

# Matador Resources

Eddy County, NM (NAD27 NME

Black River SWD #1

Black River SWD #1

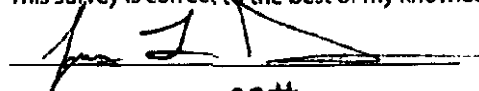
OH

Design: OH

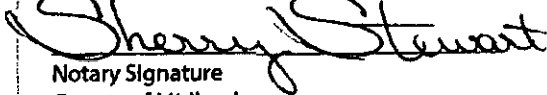
## Regulatory Report (Grid North)

28 November, 2016

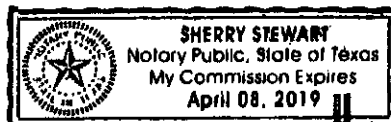
This survey is correct to the best of my knowledge and is supported by actual field data.



Notarized this date 28<sup>th</sup> of November, 2016.



Notary Signature  
County of Midland  
State of Texas



Scientific Drilling

## Regulatory Report (Grid North)



|                  |                             |                                     |                         |
|------------------|-----------------------------|-------------------------------------|-------------------------|
| <b>Company:</b>  | Matador Resources           | <b>Local Co-ordinate Reference:</b> | Well Black River SWD #1 |
| <b>Project:</b>  | Eddy County, NM (NAD27 NME) | <b>TVD Reference:</b>               | KB= 28' @ 3154.00usft   |
| <b>Site:</b>     | Black River SWD #1          | <b>MD Reference:</b>                | KB= 28' @ 3154.00usft   |
| <b>Well:</b>     | Black River SWD #1          | <b>North Reference:</b>             | Grid                    |
| <b>Wellbore:</b> | OH                          | <b>Survey Calculation Method:</b>   | (Minimum Curvature      |
| <b>Design:</b>   | OH                          | <b>Database:</b>                    | Midland District        |

|                    |                                      |                      |                |
|--------------------|--------------------------------------|----------------------|----------------|
| <b>Project</b>     | Eddy County, NM (NAD27 NME)          |                      |                |
| <b>Map System:</b> | US State Plane 1927 (Exact solution) | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | NAD 1927 (NADCON CONUS)              |                      |                |
| <b>Map Zone:</b>   | New Mexico East 3001                 |                      |                |

|                              |                    |                     |                 |                          |                  |
|------------------------------|--------------------|---------------------|-----------------|--------------------------|------------------|
| <b>Site</b>                  | Black River SWD #1 |                     |                 |                          |                  |
| <b>Site Position:</b>        |                    | <b>Northing:</b>    | 461,279.00 usft | <b>Latitude:</b>         | 32° 16' 4.815 N  |
| <b>From:</b>                 | Map                | <b>Easting:</b>     | 563,809.00 usft | <b>Longitude:</b>        | 104° 7' 36.810 W |
| <b>Position Uncertainty:</b> | 0.00 usft          | <b>Slot Radius:</b> | 13-3/16"        | <b>Grid Convergence:</b> | 0.11 "           |

|                             |                    |           |                            |                 |                      |                  |
|-----------------------------|--------------------|-----------|----------------------------|-----------------|----------------------|------------------|
| <b>Well</b>                 | Black River SWD #1 |           |                            |                 |                      |                  |
| <b>Well Position</b>        | +N-S               | 0.00 usft | <b>Northing:</b>           | 461,279.00 usft | <b>Latitude:</b>     | 32° 16' 4.815 N  |
|                             | +E-W               | 0.00 usft | <b>Easting:</b>            | 563,809.00 usft | <b>Longitude:</b>    | 104° 7' 36.810 W |
| <b>Position Uncertainty</b> |                    | 0.00 usft | <b>Wellhead Elevation:</b> | 0.00 usft       | <b>Ground Level:</b> | 3,126.00 usft    |

|                  |                   |                    |                            |                          |                                |
|------------------|-------------------|--------------------|----------------------------|--------------------------|--------------------------------|
| <b>Wellbore</b>  | OH                |                    |                            |                          |                                |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination<br/>(°)</b> | <b>Dip Angle<br/>(°)</b> | <b>Field Strength<br/>(nT)</b> |
|                  | HDGM              | 9/15/2016          | 7.43                       | 60.10                    | 48,189                         |

|                          |                                    |                        |                        |                                |      |
|--------------------------|------------------------------------|------------------------|------------------------|--------------------------------|------|
| <b>Design</b>            | OH                                 |                        |                        |                                |      |
| <b>Audit Notes:</b>      |                                    |                        |                        |                                |      |
| <b>Version:</b>          | 1.0                                | <b>Phase:</b>          | ACTUAL                 | <b>Tie On Depth:</b>           | 0.00 |
| <b>Vertical Section:</b> | <b>Depth From (TVD)<br/>(usft)</b> | <b>+N-S<br/>(usft)</b> | <b>+E-W<br/>(usft)</b> | <b>Direction<br/>(bearing)</b> |      |
|                          | 0.00                               | 0.00                   | 0.00                   | 192.07                         |      |

|                        |                      |                          |                    |
|------------------------|----------------------|--------------------------|--------------------|
| <b>Survey Program</b>  | Date 11/28/2016      |                          |                    |
| <b>From<br/>(usft)</b> | <b>To<br/>(usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b>   |
| 9,836.00               | 14,734.00            | SDH MWD (OH)             | MWD+HDGM           |
|                        |                      |                          | <b>Description</b> |
|                        |                      |                          | OWSG MWD + HDGM    |

| <b>MD<br/>(usft)</b> | <b>Inc<br/>(°)</b> | <b>Azi (azimuth)<br/>(bearing)</b> | <b>TVD<br/>(usft)</b> | <b>N/S<br/>(usft)</b> | <b>E/W<br/>(usft)</b> | <b>Closure Azimuth<br/>(bearing)</b> | <b>Closure Distance<br/>(usft)</b> |
|----------------------|--------------------|------------------------------------|-----------------------|-----------------------|-----------------------|--------------------------------------|------------------------------------|
| 9,734.00             | 2.10               | 244.50                             | 9,730.45              | -92.26                | -37.08                | 201.90                               | 99.43                              |
| 9,836.00             | 1.51               | 232.67                             | 9,832.40              | -93.88                | -39.84                | 203.00                               | 101.98                             |
| 9,917.00             | 1.25               | 233.42                             | 9,913.38              | -95.05                | -41.40                | 203.54                               | 103.67                             |
| 9,930.00             | 1.40               | 227.66                             | 9,926.37              | -95.24                | -41.83                | 203.61                               | 103.94                             |
| 10,031.00            | 1.18               | 222.75                             | 10,027.35             | -96.83                | -43.25                | 204.07                               | 106.05                             |
| 10,126.00            | 1.28               | 226.05                             | 10,122.32             | -98.26                | -44.70                | 204.46                               | 107.95                             |
| 10,221.00            | 1.32               | 236.16                             | 10,217.30             | -99.58                | -46.40                | 204.98                               | 109.86                             |
| 10,316.00            | 1.18               | 226.56                             | 10,312.28             | -100.86               | -48.02                | 205.46                               | 111.71                             |
| 10,412.00            | 1.05               | 224.73                             | 10,408.26             | -102.18               | -49.36                | 205.78                               | 113.46                             |
| 10,507.00            | 0.96               | 212.53                             | 10,503.25             | -103.45               | -50.40                | 205.97                               | 115.08                             |
| 10,602.00            | 0.72               | 184.08                             | 10,598.24             | -104.72               | -50.87                | 205.91                               | 116.42                             |
| 10,698.00            | 0.24               | 180.99                             | 10,694.23             | -105.51               | -50.84                | 205.73                               | 117.12                             |

## Regulatory Report (Grid North)



Company: Matador Resources  
 Project: Eddy County, NM (NAD27 NME)  
 Site: Black River SWD #1  
 Well: Black River SWD #1  
 Wellbore: OH  
 Design: OH

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

Well Black River SWD #1  
 KB= 26' @ 3154.00usft  
 KB= 26' @ 3154.00usft  
 Grid  
 Minimum Curvature  
 Midland District

| Survey                                 |            |                            |               |               |               |                              |                            |  |
|----------------------------------------|------------|----------------------------|---------------|---------------|---------------|------------------------------|----------------------------|--|
| MD<br>(usft)                           | Inc<br>(°) | Azi (azimuth)<br>(bearing) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | Closure Azimuth<br>(bearing) | Closure Distance<br>(usft) |  |
| 10,793.00                              | 0.85       | 153.57                     | 10,789.23     | -108.18       | -50.54        | 205.45                       | 117.80                     |  |
| 10,888.00                              | 0.43       | 103.15                     | 10,884.22     | -108.75       | -49.95        | 205.08                       | 117.86                     |  |
| 10,984.00                              | 0.89       | 116.75                     | 10,980.22     | -107.16       | -48.94        | 204.54                       | 117.81                     |  |
| 11,079.00                              | 0.98       | 111.94                     | 11,075.21     | -107.80       | -47.52        | 203.79                       | 117.81                     |  |
| 11,174.00                              | 1.34       | 121.84                     | 11,170.19     | -108.69       | -45.82        | 202.86                       | 117.95                     |  |
| 11,268.00                              | 1.41       | 117.10                     | 11,264.16     | -109.79       | -43.68        | 201.78                       | 118.23                     |  |
| 11,365.00                              | 1.55       | 130.87                     | 11,361.13     | -111.19       | -41.80        | 200.80                       | 118.79                     |  |
| 11,460.00                              | 1.18       | 121.82                     | 11,456.10     | -112.54       | -40.00        | 199.56                       | 119.44                     |  |
| 11,555.00                              | 1.19       | 138.25                     | 11,551.08     | -113.77       | -38.48        | 198.69                       | 120.10                     |  |
| 11,651.00                              | 1.80       | 122.60                     | 11,647.05     | -115.21       | -38.66        | 197.65                       | 120.90                     |  |
| 11,733.00                              | 1.67       | 110.22                     | 11,729.02     | -116.24       | -34.58        | 196.57                       | 121.28                     |  |
| 11,828.00                              | 1.81       | 108.54                     | 11,823.98     | -117.10       | -32.00        | 195.28                       | 121.39                     |  |
| 11,937.00                              | 1.55       | 107.18                     | 11,932.94     | -117.97       | -29.12        | 193.87                       | 121.51                     |  |
| 12,032.00                              | 1.48       | 107.86                     | 12,027.80     | -118.73       | -26.73        | 192.69                       | 121.70                     |  |
| 12,128.00                              | 1.84       | 103.38                     | 12,121.87     | -119.41       | -24.26        | 191.49                       | 121.85                     |  |
| 12,221.00                              | 1.46       | 112.88                     | 12,218.84     | -120.20       | -21.83        | 190.29                       | 122.16                     |  |
| 12,311.00                              | 1.55       | 98.91                      | 12,308.80     | -120.83       | -19.57        | 189.20                       | 122.40                     |  |
| 12,408.00                              | 1.72       | 94.89                      | 12,401.77     | -121.15       | -18.88        | 187.93                       | 122.32                     |  |
| 12,502.00                              | 1.38       | 88.12                      | 12,497.73     | -120.84       | -14.37        | 186.78                       | 121.89                     |  |
| 12,597.00                              | 1.90       | 78.83                      | 12,592.69     | -120.06       | -11.77        | 185.80                       | 120.83                     |  |
| 12,693.00                              | 2.05       | 83.69                      | 12,688.84     | -119.50       | -8.52         | 184.08                       | 119.81                     |  |
| 12,788.00                              | 2.21       | 103.41                     | 12,783.57     | -119.74       | -5.05         | 182.41                       | 119.84                     |  |
| 12,883.00                              | 2.26       | 107.78                     | 12,878.50     | -120.73       | -1.48         | 180.70                       | 120.74                     |  |
| 12,978.00                              | 2.35       | 109.28                     | 12,973.42     | -121.95       | 2.14          | 178.99                       | 121.97                     |  |
| 13,074.00                              | 2.20       | 109.70                     | 13,069.35     | -123.22       | 5.73          | 177.34                       | 123.35                     |  |
| 13,169.00                              | 2.30       | 124.27                     | 13,164.27     | -124.91       | 9.02          | 175.87                       | 125.23                     |  |
| 13,250.00                              | 1.73       | 121.08                     | 13,245.22     | -128.46       | 11.41         | 174.84                       | 128.87                     |  |
| 13,346.00                              | 1.81       | 137.09                     | 13,341.18     | -128.19       | 13.57         | 173.98                       | 128.91                     |  |
| 13,441.00                              | 1.51       | 159.44                     | 13,436.15     | -130.34       | 14.92         | 173.47                       | 131.19                     |  |
| 13,536.00                              | 2.24       | 173.33                     | 13,531.10     | -133.36       | 15.58         | 173.34                       | 134.28                     |  |
| 13,645.00                              | 3.01       | 183.98                     | 13,639.98     | -138.33       | 15.83         | 173.55                       | 139.21                     |  |
| 13,737.00                              | 4.52       | 207.33                     | 13,731.79     | -143.98       | 13.80         | 174.53                       | 144.62                     |  |
| 13,828.00                              | 5.18       | 212.08                     | 13,822.48     | -150.81       | 9.98          | 176.21                       | 150.94                     |  |
| 13,922.00                              | 8.07       | 208.51                     | 13,915.83     | -159.99       | 4.58          | 178.38                       | 180.08                     |  |
| 13,985.00                              | 10.30      | 204.62                     | 13,978.02     | -169.00       | 0.12          | 179.98                       | 169.00                     |  |
| 14,079.00                              | 13.28      | 201.06                     | 14,070.02     | -188.72       | -7.29         | 182.23                       | 186.88                     |  |
| 14,174.00                              | 17.05      | 199.54                     | 14,161.70     | -210.03       | -15.84        | 184.31                       | 210.83                     |  |
| 14,268.00                              | 19.79      | 199.49                     | 14,250.88     | -238.03       | -25.76        | 186.18                       | 239.42                     |  |
| 14,362.00                              | 20.91      | 199.50                     | 14,339.01     | -268.84       | -38.67        | 187.77                       | 271.33                     |  |
| 14,457.00                              | 23.08      | 198.16                     | 14,427.09     | -302.52       | -48.13        | 189.04                       | 306.33                     |  |
| 14,551.00                              | 25.70      | 200.31                     | 14,512.89     | -339.15       | -80.95        | 190.19                       | 344.58                     |  |
| 14,645.00                              | 28.70      | 199.44                     | 14,608.29     | -379.68       | -75.64        | 191.26                       | 387.00                     |  |
| Final MWD Survey (14645.00' MD)        |            |                            |               |               |               |                              |                            |  |
| 14,734.00                              | 28.70      | 199.44                     | 14,674.35     | -419.86       | -89.77        | 192.07                       | 429.35                     |  |
| Final Projection to Bit (14734.00' MD) |            |                            |               |               |               |                              |                            |  |

## Regulatory Report (Grid North)



|           |                             |                              |                         |
|-----------|-----------------------------|------------------------------|-------------------------|
| Company:  | Matador Resources           | Local Co-ordinate Reference: | Well Black River SWD #1 |
| Project:  | Eddy County, NM (NAD27 NME) | TVD Reference:               | KB= 26' @ 3154.00usft   |
| Site:     | Black River SWD #1          | MD Reference:                | KB= 26' @ 3154.00usft   |
| Well:     | Black River SWD #1          | North Reference:             | Grid                    |
| Wellbore: | OH                          | Survey Calculation Method:   | Minimum Curvature       |
| Design:   | OH                          | Database:                    | Midland District        |

## Survey:

| MD<br>(usft) | Inc<br>(") | Azi (azimuth)<br>(bearing) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | Closure Azimuth<br>(bearing) | Closure Distance<br>(usft) |
|--------------|------------|----------------------------|---------------|---------------|---------------|------------------------------|----------------------------|
|--------------|------------|----------------------------|---------------|---------------|---------------|------------------------------|----------------------------|

## Design Annotations:

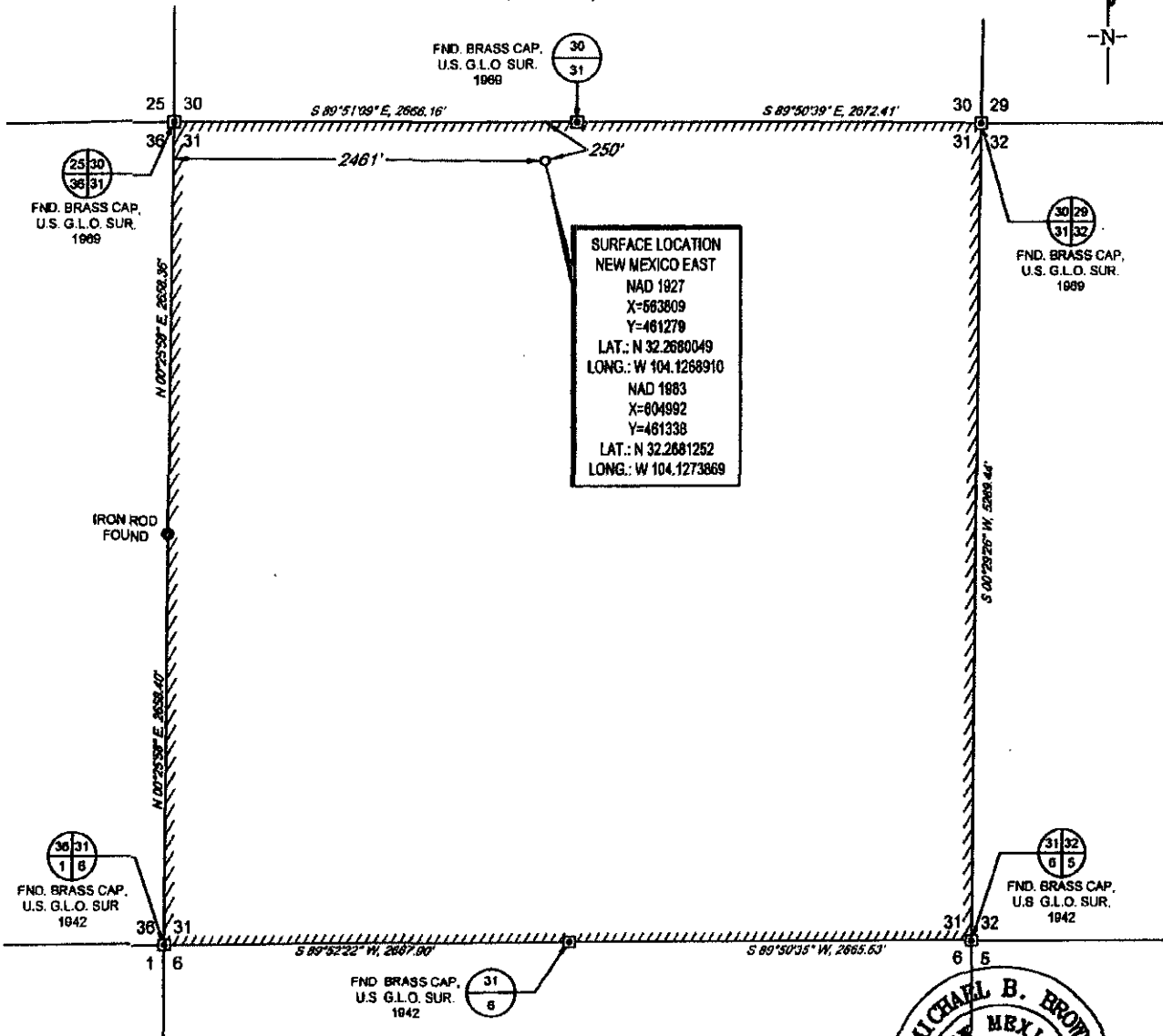
| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates |                | Comment                                |
|-----------------------------|-----------------------------|-------------------|----------------|----------------------------------------|
|                             |                             | +N-S<br>(usft)    | +E-W<br>(usft) |                                        |
| 14,645.00                   | 14,598.29                   | -379.56           | -75.54         | Final MWD Survey (14645.00' MD)        |
| 14,734.00                   | 14,674.35                   | -419.88           | -89.77         | Final Projection to Bit (14734.00' MD) |

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

SCALE: 1" = 1000'  
0' 500' 1000'



SECTION 31, TOWNSHIP 23-S, RANGE 28-E, N.M.P.M.  
EDDY COUNTY, NEW MEXICO



SURFACE LOCATION  
NEW MEXICO EAST  
NAD 1927  
X=563809  
Y=461279  
LAT.: N 32.2680049  
LONG.: W 104.1268910  
NAD 1983  
X=804992  
Y=461338  
LAT.: N 32.2681252  
LONG.: W 104.1273869

LEASE NAME & WELL NO.: BLACK RIVER SWD #1

SECTION 31 TWP 23-S RGE 28-E SURVEY N.M.P.M.

COUNTY EDDY STATE NM

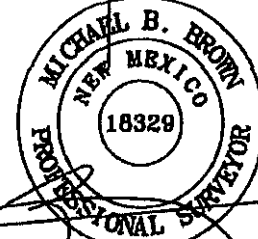
DESCRIPTION 250' FNL & 2461' FWL

DISTANCE & DIRECTION

FROM INT. OF US-285 & JAYDERS RD. GO SOUTH ON US-285  
±0.8 MILE, THENCE WEST (RIGHT) ON HIGBY HOLE RD. ±0.4  
MILES, THENCE WEST (RIGHT) ON BOUNDS RD. ±1.8 MILES, TO  
A POINT ±1121 FEET SOUTH OF THE LOCATION.

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID  
BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE OF THE  
NORTH AMERICAN DATUM 1927, U.S. SURVEY FEET

THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND  
UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF  
SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. THIS CERTIFICATION IS MADE  
AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS  
NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.



Michael Blake Brown, P.S. No. 18329

JUNE 10, 2016



**TOPOGRAPHIC**  
LOYALTY INNOVATION LEGACY

1400 EVERMAN PARKWAY, 6th. 197 - FT. WORTH, TEXAS 76116  
TELEPHONE: (817) 744-7512 - FAX (817) 744-7348  
2803 NORTH 800 SPRING - MIDLAND, TEXAS 79705  
TELEPHONE: (432) 652-1653 OR (800) 767-1653 - FAX (432) 842-1743  
WWW.TOPOGRAPHIC.COM

30-15-43807

| WELL: Black River SWD #1                                                                                                                                                                                                                                                                                                                          |                             | PROSPECT: Devonian SWD                              |                             | AFE No:                |      |                                                                                        |                                                                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------|-----------------------------|------------------------|------|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|--|
| GL ELEV : 3125'<br>RKB ELEV :+KB                                                                                                                                                                                                                                                                                                                  |                             | SURFACE LOCATION: N 32.2681252 W 104.1273869        |                             | BOTTOM HOLE LOCATION : |      |                                                                                        |                                                                                                                                     |  |
| Formation Tops (TVD)                                                                                                                                                                                                                                                                                                                              | Mud Weight                  | Logs                                                | CASING<br>DIAGRAM           | Depth                  | Hole | Casing & Cement Details<br>30" Conductor @ ± 120'                                      | BHA Details                                                                                                                         |  |
| Rustler Anhydrite @ xx'                                                                                                                                                                                                                                                                                                                           | 8.4-8.5 PPG<br>FW           |                                                     |                             | 598'                   | 26"  | Surf. Csg Cmt: Lead: Circulate to surface<br>Tail: 20% critical<br>20", 84#, K-55, BTC |                                                                                                                                     |  |
| Top of Salt<br>Lamar @ 555'<br>@ 2400'                                                                                                                                                                                                                                                                                                            | 10.0 PPG<br>saturated brine | • Inc / Azi measurement                             |                             |                        |      | 17 1/2"                                                                                | 1 <sup>st</sup> Int. Csg Cmt:<br>Lead: Circulate to surface<br>Tail: 20% critical<br>13 3/8", 68#, K55, BTC                         |  |
| Bell Canyon @ 2450'<br>Cherry Canyon @ 3270'<br>Brushy Canyon @ 4465'<br>Bone Spring Lime @ 5974'<br>1 <sup>st</sup> Bone Spring Sand @ 6990'<br>2 <sup>nd</sup> Bone Spring Carb @ 7204'<br>2 <sup>nd</sup> Bone Spring Sand @ 7614'<br>3 <sup>rd</sup> Bone Spring Carb @ 7829'<br>3 <sup>rd</sup> Bone Spring Sand @ 8974'<br>Wolfcamp @ 9294' | 8.4-9.0 PPG<br>cut brine    | • Inc / Azi measurement                             |                             |                        |      | 12-1/4"                                                                                | 2 <sup>nd</sup> Int. Csg Cmt:<br>Lead: Circulate to surface<br>Tail: 20% critical<br>9 5/8", 53.5#, P110HC Alternative Drift<br>BTC |  |
| Blair Shale @ 10431'<br>Wolfcamp D @ 10814'<br>Strawn @ 11279'<br>Atoka @ 11528'<br>Morrow @ 12104'<br>Barnett @ 12883'<br>Miss Lime @ 13241'<br>Woodford Shale @ 13584'<br>Devonian Carb @ 13694'                                                                                                                                                | 10-12 PPG<br>mud            | • Inc / Azi measurement<br>•Open hole Wireline logs |                             |                        |      | 8-1/2"                                                                                 | Prod Csg Cmt:<br>Top of Lead: 7408' (verified with CBL)<br>Top of Tail: 20% critical<br>7", 32#, P110HC, Alternative Drift BTC      |  |
| Devonian Dolomite @ 13844'<br>Montoya @ 14704'                                                                                                                                                                                                                                                                                                    | 8.4-8.5 PPG<br>FW           | • Inc / Azi measurement<br>•Open hole Wireline logs |                             |                        |      | 6"                                                                                     | Tubing:<br>4 1/2" P110 IC 13.5 #, Fiberglass<br>Lined BTC to 13,740'<br><br>Packer set @ 13,740'                                    |  |
|                                                                                                                                                                                                                                                                                                                                                   |                             |                                                     | TD @ 14,734' MD 14,675' TVD |                        |      |                                                                                        |                                                                                                                                     |  |
| Prepared By: AL - 10/26/16                                                                                                                                                                                                                                                                                                                        |                             |                                                     |                             |                        |      |                                                                                        |                                                                                                                                     |  |