00 | 179.90 | 1.62 |
| 17,503.85 | 89.97 | 180.13 | 12,550.41 | -4,846.25 | 17.74 | 4,846.24 | 42.85 | 180.17 | 0.85 |
| SEC XING @ 17503.85' MD 0' FNL/754.65' FEL SEC 28 | | | | | | | | | |
| 17,556.00 | 89.54 | 180.03 | 12,550.63 | -4,898.40 | 17.67 | 4,898.39 | 52.15 | 180.08 | 0.85 |
| 17,651.00 | 89.14 | 179.77 | 12,551.72 | -4,993.39 | 17.83 | 4,993.38 | 95.00 | 179.90 | 0.50 |
| 17,746.00 | 88.09 | 179.50 | 12,554.02 | -5,088.36 | 18.44 | 5,088.35 | 95.00 | 179.64 | 1.14 |
| 17,841.00 | 89.19 | 181.00 | 12,556.27 | -5,183.33 | 18.02 | 5,183.32 | 95.00 | 180.25 | 1.96 |
| 17,936.00 | 89.71 | 181.79 | 12,557.19 | -5,278.30 | 15.71 | 5,278.26 | 95.00 | 181.40 | 1.00 |
| 18,031.00 | 89.36 | 181.35 | 12,557.96 | -5,373.26 | 13.11 | 5,373.20 | 95.00 | 181.57 | 0.59 |
| 18,126.00 | 88.62 | 181.08 | 12,559.63 | -5,468.22 | 11.09 | 5,468.15 | 95.00 | 181.22 | 0.83 |
| 18,221.00 | 88.44 | 180.12 | 12,562.07 | -5,563.18 | 10.10 | 5,563.10 | 95.00 | 180.60 | 1.03 |
| 18,316.00 | 88.79 | 180.12 | 12,564.37 | -5,658.16 | 9.90 | 5,658.06 | 95.00 | 180.12 | 0.37 |
| 18,411.00 | 86.81 | 179.68 | 12,568.01 | -5,753.08 | 10.06 | 5,752.99 | 95.00 | 179.90 | 2.13 |
| 18,505.00 | 88.48 | 179.85 | 12,571.87 | -5,847.00 | 10.45 | 5,846.90 | 94.00 | 179.77 | 1.79 |
| 18,600.00 | 90.55 | 180.29 | 12,572.68 | -5,941.99 | 10.33 | 5,941.89 | 95.00 | 180.07 | 2.23 |
| 18,695.00 | 90.42 | 180.29 | 12,571.87 | -6,036.98 | 9.85 | 6,036.88 | 95.00 | 180.29 | 0.14 |
| 18,790.00 | 88.44 | 179.50 | 12,572.82 | -6,131.97 | 10.03 | 6,131.87 | 95.00 | 179.90 | 2.24 |
| 18,885.00 | 87.30 | 179.33 | 12,576.35 | -6,226.90 | 11.00 | 6,226.80 | 95.00 | 179.42 | 1.21 |
| 18,981.00 | 89.67 | 179.33 | 12,578.89 | -6,322.85 | 12.12 | 6,322.76 | 96.00 | 179.33 | 2.47 |
| 19,076.00 | 87.03 | 178.71 | 12,581.62 | -6,417.79 | 13.74 | 6,417.71 | 95.00 | 179.02 | 2.85 |
| 19,171.00 | 91.82 | 180.91 | 12,582.58 | -6,512.75 | 14.06 | 6,512.67 | 95.00 | 179.81 | 5.55 |
| 19,267.00 | 91.56 | 180.65 | 12,579.75 | -6,608.70 | 12.75 | 6,608.61 | 96.00 | 180.78 | 0.38 |
| 19,362.00 | 90.86 | 180.03 | 12,577.74 | -6,703.68 | 12.19 | 6,703.57 | 95.00 | 180.34 | 0.98 |
| 19,457.00 | 90.86 | 180.91 | 12,576.31 | -6,798.66 | 11.41 | 6,798.55 | 95.00 | 180.47 | 0.93 |
| 19,552.00 | 91.60 | 181.44 | 12,574.27 | -6,893.62 | 9.46 | 6,893.49 | 95.00 | 181.17 | 0.96 |
| 19,647.00 | 89.80 | 180.73 | 12,573.11 | -6,988.59 | 7.66 | 6,988.44 | 95.00 | 181.08 | 2.04 |
| 19,742.00 | 88.92 | 179.41 | 12,574.18 | -7,083.58 | 7.54 | 7,083.43 | 95.00 | 180.07 | 1.67 |



Wellbenders

End Of Well Report

Company:
Project:
Site:
Well:
Wellbore:
Design:

Devon Energy
Lea Co., NM (Nad83 - East Zone)
Thistle Unit
#108H
OH
OH

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

Well #108H
RKB=30' @ 3754.00ustf (Cactus 108)
RKB=30' @ 3754.00ustf (Cactus 108)
Grid
Minimum Curvature
WBDS_SQL_2

| Survey | | | | | | | | | | |
|--------------|------------|----------------------|---------------|---------------|---------------|------------------|--------------|---------------|-------------------|--|
| MD (ustf) | Inc (°) | Azi (azimuth) (°) | TVD (ustf) | N/S (ustf) | E/W (ustf) | V. Sec (ustf) | CL (ustf) | CL Azi (°) | DLeg (°/100ft) | |
| 19,837.00 | 90.81 | 178.36 | 12,574.40 | -7,178.56 | 9.39 | 7,178.42 | 95.00 | 178.88 | 2.28 | |
| 19,932.00 | 88.35 | 177.39 | 12,575.10 | -7,273.48 | 12.91 | 7,273.37 | 95.00 | 177.88 | 2.78 | |
| 20,027.00 | 91.25 | 176.43 | 12,575.43 | -7,368.33 | 18.03 | 7,368.25 | 95.00 | 176.91 | 3.22 | |
| 20,122.00 | 89.80 | 174.93 | 12,574.56 | -7,463.05 | 25.19 | 7,463.03 | 95.00 | 175.68 | 2.20 | |
| 20,217.00 | 89.58 | 177.13 | 12,575.07 | -7,557.82 | 31.77 | 7,557.84 | 95.00 | 176.03 | 2.33 | |
| 20,312.00 | 90.77 | 180.12 | 12,574.78 | -7,652.78 | 34.05 | 7,652.81 | 95.00 | 178.62 | 3.39 | |
| 20,407.00 | 89.93 | 180.82 | 12,574.20 | -7,747.77 | 33.27 | 7,747.80 | 95.00 | 180.47 | 1.15 | |
| 20,502.00 | 90.77 | 181.44 | 12,573.62 | -7,842.75 | 31.39 | 7,842.76 | 95.00 | 181.13 | 1.10 | |
| 20,598.00 | 90.07 | 180.29 | 12,572.92 | -7,938.73 | 29.94 | 7,938.73 | 96.00 | 180.86 | 1.40 | |
| 20,693.00 | 89.14 | 180.82 | 12,573.57 | -8,033.73 | 29.02 | 8,033.71 | 95.00 | 180.55 | 1.13 | |
| 20,788.00 | 89.05 | 181.17 | 12,575.07 | -8,128.70 | 27.37 | 8,128.67 | 95.00 | 180.99 | 0.38 | |
| 20,883.00 | 89.14 | 181.08 | 12,576.57 | -8,223.67 | 25.51 | 8,223.62 | 95.00 | 181.12 | 0.13 | |
| 20,978.00 | 89.14 | 178.27 | 12,578.00 | -8,318.65 | 26.05 | 8,318.60 | 95.00 | 179.68 | 2.96 | |
| 21,073.00 | 89.27 | 179.41 | 12,579.32 | -8,413.62 | 27.97 | 8,413.58 | 95.00 | 178.84 | 1.21 | |
| 21,169.00 | 92.00 | 180.73 | 12,578.25 | -8,509.60 | 27.85 | 8,509.56 | 96.00 | 180.07 | 3.16 | |
| 21,264.00 | 90.99 | 180.91 | 12,575.77 | -8,604.56 | 26.50 | 8,604.51 | 95.00 | 180.82 | 1.08 | |
| 21,359.00 | 87.65 | 181.00 | 12,576.90 | -8,699.52 | 24.91 | 8,699.46 | 95.00 | 180.95 | 3.52 | |
| 21,453.00 | 86.86 | 180.47 | 12,581.40 | -8,793.41 | 23.71 | 8,793.33 | 94.00 | 180.74 | 1.01 | |
| 21,549.00 | 86.64 | 179.50 | 12,586.85 | -8,889.25 | 23.73 | 8,889.17 | 96.00 | 179.99 | 1.03 | |
| 21,644.00 | 87.38 | 179.50 | 12,591.80 | -8,984.12 | 24.56 | 8,984.04 | 95.00 | 179.50 | 0.78 | |
| 21,739.00 | 86.29 | 179.15 | 12,597.05 | -9,078.97 | 25.68 | 9,078.89 | 95.00 | 179.33 | 1.20 | |
| 21,834.00 | 87.12 | 179.24 | 12,602.51 | -9,173.80 | 27.01 | 9,173.73 | 95.00 | 179.20 | 0.88 | |
| 21,929.00 | 88.84 | 179.33 | 12,605.85 | -9,268.73 | 28.20 | 9,268.67 | 95.00 | 179.29 | 1.81 | |
| 22,024.00 | 88.88 | 179.85 | 12,607.74 | -9,363.71 | 28.88 | 9,363.65 | 95.00 | 179.59 | 0.55 | |
| 22,119.00 | 90.42 | 180.21 | 12,608.32 | -9,458.70 | 28.83 | 9,458.64 | 95.00 | 180.03 | 1.66 | |
| 22,214.00 | 90.64 | 179.50 | 12,607.45 | -9,553.70 | 29.07 | 9,553.64 | 95.00 | 179.86 | 0.78 | |
| 22,310.00 | 91.91 | 179.85 | 12,605.31 | -9,649.67 | 29.61 | 9,649.61 | 96.00 | 179.67 | 1.37 | |



Wellbenders

End Of Well Report

| | | | |
|---|--|-------------------------------------|-----------------------------------|
| Company: Devon Energy | | Local Co-ordinate Reference: | |
| Project: Lea Co., NM (Nad83 - East Zone) | | TVD Reference: | Well #108H |
| Site: Thistle Unit | | MD Reference: | RKB=30' @ 3754.00uft (Cactus 108) |
| Well: #108H | | North Reference: | RKB=30' @ 3754.00uft (Cactus 108) |
| Wellbore: OH | | Survey Calculation Method: | Grid |
| Design: OH | | Database: | Minimum Curvature WBDS_SQL_2 |

| Survey | | | | | | | | | |
|---|------------|----------------------|--------------|--------------|--------------|-----------------|-------------|---------------|-------------------|
| MD (uft) | Inc (°) | Azi (azimuth) (°) | TVD (uft) | N/S (uft) | E/W (uft) | V. Sec (uft) | CL (uft) | CL Azi (°) | DLeg (°/100ft) |
| 22,404.00 | 89.89 | 178.98 | 12,603.83 | -9,743.65 | 30.57 | 9,743.59 | 94.00 | 179.41 | 2.34 |
| 22,499.00 | 88.66 | 178.89 | 12,605.04 | -9,838.62 | 32.34 | 9,838.58 | 95.00 | 178.94 | 1.30 |
| 22,594.00 | 90.73 | 181.17 | 12,605.54 | -9,933.61 | 32.29 | 9,933.56 | 95.00 | 180.03 | 3.24 |
| 22,689.00 | 87.74 | 182.14 | 12,606.81 | -10,028.55 | 29.54 | 10,028.48 | 95.00 | 181.65 | 3.31 |
| 22,784.00 | 90.20 | 181.44 | 12,608.52 | -10,123.48 | 26.58 | 10,123.38 | 95.00 | 181.79 | 2.69 |
| 22,784.31 | 90.20 | 181.44 | 12,608.52 | -10,123.79 | 26.57 | 10,123.69 | 0.31 | 181.44 | 0.00 |
| SEC XING @ 22784.31' MD 0' FNL/786.10' FEL SEC 33 | | | | | | | | | |
| 22,879.00 | 88.79 | 180.91 | 12,609.35 | -10,218.45 | 24.63 | 10,218.34 | 94.69 | 181.17 | 1.59 |
| 22,975.00 | 87.60 | 181.35 | 12,612.38 | -10,314.38 | 22.74 | 10,314.25 | 96.00 | 181.13 | 1.32 |
| 23,070.00 | 84.79 | 180.12 | 12,618.68 | -10,409.16 | 21.52 | 10,409.01 | 95.00 | 180.74 | 3.23 |
| 23,165.00 | 85.67 | 179.77 | 12,626.58 | -10,503.83 | 21.61 | 10,503.68 | 95.00 | 179.94 | 1.00 |
| 23,260.00 | 88.18 | 180.12 | 12,631.68 | -10,598.68 | 21.70 | 10,598.53 | 95.00 | 179.95 | 2.67 |
| 23,355.00 | 89.14 | 179.85 | 12,633.90 | -10,693.65 | 21.73 | 10,693.51 | 95.00 | 179.98 | 1.05 |
| 23,451.00 | 88.84 | 179.33 | 12,635.59 | -10,789.64 | 22.41 | 10,789.49 | 96.00 | 179.59 | 0.63 |
| 23,546.00 | 90.81 | 179.41 | 12,635.88 | -10,884.62 | 23.46 | 10,884.48 | 95.00 | 179.37 | 2.08 |
| 23,641.00 | 91.82 | 178.98 | 12,633.70 | -10,979.59 | 24.79 | 10,979.46 | 95.00 | 179.20 | 1.16 |
| 23,736.00 | 93.41 | 178.98 | 12,629.37 | -11,074.47 | 26.48 | 11,074.35 | 95.00 | 178.98 | 1.67 |
| 23,831.00 | 93.58 | 179.15 | 12,623.58 | -11,169.28 | 28.03 | 11,169.17 | 95.00 | 179.06 | 0.25 |
| 23,925.00 | 92.75 | 178.89 | 12,618.39 | -11,263.12 | 29.63 | 11,263.02 | 94.00 | 179.02 | 0.93 |
| 24,020.00 | 90.64 | 178.71 | 12,615.58 | -11,358.06 | 31.62 | 11,357.96 | 95.00 | 178.80 | 2.23 |
| 24,115.00 | 90.07 | 177.92 | 12,614.99 | -11,453.01 | 34.41 | 11,452.94 | 95.00 | 178.31 | 1.03 |
| 24,210.00 | 90.95 | 178.45 | 12,614.14 | -11,547.96 | 37.42 | 11,547.91 | 95.00 | 178.18 | 1.08 |
| 24,305.00 | 89.01 | 178.10 | 12,614.18 | -11,642.91 | 40.28 | 11,642.88 | 95.00 | 178.28 | 2.08 |
| 24,400.00 | 87.30 | 178.01 | 12,617.23 | -11,737.80 | 43.51 | 11,737.79 | 95.00 | 178.06 | 1.80 |
| 24,495.00 | 87.96 | 177.04 | 12,621.16 | -11,832.63 | 47.60 | 11,832.65 | 95.00 | 177.52 | 1.23 |
| 24,590.00 | 88.09 | 177.83 | 12,624.44 | -11,927.48 | 51.85 | 11,927.53 | 95.00 | 177.44 | 0.84 |
| 24,685.00 | 90.11 | 179.15 | 12,625.93 | -12,022.43 | 54.36 | 12,022.49 | 95.00 | 178.49 | 2.54 |



Wellbenders

End Of Well Report

Company:
Project:
Site:
Well:
Wellbore:
Design:

Devon Energy
Lea Co., NM (Nad83 - East Zone)
Thistle Unit
#108H
OH
OH

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

Well #108H
RKB=30' @ 3754.00ustf (Cactus 108)
RKB=30' @ 3754.00ustf (Cactus 108)
Grid
Minimum Curvature
WBDS_SQL_2

| Survey | MD (ustf) | Inc (°) | Azi (azimuth) (°) | TVD (ustf) | N/S (ustf) | E/W (ustf) | V. Sec (ustf) | CL (ustf) | CL Azi (°) | D Leg (°/100ft) |
|--------|--------------|------------|----------------------|---------------|---------------|---------------|------------------|--------------|---------------|--------------------|
| | 24,780.00 | 89.63 | 178.80 | 12,626.14 | -12,117.41 | 56.06 | 12,117.49 | 95.00 | 178.98 | 0.63 |
| | 24,875.00 | 92.18 | 178.80 | 12,624.64 | -12,212.37 | 58.04 | 12,212.46 | 95.00 | 178.80 | 2.68 |
| | 24,970.00 | 92.44 | 180.65 | 12,620.81 | -12,307.29 | 58.50 | 12,307.38 | 95.00 | 179.72 | 1.96 |
| | 25,065.00 | 91.87 | 181.61 | 12,617.24 | -12,402.20 | 56.63 | 12,402.27 | 95.00 | 181.13 | 1.17 |
| | 25,160.00 | 92.09 | 181.79 | 12,613.96 | -12,497.10 | 53.81 | 12,497.15 | 95.00 | 181.70 | 0.30 |
| | 25,254.00 | 93.14 | 182.67 | 12,609.67 | -12,590.93 | 50.16 | 12,590.95 | 94.00 | 182.23 | 1.46 |
| | 25,350.00 | 91.96 | 182.05 | 12,605.40 | -12,686.75 | 46.21 | 12,686.74 | 96.00 | 182.36 | 1.39 |
| | 25,445.00 | 91.60 | 182.40 | 12,602.45 | -12,781.64 | 42.52 | 12,781.59 | 95.00 | 182.23 | 0.53 |
| | 25,540.00 | 91.34 | 182.14 | 12,600.01 | -12,876.53 | 38.76 | 12,876.45 | 95.00 | 182.27 | 0.39 |
| | 25,635.00 | 90.77 | 182.40 | 12,598.26 | -12,971.44 | 35.00 | 12,971.33 | 95.00 | 182.27 | 0.66 |
| | 25,730.00 | 90.73 | 182.93 | 12,597.02 | -13,066.33 | 30.58 | 13,066.18 | 95.00 | 182.67 | 0.56 |
| | 25,825.00 | 90.99 | 183.28 | 12,595.59 | -13,161.18 | 25.44 | 13,160.99 | 95.00 | 183.10 | 0.46 |
| | 25,920.00 | 87.87 | 181.96 | 12,596.54 | -13,256.06 | 21.10 | 13,255.83 | 95.00 | 182.62 | 3.57 |
| | 26,015.00 | 87.43 | 180.82 | 12,600.43 | -13,350.95 | 18.79 | 13,350.70 | 95.00 | 181.39 | 1.29 |
| | 26,110.00 | 88.48 | 179.41 | 12,603.82 | -13,445.89 | 18.60 | 13,445.63 | 95.00 | 180.11 | 1.85 |
| | 26,205.00 | 89.05 | 178.80 | 12,605.87 | -13,540.85 | 20.09 | 13,540.61 | 95.00 | 179.10 | 0.88 |
| | 26,300.00 | 90.33 | 179.50 | 12,606.39 | -13,635.84 | 21.50 | 13,635.60 | 95.00 | 179.15 | 1.54 |
| | 26,395.00 | 90.59 | 179.41 | 12,605.62 | -13,730.83 | 22.40 | 13,730.60 | 95.00 | 179.46 | 0.29 |
| | 26,489.00 | 91.25 | 179.85 | 12,604.11 | -13,824.82 | 23.01 | 13,824.58 | 94.00 | 179.63 | 0.84 |
| | 26,584.00 | 91.91 | 180.29 | 12,601.49 | -13,919.78 | 22.89 | 13,919.54 | 95.00 | 180.07 | 0.83 |
| | 26,679.00 | 88.44 | 179.24 | 12,601.20 | -14,014.76 | 23.28 | 14,014.53 | 95.00 | 179.76 | 3.82 |
| | 26,774.00 | 90.37 | 179.85 | 12,602.19 | -14,109.75 | 24.03 | 14,109.52 | 95.00 | 179.55 | 2.13 |
| | 26,869.00 | 86.73 | 178.27 | 12,604.59 | -14,204.69 | 25.59 | 14,204.46 | 95.00 | 179.06 | 4.18 |
| | 26,963.00 | 88.79 | 178.01 | 12,608.27 | -14,298.56 | 28.64 | 14,298.36 | 94.00 | 178.14 | 2.21 |
| | 27,058.00 | 87.74 | 177.48 | 12,611.14 | -14,393.44 | 32.37 | 14,393.27 | 95.00 | 177.75 | 1.24 |
| | 27,154.00 | 89.36 | 177.31 | 12,613.57 | -14,489.31 | 36.74 | 14,489.16 | 96.00 | 177.39 | 1.70 |
| | 27,249.00 | 89.93 | 177.22 | 12,614.16 | -14,584.20 | 41.27 | 14,584.08 | 95.00 | 177.26 | 0.61 |



Wellbenders

End Of Well Report

Company:

Project:

Site:

Well:

Wellbore:

Design:

Devon Energy

Lea Co., NM (Nad83 - East Zone)

Thistle Unit

#108H

OH

OH

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Database:

Well #108H

RKB=30' @ 3754.00ustf (Cactus 108)

RKB=30' @ 3754.00ustf (Cactus 108)

Grid

Minimum Curvature

WBDS_SQL_2

| MD (ustf) | Inc (°) | Azi (azimuth) (°) | TVD (ustf) | N/S (ustf) | E/W (ustf) | V. Sec (ustf) | CL (ustf) | CL Azi (°) | DLeg (°/100ft) |
|--|---------|-------------------|------------|------------|------------|---------------|-----------|------------|----------------|
| 27,344.00 | 89.63 | 177.04 | 12,614.53 | -14,679.08 | 46.03 | 14,679.00 | 95.00 | 177.13 | 0.37 |
| 27,439.00 | 91.03 | 177.31 | 12,613.98 | -14,773.96 | 50.71 | 14,773.91 | 95.00 | 177.17 | 1.50 |
| 27,533.00 | 91.08 | 177.92 | 12,612.25 | -14,867.86 | 54.62 | 14,867.84 | 94.00 | 177.61 | 0.65 |
| 27,628.00 | 90.99 | 177.48 | 12,610.53 | -14,962.77 | 58.43 | 14,962.78 | 95.00 | 177.70 | 0.47 |
| 27,723.00 | 91.47 | 177.92 | 12,608.49 | -15,057.67 | 62.24 | 15,057.70 | 95.00 | 177.70 | 0.69 |
| 27,818.00 | 89.71 | 175.81 | 12,607.52 | -15,152.51 | 67.44 | 15,152.58 | 95.00 | 176.86 | 2.89 |
| 27,913.00 | 90.51 | 175.81 | 12,607.33 | -15,247.26 | 74.38 | 15,247.38 | 95.00 | 175.81 | 0.84 |
| 27,980.35 | 88.16 | 174.35 | 12,608.12 | -15,314.35 | 80.15 | 15,314.51 | 67.35 | 175.08 | 4.11 |
| LTP @ 27980.35' MD 100' FSL/773.62' FEL SEC 33 | | | | | | | | | |
| 27,986.00 | 87.96 | 174.23 | 12,608.31 | -15,319.97 | 80.71 | 15,320.14 | 5.65 | 174.29 | 4.11 |
| 28,045.00 | 87.96 | 174.23 | 12,610.41 | -15,378.63 | 86.64 | 15,378.84 | 59.00 | 174.23 | 0.00 |
| BHL @ 28045' MD 35.70' FSL/768.22' FEL SEC 33 | | | | | | | | | |

Design Annotations

| Measured Depth (ustf) | Vertical Depth (ustf) | Local Coordinates +N/-S (ustf) | +E/-W (ustf) | Comment |
|-----------------------|-----------------------|--------------------------------|--------------|---|
| 11,900.00 | 11,886.33 | 374.11 | -77.14 | KOP @ 11900.00' MD 61.55' FNL/808.15' FEL SEC 21 |
| 12,174.82 | 12,156.76 | 335.73 | -75.83 | FTP @ 12174.82' MD 100' FNL/806.90' FEL SEC 21 |
| 12,479.00 | 12,401.31 | 167.71 | -55.53 | 60° INC @ 12479.00' MD 268.20' FNL/788.75' FEL SEC 21 |
| 17,503.85 | 12,550.41 | -4,846.25 | 17.74 | SEC XING @ 17503.85' MD 0' FNL/754.65' FEL SEC 28 |
| 22,784.31 | 12,608.52 | -10,123.79 | 26.57 | SEC XING @ 22784.31' MD 0' FNL/786.10' FEL SEC 33 |
| 27,980.35 | 12,608.12 | -15,314.35 | 80.15 | LTP @ 27980.35' MD 100' FSL/773.62' FEL SEC 33 |
| 28,045.00 | 12,610.41 | -15,378.63 | 86.64 | BHL @ 28045' MD 35.70' FSL/768.22' FEL SEC 33 |

Checked By:

Approved By:

Date:



I **Larry Wright**, certify that I am employed by **Wellbenders Directional Services**. That I did on the day(s) of **02/14/20** thru **04/20/20** conduct or supervise the taking of a **MWD Survey** from a depth of **174'** to a depth of **28045'**; that the data is true, correct, complete and within the limitations of the tool as set forth by **Wellbenders Directional Services**; that I am authorized and qualified to make this report; that this survey was conducted at the request of **Devon Energy** for the **Thistle Unit #108H** API No. **30-025-43727** in **Lea County, New Mexico**; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by **Wellbenders Directional Services**.

Larry Wright