

Reservoir Development  
Drilling & Measurements (Anadrill)  
4301 SW 44th St  
Oklahoma City, Oklahoma 73119 USA  
Phone: (405) 682-2284  
Fax: (405) 682-3937

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March 17, 2015

Cimarex  
600 N MARIENFELD STREET SUITE 600  
  
MIDLAND, TX 79701

Re:

Sec 36, T26S, R26E Eddy NM  
N 32.00143 W 104.25394

CLIENT: Cimarex Energy Co.  
WELL: Robinson 36 State 1H  
FIELD: Bone Spring  
RIG: NorAm 23  
COUNTY: Eddy  
API NO: 30-015-42919  
JOB NO: 15MLD1723

Enclosed, please find the original copy of the survey performed on the referenced well by PathFinder, a division of Schlumberger Technology Corporation.  
Other information required by your office is as follows.

| <u>Name &amp; Title of<br/>Surveyor</u> | <u>Drainhole Number</u>               | <u>Surveyed Depths</u>       | <u>Dates Performed</u>             | <u>Type of Survey</u> |
|-----------------------------------------|---------------------------------------|------------------------------|------------------------------------|-----------------------|
| Riley Swanston<br>MWD                   | Robinson 36 State 1H<br>Original Hole | 6740.00 Ft to<br>11932.00 Ft | March 5, 2015 to<br>March 11, 2015 | SlimPulse             |

If any other information is required, please contact the undersigned at the above letterhead and phone number.  
Sincerely,

Joseph Hogan  
Field Service Manager

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**Reservoir Development**

Drilling & Measurements (Anadrill)

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**PATHFINDER**  
A Schlumberger Company

**Well Reference:**

Sec 36, T26S, R26E Eddy NM

N 32.00143 W 104.25394

I, Riley Swanston certify that; I am employed by PathFinder, a division of Schlumberger Technology Corporation; that I did on the day(s) of March 05, 2015 through March 11, 2015, conduct or supervise the taking of the SlimPulse surveys from a depth of 6740.00 feet to a depth of 11932.00 feet referenced to driller's depth; that the data is true, correct, complete and within the limitations of the tool as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I am authorized and qualified to make this report; that this survey was conducted at the request of Cimarex Energy Co. for the Robinson 36 State 1H Well (Original Hole) API No. 30-015-42919 and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation.

By  
Riley Swanston  
MWD



Subscribed and Sworn to before me this 17th day of March (month) 2015 (yr)

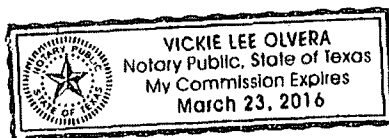
My Commission expires:

March 23, 2016  
Vickie L. Olvera

(signature)

Notary Public

Midland County State of Texas  
(County State)



SCHLUMBERGER  
Survey Report

17-Mar-2015

Client.....: Cimarex Energy Co.  
Field.....: Bone Spring

Well.....: Robinson 36 State 1H  
API number.....: 30-015-42919  
Engineer.....: R. Swanston

Spud date.....: 25-Feb-15  
Last survey date.....: 11-Mar-15  
Total accepted surveys...: 72  
MD of first survey.....: 6740.00 ft  
MD of last survey.....: 11932.00 ft

County.....: Eddy  
State.....: New Mexico  
Rig.....: NorAm 23

Latitude.....: 32° 0' 5.155" N  
Longitude.....: 104° 15' 14.183" W

----- Survey calculation methods-----

Method for positions...: Minimum curvature  
Method for DLS.....: Lubinski

----- Depth reference -----

Permanent datum.....: MSL  
Depth reference.....: Driller's Depth  
GL above permanent.....: 3324.00  
KB above permanent.....: 3352.00  
DF above permanent.....: 3352.00

----- Vertical section origin-----

Latitude (+N/-).....: 0.00 ft  
Departure (+E/-).....: 0.00 ft

----- Grid Coordinates -----

NAD27 Texas State Plane, Central Zone, US Feet  
X.....: 565948.20 ft  
Y.....: 364269.50 ft

Azimuth from Vsect Origin to target: 90.00 degrees

-----MWD Survey Reference Criteria-----

-----Run1----- Calculation Date: 5-Mar-2015  
Location G....: 998.32163 mgn Tolerance G....: 2.50 mgn  
Location B....: 48146.54 nT Tolerance B....: 300.00 nT  
Magnetic Dip: 59.702 degrees Tolerance Dip: 0.45 degrees

-----Run2----- Calculation Date: 6-Mar-2015  
Location G....: 998.32163 mgn Tolerance G....: 2.50 mgn  
Location B....: 48146.54 nT Tolerance B....: 300.00 nT  
Magnetic Dip: 59.7 degrees Tolerance Dip: 0.45 degrees

-----Run3----- Calculation Date: 8-Mar-2015  
Location G....: 998.32163 mgn Tolerance G....: 2.50 mgn  
Location B....: 48146.54 nT Tolerance B....: 300.00 nT  
Magnetic Dip: 59.7 degrees Tolerance Dip: 0.45 degrees

BGGM Model: 2014

-----Run1-----  
Magnetic dec (+E/-).....: 7.658 degrees  
Grid Conv (+E/-).....: 0.038 degrees  
Total Azim Corr (+E/-).....: 7.62 degrees

-----Run2-----  
Magnetic dec (+E/-).....: 7.658 degrees  
Grid Conv (+E/-).....: 0.038 degrees  
Total Azim Corr (+E/-).....: 7.62 degrees

-----Run3-----  
Magnetic dec (+E/-).....: 7.658 degrees  
Grid Conv (+E/-).....: 0.038 degrees  
Total Azim Corr (+E/-).....: 7.62 degrees

-----Survey Correction Index Description-----

0 = Uncorrected 1 = Sag Corrected  
2 = DMAG Corrected 3 = Sag + DMAG Corrected

===== Survey List =====  
Seq MD Incl Azim Course TVD V Sec N/-S E/-W Closure at Azi DLS Tool Correction

|    | (ft)    | (deg) | (deg)  | (ft)    | (ft)    | (ft)    | (ft)   | (ft)    | (ft)   | (ft)   | (deg) | (deg/100ft) |           |   |
|----|---------|-------|--------|---------|---------|---------|--------|---------|--------|--------|-------|-------------|-----------|---|
| 1  | 0.00    | 0.00  | 0.00   | -999.25 | 0.00    | 0.00    | 0.00   | 0.00    | 0      | 90.00  | 0.00  |             | TIP       | 0 |
| 2  | 201.00  | 1.10  | 297.21 | 201.00  | 200.99  | -1.72   | 0.88   | -1.72   | 1.93   | 297.21 | 0.55  |             | Other     | 0 |
| 3  | 260.00  | 1.10  | 285.39 | 59.00   | 259.98  | -2.77   | 1.29   | -2.77   | 3.05   | 295.03 | 0.38  |             | Other     | 0 |
| 4  | 348.00  | 1.32  | 297.61 | 88.00   | 347.96  | -4.48   | 1.99   | -4.48   | 4.9    | 293.91 | 0.38  |             | Other     | 0 |
| 5  | 437.00  | 1.71  | 301.43 | 89.00   | 436.93  | -6.52   | 3.15   | -6.52   | 7.24   | 295.81 | 0.45  |             | Other     | 0 |
| 6  | 534.00  | 1.40  | 297.61 | 97.00   | 533.89  | -8.80   | 4.46   | -8.80   | 9.87   | 296.85 | 0.34  |             | Other     | 0 |
| 7  | 656.00  | 1.60  | 292.60 | 122.00  | 655.85  | -11.70  | 5.80   | -11.70  | 13.06  | 296.38 | 0.20  |             | Other     | 0 |
| 8  | 706.00  | 1.71  | 297.43 | 50.00   | 705.83  | -13.00  | 6.41   | -13.00  | 14.5   | 296.25 | 0.36  |             | Other     | 0 |
| 9  | 799.00  | 1.71  | 289.43 | 93.00   | 798.79  | -15.54  | 7.51   | -15.54  | 17.27  | 295.80 | 0.26  |             | Other     | 0 |
| 10 | 894.00  | 2.02  | 290.40 | 95.00   | 893.74  | -18.45  | 8.57   | -18.45  | 20.34  | 294.91 | 0.33  |             | Other     | 0 |
| 11 | 988.00  | 2.02  | 281.52 | 94.00   | 987.68  | -21.63  | 9.48   | -21.63  | 23.61  | 293.67 | 0.33  |             | Other     | 0 |
| 12 | 1082.00 | 2.11  | 284.51 | 94.00   | 1081.62 | -24.92  | 10.24  | -24.93  | 26.95  | 292.34 | 0.15  |             | Other     | 0 |
| 13 | 1176.00 | 2.02  | 286.40 | 94.00   | 1175.56 | -28.19  | 11.14  | -28.19  | 30.31  | 291.57 | 0.12  |             | Other     | 0 |
| 14 | 1271.00 | 1.80  | 280.91 | 95.00   | 1270.50 | -31.26  | 11.90  | -31.26  | 33.45  | 290.84 | 0.30  |             | Other     | 0 |
| 15 | 1366.00 | 1.71  | 282.93 | 95.00   | 1365.46 | -34.11  | 12.50  | -34.11  | 36.33  | 290.13 | 0.11  |             | Other     | 0 |
| 16 | 1458.00 | 1.71  | 283.32 | 92.00   | 1457.42 | -36.78  | 13.12  | -36.78  | 39.05  | 289.63 | 0.01  |             | Other     | 0 |
| 17 | 1552.00 | 1.41  | 281.61 | 94.00   | 1551.38 | -39.28  | 13.68  | -39.28  | 41.59  | 289.20 | 0.32  |             | Other     | 0 |
| 18 | 1647.00 | 1.32  | 276.20 | 95.00   | 1646.36 | -41.51  | 14.03  | -41.51  | 43.82  | 288.68 | 0.17  |             | Other     | 0 |
| 19 | 1741.00 | 1.32  | 276.03 | 94.00   | 1740.33 | -43.66  | 14.26  | -43.66  | 45.93  | 288.09 | 0.00  |             | Other     | 0 |
| 20 | 1839.00 | 1.41  | 279.50 | 98.00   | 1838.30 | -45.98  | 14.58  | -45.98  | 48.23  | 287.59 | 0.12  |             | Other     | 0 |
| 21 | 2016.00 | 1.71  | 293.69 | 177.00  | 2015.24 | -50.54  | 16.00  | -50.54  | 53.01  | 287.57 | 0.28  |             | Other     | 0 |
| 22 | 2109.00 | 1.80  | 294.00 | 93.00   | 2108.19 | -53.15  | 17.15  | -53.15  | 55.85  | 287.89 | 0.10  |             | Other     | 0 |
| 23 | 2203.00 | 1.71  | 284.99 | 94.00   | 2202.15 | -55.85  | 18.11  | -55.85  | 58.72  | 287.97 | 0.31  |             | Other     | 0 |
| 24 | 2297.00 | 1.49  | 292.99 | 94.00   | 2296.11 | -58.33  | 18.95  | -58.33  | 61.33  | 288.00 | 0.33  |             | Other     | 0 |
| 25 | 2391.00 | 1.71  | 304.50 | 94.00   | 2390.08 | -60.61  | 20.23  | -60.61  | 63.9   | 288.45 | 0.41  |             | Other     | 0 |
| 26 | 2484.00 | 1.58  | 291.72 | 93.00   | 2483.04 | -62.94  | 21.49  | -62.95  | 66.51  | 288.85 | 0.42  |             | Other     | 0 |
| 27 | 2578.00 | 1.80  | 285.52 | 94.00   | 2577.00 | -65.57  | 22.36  | -65.57  | 69.28  | 288.83 | 0.30  |             | Other     | 0 |
| 28 | 2673.00 | 1.80  | 291.89 | 95.00   | 2671.95 | -68.39  | 23.32  | -68.39  | 72.26  | 288.83 | 0.21  |             | Other     | 0 |
| 29 | 2767.00 | 1.58  | 283.02 | 94.00   | 2765.91 | -71.03  | 24.16  | -71.03  | 75.02  | 288.79 | 0.36  |             | Other     | 0 |
| 30 | 2861.00 | 1.89  | 283.63 | 94.00   | 2859.87 | -73.79  | 24.82  | -73.80  | 77.86  | 288.59 | 0.33  |             | Other     | 0 |
| 31 | 2955.00 | 1.71  | 280.99 | 94.00   | 2953.82 | -76.68  | 25.45  | -76.68  | 80.79  | 288.36 | 0.21  |             | Other     | 0 |
| 32 | 3050.00 | 2.02  | 278.40 | 95.00   | 3048.77 | -79.73  | 25.96  | -79.73  | 83.85  | 288.04 | 0.34  |             | Other     | 0 |
| 33 | 3146.00 | 2.02  | 275.02 | 96.00   | 3144.71 | -83.08  | 26.36  | -83.09  | 87.17  | 287.60 | 0.12  |             | Other     | 0 |
| 34 | 3239.00 | 1.58  | 274.31 | 93.00   | 3237.66 | -86.00  | 26.60  | -86.00  | 90.02  | 287.19 | 0.47  |             | Other     | 0 |
| 35 | 3334.00 | 1.58  | 272.29 | 95.00   | 3332.63 | -88.61  | 26.75  | -88.61  | 92.56  | 286.80 | 0.06  |             | Other     | 0 |
| 36 | 3429.00 | 1.80  | 261.53 | 95.00   | 3427.59 | -91.39  | 26.58  | -91.40  | 95.18  | 286.22 | 0.41  |             | Other     | 0 |
| 37 | 3523.00 | 1.89  | 257.92 | 94.00   | 3521.54 | -94.37  | 26.04  | -94.37  | 97.9   | 285.43 | 0.16  |             | Other     | 0 |
| 38 | 3617.00 | 1.71  | 262.23 | 94.00   | 3615.49 | -97.28  | 25.53  | -97.28  | 100.57 | 284.70 | 0.24  |             | Other     | 0 |
| 39 | 3711.00 | 2.02  | 251.51 | 94.00   | 3709.44 | -100.24 | 24.81  | -100.24 | 103.26 | 283.90 | 0.50  |             | Other     | 0 |
| 40 | 3805.00 | 1.89  | 249.53 | 94.00   | 3803.39 | -103.26 | 23.74  | -103.26 | 105.96 | 282.95 | 0.16  |             | Other     | 0 |
| 41 | 3900.00 | 1.89  | 247.60 | 95.00   | 3898.34 | -106.18 | 22.60  | -106.18 | 108.56 | 282.02 | 0.07  |             | Other     | 0 |
| 42 | 3994.00 | 1.89  | 247.60 | 94.00   | 3992.29 | -109.04 | 21.42  | -109.04 | 111.13 | 281.11 | 0.00  |             | Other     | 0 |
| 43 | 4087.00 | 1.71  | 251.02 | 93.00   | 4085.24 | -111.77 | 20.38  | -111.77 | 113.62 | 280.33 | 0.23  |             | Other     | 0 |
| 44 | 4181.00 | 1.58  | 244.83 | 94.00   | 4179.20 | -114.27 | 19.37  | -114.27 | 115.9  | 279.62 | 0.23  |             | Other     | 0 |
| 45 | 4275.00 | 1.71  | 231.60 | 94.00   | 4273.16 | -116.54 | 17.95  | -116.55 | 117.92 | 278.76 | 0.43  |             | Other     | 0 |
| 46 | 4369.00 | 1.80  | 236.83 | 94.00   | 4367.12 | -118.88 | 16.27  | -118.88 | 119.99 | 277.79 | 0.20  |             | Other     | 0 |
| 47 | 4464.00 | 1.80  | 226.50 | 95.00   | 4462.07 | -121.21 | 14.43  | -121.21 | 122.07 | 276.79 | 0.34  |             | Other     | 0 |
| 48 | 4557.00 | 1.71  | 223.82 | 93.00   | 4555.03 | -123.23 | 12.42  | -123.23 | 123.86 | 275.76 | 0.13  |             | Other     | 0 |
| 49 | 4652.00 | 1.71  | 229.31 | 95.00   | 4649.99 | -125.29 | 10.48  | -125.29 | 125.73 | 274.78 | 0.17  |             | Other     | 0 |
| 50 | 4746.00 | 1.89  | 237.31 | 94.00   | 4743.94 | -127.66 | 8.73   | -127.66 | 127.95 | 273.91 | 0.33  |             | Other     | 0 |
| 51 | 4840.00 | 1.80  | 227.12 | 94.00   | 4837.89 | -130.04 | 6.88   | -130.04 | 130.22 | 273.03 | 0.36  |             | Other     | 0 |
| 52 | 4939.00 | 2.11  | 229.09 | 99.00   | 4936.83 | -132.56 | 4.63   | -132.56 | 132.64 | 272.00 | 0.32  |             | Other     | 0 |
| 53 | 5034.00 | 2.11  | 228.61 | 95.00   | 5031.77 | -135.19 | 2.33   | -135.19 | 135.21 | 270.99 | 0.02  |             | Other     | 0 |
| 54 | 5128.00 | 2.02  | 236.13 | 94.00   | 5125.71 | -137.87 | 0.26   | -137.87 | 137.87 | 270.11 | 0.30  |             | Other     | 0 |
| 55 | 5222.00 | 2.11  | 232.21 | 94.00   | 5219.65 | -140.61 | -1.72  | -140.61 | 140.62 | 269.30 | 0.18  |             | Other     | 0 |
| 56 | 5316.00 | 1.89  | 237.71 | 94.00   | 5313.59 | -143.29 | -3.61  | -143.29 | 143.33 | 268.56 | 0.31  |             | Other     | 0 |
| 57 | 5411.00 | 1.58  | 240.52 | 95.00   | 5408.55 | -145.75 | -5.09  | -145.75 | 145.84 | 268.00 | 0.34  |             | Other     | 0 |
| 58 | 5506.00 | 1.80  | 238.10 | 95.00   | 5503.50 | -148.16 | -6.52  | -148.16 | 148.3  | 267.48 | 0.24  |             | Other     | 0 |
| 59 | 5600.00 | 2.02  | 221.01 | 94.00   | 5597.45 | -150.50 | -8.55  | -150.50 | 150.74 | 266.75 | 0.65  |             | Other     | 0 |
| 60 | 5695.00 | 1.49  | 234.63 | 95.00   | 5692.41 | -152.61 | -10.53 | -152.61 | 152.97 | 266.05 | 0.71  |             | Other     | 0 |
| 61 | 5790.00 | 1.32  | 248.21 | 95.00   | 5787.38 | -154.63 | -11.65 | -154.63 | 155.07 | 265.69 | 0.39  |             | Other     | 0 |
| 62 | 5884.00 | 0.79  | 276.91 | 94.00   | 5881.36 | -156.28 | -11.98 | -156.28 | 156.74 | 265.62 | 0.78  |             | Other     | 0 |
| 63 | 5978.00 | 1.19  | 285.83 | 94.00   | 5975.35 | -157.86 | -11.63 | -157.86 | 158.29 | 265.79 | 0.45  |             | Other     | 0 |
| 64 | 6072.00 | 1.10  | 289.61 | 94.00   | 6069.33 | -159.65 | -11.06 | -159.65 | 160.03 | 266.04 | 0.12  |             | Other     | 0 |
| 65 | 6166.00 | 1.89  | 267.41 | 94.00   | 6163.30 | -162.05 | -10.83 | -162.05 | 162.41 | 266.18 | 1.03  |             | Other     | 0 |
| 66 | 6261.00 | 2.11  | 262.49 | 95.00   | 6258.24 | -165.35 | -11.13 | -165.35 | 165.72 | 266.15 | 0.29  |             | Other     | 0 |
| 67 | 6356.00 | 2.29  | 254.23 | 95.00   | 6353.17 | -168.91 | -11.87 | -168.91 | 169.32 | 265.98 | 0.38  |             | Other     | 0 |
| 68 | 6450.00 | 2.50  | 248.69 | 94.00   | 6447.09 | -172.62 | -13.13 | -172.62 | 173.12 | 265.65 | 0.33  |             | Other     | 0 |
| 69 | 6544.00 | 2.42  | 253.22 | 94.00   | 6541.00 | -176.43 | -14.45 | -176.43 | 177.02 | 265.32 | 0.22  |             | Other     | 0 |
| 70 | 6638.00 | 2.42  | 248.30 | 94.00   | 6634.92 | -180.18 | -15.75 | -180.18 | 180.87 | 265.00 | 0.22  |             | Other     | 0 |
| 71 | 6740.00 | 2.28  | 153.77 | 102.00  | 6736.86 | -181.28 | -18.37 | -181.28 | 182.21 | 264.21 | 3.38  |             | SlimPulse | 0 |
| 72 | 6771.00 | 5.86  | 113.15 | 31.00   | 6767.79 | -179.56 | -19.55 | -179.55 | 180.62 | 263.79 | 14.16 |             | SlimPulse | 0 |
| 73 | 6803.00 | 9.67  | 105.94 | 32.00   | 6799.49 | -175.47 | -20.93 | -175.47 | 176.71 | 263.20 | 12.28 |             | SlimPulse | 0 |
| 74 | 6834.00 | 13.24 | 100.89 | 31.00   | 6829.87 | -169.48 | -22.31 | -169.47 | 170.94 | 262.50 | 11.93 |             | SlimPulse | 0 |
| 75 | 6865.00 | 16.27 | 104.71 | 31.00   | 6859.84 | -161.79 | -24.09 | -161.79 | 163.57 | 261.53 | 10.27 |             | SlimPulse | 0 |
| 76 | 6898.00 | 18.55 | 101.10 | 33.00   | 6891.33 | -152.17 | -26.27 | -152.16 | 154.42 | 260.20 | 7.64  |             | SlimPulse | 0 |
| 77 | 6929.00 | 21.53 | 98.29  | 31.00   | 6920.45 | -141.70 | -28.04 | -141.69 | 144.44 | 258.81 | 10.12 |             | SlimPulse | 0 |
| 78 | 6961.00 | 24.16 | 96.79  | 32.00   | 6949.94 | -129.38 | -29.66 | -129.38 | 132.73 | 257.09 | 8.40  |             | SlimPulse | 0 |
| 79 |         |       |        |         |         |         |        |         |        |        |       |             |           |   |

|     |          |       |       |        |         |         |        |         |         |        |       |           |   |
|-----|----------|-------|-------|--------|---------|---------|--------|---------|---------|--------|-------|-----------|---|
| 82  | 7087.00  | 36.84 | 88.28 | 32.00  | 7058.25 | -65.65  | -31.07 | -65.65  | 72.63   | 244.67 | 9.02  | SlimPulse | 0 |
| 83  | 7118.00  | 39.69 | 90.65 | 31.00  | 7082.59 | -46.45  | -30.91 | -46.45  | 55.8    | 236.36 | 10.34 | SlimPulse | 0 |
| 84  | 7150.00  | 43.87 | 92.78 | 32.00  | 7106.45 | -25.15  | -31.56 | -25.15  | 40.36   | 218.55 | 13.77 | SlimPulse | 0 |
| 85  | 7181.00  | 49.23 | 93.79 | 31.00  | 7127.76 | -2.69   | -32.86 | -2.69   | 32.97   | 184.68 | 17.45 | SlimPulse | 0 |
| 86  | 7213.00  | 55.20 | 93.63 | 32.00  | 7147.36 | 22.53   | -34.50 | 22.53   | 41.2    | 146.85 | 18.67 | SlimPulse | 0 |
| 87  | 7244.00  | 60.49 | 91.19 | 31.00  | 7163.85 | 48.74   | -35.58 | 48.74   | 60.35   | 126.13 | 18.32 | SlimPulse | 0 |
| 88  | 7272.00  | 64.39 | 89.16 | 28.00  | 7176.81 | 73.56   | -35.65 | 73.56   | 81.74   | 115.86 | 15.35 | SlimPulse | 0 |
| 89  | 7306.00  | 68.89 | 88.69 | 34.00  | 7190.29 | 104.76  | -35.07 | 104.76  | 110.47  | 108.51 | 13.30 | SlimPulse | 0 |
| 90  | 7338.00  | 72.69 | 88.91 | 32.00  | 7200.81 | 134.96  | -34.43 | 134.96  | 139.29  | 104.31 | 11.88 | SlimPulse | 0 |
| 91  | 7369.00  | 77.70 | 89.37 | 31.00  | 7208.73 | 164.92  | -33.98 | 164.92  | 168.39  | 101.64 | 16.22 | SlimPulse | 0 |
| 92  | 7400.00  | 82.13 | 89.06 | 31.00  | 7214.16 | 195.43  | -33.57 | 195.43  | 198.29  | 99.75  | 14.35 | SlimPulse | 0 |
| 93  | 7433.00  | 85.73 | 88.31 | 33.00  | 7217.65 | 228.23  | -32.81 | 228.23  | 230.58  | 98.18  | 11.14 | SlimPulse | 0 |
| 94  | 7462.00  | 88.00 | 88.24 | 29.00  | 7219.23 | 257.17  | -31.94 | 257.17  | 259.15  | 97.08  | 7.84  | SlimPulse | 0 |
| 95  | 7499.00  | 89.21 | 87.92 | 37.00  | 7220.13 | 294.14  | -30.70 | 294.14  | 295.74  | 95.96  | 3.37  | SlimPulse | 0 |
| 96  | 7599.00  | 92.24 | 91.10 | 100.00 | 7218.87 | 394.10  | -29.84 | 394.11  | 395.23  | 94.33  | 4.39  | SlimPulse | 0 |
| 97  | 7694.00  | 89.69 | 92.23 | 95.00  | 7217.28 | 489.04  | -32.60 | 489.04  | 490.13  | 93.81  | 2.93  | SlimPulse | 0 |
| 98  | 7788.00  | 89.45 | 91.07 | 94.00  | 7217.98 | 583.00  | -35.30 | 583.00  | 584.07  | 93.47  | 0.26  | SlimPulse | 0 |
| 99  | 7883.00  | 89.48 | 90.27 | 95.00  | 7218.86 | 677.99  | -36.41 | 677.99  | 678.97  | 93.07  | 1.84  | SlimPulse | 0 |
| 100 | 7977.00  | 89.35 | 87.95 | 94.00  | 7219.82 | 771.96  | -34.95 | 771.97  | 772.76  | 92.59  | 2.47  | SlimPulse | 0 |
| 101 | 8072.00  | 89.31 | 88.63 | 95.00  | 7220.94 | 866.91  | -32.12 | 866.92  | 867.51  | 92.12  | 0.71  | SlimPulse | 0 |
| 102 | 8166.00  | 89.55 | 88.81 | 94.00  | 7221.87 | 960.89  | -30.02 | 960.89  | 961.36  | 91.79  | 0.32  | SlimPulse | 0 |
| 103 | 8260.00  | 89.97 | 88.73 | 94.00  | 7222.26 | 1054.86 | -28.00 | 1054.87 | 1055.24 | 91.52  | 0.45  | SlimPulse | 0 |
| 104 | 8354.00  | 90.28 | 88.64 | 94.00  | 7222.06 | 1148.84 | -25.85 | 1148.84 | 1149.13 | 91.29  | 0.34  | SlimPulse | 0 |
| 105 | 8449.00  | 90.21 | 88.30 | 95.00  | 7221.66 | 1243.80 | -23.30 | 1243.81 | 1244.02 | 91.07  | 0.37  | SlimPulse | 0 |
| 106 | 8544.00  | 90.41 | 88.67 | 95.00  | 7221.15 | 1338.77 | -20.79 | 1338.77 | 1338.93 | 90.89  | 0.45  | SlimPulse | 0 |
| 107 | 8639.00  | 90.62 | 89.14 | 95.00  | 7220.30 | 1433.75 | -18.97 | 1433.75 | 1433.87 | 90.76  | 0.55  | SlimPulse | 0 |
| 108 | 8733.00  | 90.34 | 87.96 | 94.00  | 7219.51 | 1527.71 | -16.60 | 1527.71 | 1527.8  | 90.62  | 1.29  | SlimPulse | 0 |
| 109 | 8827.00  | 89.72 | 88.52 | 94.00  | 7219.45 | 1621.67 | -13.71 | 1621.67 | 1621.73 | 90.48  | 0.88  | SlimPulse | 0 |
| 110 | 8921.00  | 89.42 | 89.50 | 94.00  | 7220.16 | 1715.65 | -12.09 | 1715.65 | 1715.69 | 90.40  | 1.10  | SlimPulse | 0 |
| 111 | 9015.00  | 89.52 | 90.32 | 94.00  | 7221.03 | 1809.64 | -11.94 | 1809.65 | 1809.68 | 90.38  | 0.88  | SlimPulse | 0 |
| 112 | 9110.00  | 88.35 | 90.53 | 95.00  | 7222.80 | 1904.62 | -12.65 | 1904.62 | 1904.67 | 90.38  | 1.25  | SlimPulse | 0 |
| 113 | 9204.00  | 87.87 | 90.34 | 94.00  | 7225.90 | 1998.57 | -13.36 | 1998.57 | 1998.62 | 90.38  | 0.55  | SlimPulse | 0 |
| 114 | 9299.00  | 88.11 | 90.27 | 95.00  | 7229.24 | 2093.51 | -13.86 | 2093.51 | 2093.56 | 90.38  | 0.26  | SlimPulse | 0 |
| 115 | 9393.00  | 87.25 | 89.72 | 94.00  | 7233.05 | 2187.43 | -13.85 | 2187.43 | 2187.48 | 90.36  | 1.08  | SlimPulse | 0 |
| 116 | 9488.00  | 88.28 | 88.71 | 95.00  | 7236.75 | 2282.35 | -12.56 | 2282.35 | 2282.38 | 90.32  | 1.52  | SlimPulse | 0 |
| 117 | 9582.00  | 87.35 | 87.99 | 94.00  | 7240.34 | 2376.24 | -9.86  | 2376.24 | 2376.26 | 90.24  | 1.25  | SlimPulse | 0 |
| 118 | 9676.00  | 87.52 | 88.09 | 94.00  | 7244.54 | 2470.09 | -6.64  | 2470.09 | 2470.1  | 90.15  | 0.21  | SlimPulse | 0 |
| 119 | 9771.00  | 87.32 | 88.10 | 95.00  | 7248.82 | 2564.94 | -3.49  | 2564.94 | 2564.94 | 90.08  | 0.22  | SlimPulse | 0 |
| 120 | 9866.00  | 87.73 | 89.04 | 95.00  | 7252.92 | 2659.82 | -1.13  | 2659.82 | 2659.82 | 90.02  | 1.08  | SlimPulse | 0 |
| 121 | 9958.00  | 87.59 | 89.91 | 92.00  | 7256.68 | 2751.74 | -0.29  | 2751.74 | 2751.74 | 90.01  | 0.95  | SlimPulse | 0 |
| 122 | 10052.00 | 87.39 | 90.30 | 94.00  | 7260.80 | 2845.65 | -0.47  | 2845.65 | 2845.65 | 90.01  | 0.47  | SlimPulse | 0 |
| 123 | 10146.00 | 87.18 | 90.96 | 94.00  | 7265.26 | 2939.54 | -1.50  | 2939.54 | 2939.54 | 90.03  | 0.73  | SlimPulse | 0 |
| 124 | 10241.00 | 87.90 | 91.65 | 95.00  | 7269.33 | 3034.42 | -3.65  | 3034.42 | 3034.43 | 90.07  | 1.05  | SlimPulse | 0 |
| 125 | 10335.00 | 87.59 | 92.57 | 94.00  | 7273.03 | 3128.29 | -7.10  | 3128.29 | 3128.3  | 90.13  | 1.03  | SlimPulse | 0 |
| 126 | 10429.00 | 89.11 | 90.97 | 94.00  | 7275.74 | 3222.20 | -10.01 | 3222.20 | 3222.21 | 90.18  | 2.34  | SlimPulse | 0 |
| 127 | 10523.00 | 89.21 | 89.48 | 94.00  | 7277.12 | 3316.18 | -10.37 | 3316.18 | 3316.2  | 90.18  | 1.59  | SlimPulse | 0 |
| 128 | 10618.00 | 89.52 | 88.60 | 95.00  | 7278.18 | 3411.16 | -8.78  | 3411.16 | 3411.18 | 90.15  | 0.98  | SlimPulse | 0 |
| 129 | 10715.00 | 89.83 | 88.32 | 97.00  | 7278.73 | 3508.13 | -6.18  | 3508.13 | 3508.13 | 90.10  | 0.43  | SlimPulse | 0 |
| 130 | 10810.00 | 89.00 | 87.63 | 95.00  | 7279.70 | 3603.06 | -2.82  | 3603.06 | 3603.06 | 90.04  | 1.13  | SlimPulse | 0 |
| 131 | 10904.00 | 87.63 | 87.88 | 94.00  | 7282.47 | 3696.95 | 0.85   | 3696.95 | 3696.95 | 89.99  | 1.49  | SlimPulse | 0 |
| 132 | 10999.00 | 88.80 | 87.31 | 95.00  | 7285.43 | 3791.82 | 4.84   | 3791.82 | 3791.82 | 89.93  | 1.37  | SlimPulse | 0 |
| 133 | 11093.00 | 87.08 | 87.13 | 94.00  | 7288.82 | 3885.64 | 9.39   | 3885.64 | 3885.65 | 89.86  | 1.84  | SlimPulse | 0 |
| 134 | 11188.00 | 86.01 | 86.26 | 95.00  | 7294.55 | 3980.31 | 14.85  | 3980.31 | 3980.33 | 89.79  | 1.45  | SlimPulse | 0 |
| 135 | 11283.00 | 84.70 | 86.03 | 95.00  | 7302.25 | 4074.78 | 21.22  | 4074.78 | 4074.83 | 89.70  | 1.40  | SlimPulse | 0 |
| 136 | 11374.00 | 83.87 | 86.85 | 91.00  | 7311.32 | 4165.15 | 26.84  | 4165.15 | 4165.24 | 89.63  | 1.28  | SlimPulse | 0 |
| 137 | 11470.00 | 83.56 | 87.49 | 96.00  | 7321.83 | 4260.46 | 31.55  | 4260.45 | 4260.57 | 89.58  | 0.74  | SlimPulse | 0 |
| 138 | 11564.00 | 83.00 | 88.87 | 94.00  | 7332.84 | 4353.76 | 34.51  | 4353.76 | 4353.9  | 89.55  | 1.57  | SlimPulse | 0 |
| 139 | 11659.00 | 83.56 | 89.27 | 95.00  | 7343.96 | 4448.10 | 36.04  | 4448.09 | 4448.24 | 89.54  | 0.72  | SlimPulse | 0 |
| 140 | 11753.00 | 83.21 | 89.77 | 94.00  | 7354.79 | 4541.47 | 36.83  | 4541.46 | 4541.61 | 89.54  | 0.64  | SlimPulse | 0 |
| 141 | 11847.00 | 83.42 | 89.29 | 94.00  | 7365.73 | 4634.82 | 37.60  | 4634.82 | 4634.97 | 89.54  | 0.55  | SlimPulse | 0 |
| 142 | 11932.00 | 82.48 | 89.49 | 85.00  | 7376.17 | 4719.17 | 38.50  | 4719.17 | 4719.33 | 89.53  | 1.12  | SlimPulse | 0 |
| 143 | 12011.00 | 82.48 | 89.49 | 79.00  | 7386.51 | 4797.49 | 39.20  | 4797.49 | 4797.65 | 89.53  | 0.00  | Other     | 0 |

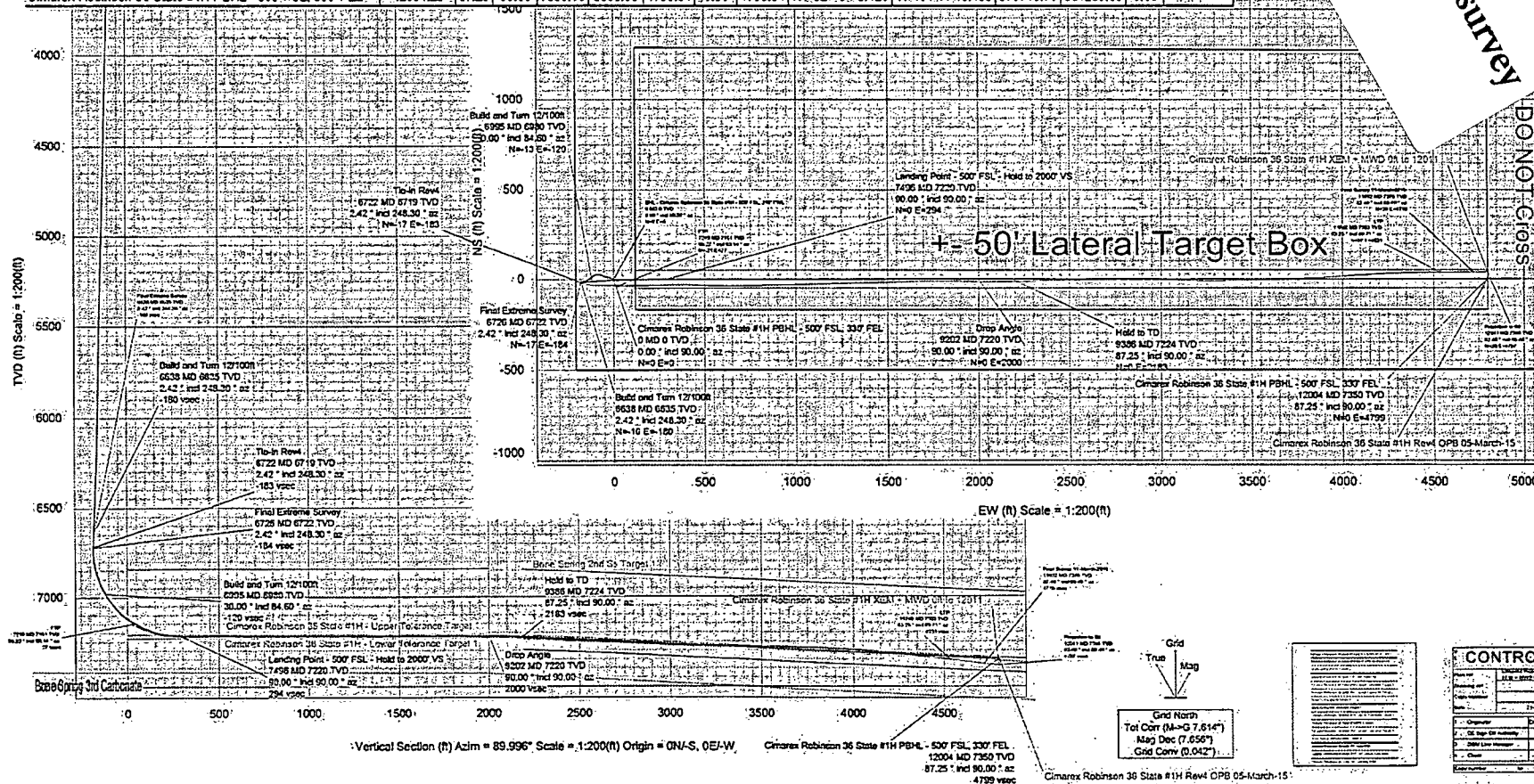
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|                                   |            |                      |             |                                                     |             |
|-----------------------------------|------------|----------------------|-------------|-----------------------------------------------------|-------------|
| Borehole:                         |            | Well:                |             | Field:                                              |             |
| Original Borehole                 |            | Robinson 36 State 1H |             | NM,Eddy County (NAD 83)                             |             |
| Geology & Stratigraphy Parameters |            | Core Base Location   |             | NAD83 New Mexico State Plane, Eastern Zone, US Feet |             |
| Model:                            | HDC33 2014 | Core:                | 33.702'     | Date:                                               | 01-42-2015  |
| Core:                             | 7.25'      | Lat:                 | 32 0 51.6   | Longitude:                                          | 106 53 27.5 |
| Core:                             | 7.25'      | Long:                | 106 53 27.5 | Core:                                               | 33.702'     |
| Geology & Stratigraphy Parameters |            | Core Base Location   |             | NAD83 New Mexico State Plane, Eastern Zone, US Feet |             |
| Model:                            | HDC33 2014 | Core:                | 33.702'     | Date:                                               | 01-42-2015  |
| Core:                             | 7.25'      | Lat:                 | 32 0 51.6   | Longitude:                                          | 106 53 27.5 |
| Core:                             | 7.25'      | Long:                | 106 53 27.5 | Core:                                               | 33.702'     |

| Comments                                                 | Critical Points |       |        |         |          |         |        |         |                |                   |                   |           |           |         |           |
|----------------------------------------------------------|-----------------|-------|--------|---------|----------|---------|--------|---------|----------------|-------------------|-------------------|-----------|-----------|---------|-----------|
|                                                          | Survey          | MD    | Incl   | Azim    | TVD      | SSVD    | VS     | NS      | EW             | Longitude         | Latitude          | Easting   | Northing  | DLS     | Tool Face |
| SHL - Cimarex Robinson 36 State #1H - 500' FSL 210' FWL  | 0.00            | 0.00  | 90.00  | 0.00    | -3352.00 | 0.00    | 0.00   | 0.00    | 0.00           | N 32° 0' -5.155   | W 104° 15' 14.183 | 565948.20 | 364269.50 |         | 297.21    |
| Re-in Rev'd                                              | 6638.00         | 2.42  | 248.30 | 6634.92 | 3262.92  | -180.18 | -15.75 | -180.18 | N 32° 0' 5.001 | W 104° 15' 16.275 | 565768.04         | 364253.75 | 0.22      | -248.30 |           |
| Projection to Bit                                        | 6722.00         | 2.42  | 248.30 | 6718.84 | 3366.84  | -183.47 | -17.07 | -183.47 | N 32° 0' 4.988 | W 104° 15' 16.314 | 565764.74         | 364252.44 | 0.00      | -248.30 |           |
| KOP - Build 12"/100R                                     | 6725.50         | 2.42  | 248.30 | 6722.34 | 3370.34  | -183.61 | -17.12 | -183.61 | N 32° 0' 4.987 | W 104° 15' 16.315 | 565764.61         | 364252.38 | 0.00      | 84.60   |           |
| Build and Turn 12"/100R                                  | 6994.91         | 30.00 | 84.60  | 6980.47 | 3628.47  | -120.15 | -12.77 | -120.15 | N 32° 0' 5.030 | W 104° 15' 15.578 | 565828.06         | 364256.73 | 12.00     | 6.23    |           |
| Landing Point - 500' FSL - Hold to 2000' VS              | 7496.32         | 90.00 | 90.00  | 7220.00 | 3668.00  | 294.12  | 0.24   | 294.12  | N 32° 0' 5.156 | W 104° 15' 10.768 | 566242.29         | 364269.74 | 12.00     | 0.00    |           |
| Drop Angle                                               | 9202.20         | 90.00 | 90.00  | 7220.00 | 3668.00  | 2000.00 | 0.24   | 2000.00 | N 32° 0' 5.143 | W 104° 14' 50.958 | 567948.01         | 364269.74 | 0.00      | 180.00  |           |
| Hold to TD                                               | 9365.54         | 87.25 | 90.00  | 7224.40 | 3872.40  | 2183.26 | 0.24   | 2183.26 | N 32° 0' 5.141 | W 104° 14' 48.830 | 568131.26         | 364269.74 | 1.50      | -54.65  |           |
| Cimarex Robinson 36 State #1H PBHL - 500' FSL - 330' FEL | 12004.23        | 87.25 | 90.00  | 7350.00 | 3998.00  | 4798.94 | 0.30   | 4798.94 | N 32° 0' 5.120 | W 104° 14' 18.455 | 570746.70         | 364269.80 | 0.00      |         |           |





## Cimarex Robinson 36 State #1H XEM + MWD 0ft to 12011 Survey Report

(Def Survey)

Report Date: May 21, 2015 10:23:36 PM  
Client: Cimarex  
Field: NM Eddy County (NAD 83)  
Structure / Slot: Cimarex Robinson 36 State #1H / Cimarex Robinson 36 State #1H  
Well: Cimarex Robinson 36 State #1H  
Borehole: Original Borehole  
UWI / API#: Unknown / Unknown  
Survey Name: Cimarex Robinson 36 State #1H XEM + MWD 0ft to 12011  
Survey Date: February 27, 2015  
Tort / AHD / DDI / ERD Ratio: 163.050 / 5183.579 ft / 6.138 / 0.702  
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet  
Location Lat / Long: N 32° 0' 5.15536", W 104° 15' 14.18292"  
Location Grid N/E Y/X: N 364269.500 ftUS; E 565948.200 ftUS  
CRS Grid Convergence Angle: 0.0421°  
Grid Scale Factor: 0.99990978  
Version / Patch: 2.8.572.0

Survey / DLS Computation: Minimum Curvature / Lubinski  
Vertical Section Azimuth: 89.996° (Grid North)  
Vertical Section Origin: 0.000 ft, 0.000 ft  
TVD Reference Datum: RKB  
TVD Reference Elevation: 3352.000 ft above MSL  
Seabed / Ground Elevation: 3324.000 ft above MSL  
Magnetic Declination: 7.656°  
Total Gravity Field Strength: 998.4211 mgn (9.80665 Based)  
Gravity Model: GARM  
Total Magnetic Field Strength: 48143.701 nT  
Magnetic Dip Angle: 59.702°  
Declination Date: March 05, 2015  
Magnetic Declination Model: HDGM 2014  
North Reference: Grid North  
Grid Convergence Used: 0.0421°  
Total Corr Mag North -> Grid North: 7.6137°  
Local Coord Referenced To: Structure Reference Point

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| Comments                                                 | MD<br>(ft) | Incl<br>(°) | Azim Grid<br>(°) | TVD<br>(ft) | VSEC<br>(ft) | NS<br>(ft) | EW<br>(ft) | DLS<br>(°/100ft) | Northing<br>(ftUS) | Easting<br>(ftUS) | Latitude<br>(N/S ° ' ")          | Longitude<br>(E/W ° ' ") |
|----------------------------------------------------------|------------|-------------|------------------|-------------|--------------|------------|------------|------------------|--------------------|-------------------|----------------------------------|--------------------------|
| SHL - Cimarex Robinson 36 State #1H - 500' FSL, 210' FWL | 0.00       | 0.00        | 90.00            | 0.00        | 0.00         | 0.00       | 0.00       | N/A              | 364269.50          | 565948.20         | N 32° 0' 5.16" W 104° 15' 14.18" |                          |
|                                                          | 201.00     | 1.10        | 297.21           | 200.99      | -1.72        | 0.88       | -1.72      | 0.55             | 364270.38          | 565946.48         | N 32° 0' 5.16" W 104° 15' 14.20" |                          |
|                                                          | 260.00     | 1.10        | 285.39           | 259.98      | -2.77        | 1.29       | -2.77      | 0.38             | 364270.79          | 565945.43         | N 32° 0' 5.17" W 104° 15' 14.22" |                          |
|                                                          | 348.00     | 1.32        | 297.61           | 347.96      | -4.48        | 1.99       | -4.48      | 0.38             | 364271.49          | 565943.72         | N 32° 0' 5.18" W 104° 15' 14.23" |                          |
|                                                          | 437.00     | 1.71        | 301.43           | 436.93      | -6.52        | 3.15       | -6.52      | 0.45             | 364272.65          | 565941.68         | N 32° 0' 5.19" W 104° 15' 14.26" |                          |
|                                                          | 534.00     | 1.40        | 297.61           | 533.89      | -8.80        | 4.46       | -8.80      | 0.34             | 364273.96          | 565939.40         | N 32° 0' 5.20" W 104° 15' 14.29" |                          |
|                                                          | 656.00     | 1.60        | 292.60           | 655.85      | -11.70       | 5.80       | -11.70     | 0.20             | 364275.30          | 565936.50         | N 32° 0' 5.21" W 104° 15' 14.32" |                          |
|                                                          | 706.00     | 1.71        | 297.43           | 705.83      | -13.00       | 6.41       | -13.00     | 0.36             | 364275.91          | 565935.20         | N 32° 0' 5.22" W 104° 15' 14.33" |                          |
|                                                          | 799.00     | 1.71        | 289.43           | 798.79      | -15.54       | 7.51       | -15.54     | 0.26             | 364277.01          | 565932.66         | N 32° 0' 5.23" W 104° 15' 14.36" |                          |
|                                                          | 894.00     | 2.02        | 290.40           | 893.74      | -18.45       | 8.57       | -18.45     | 0.33             | 364278.07          | 565929.75         | N 32° 0' 5.24" W 104° 15' 14.40" |                          |
|                                                          | 988.00     | 2.02        | 281.52           | 987.68      | -21.63       | 9.48       | -21.63     | 0.33             | 364278.98          | 565926.58         | N 32° 0' 5.25" W 104° 15' 14.43" |                          |
|                                                          | 1082.00    | 2.11        | 284.51           | 1081.62     | -24.92       | 10.24      | -24.93     | 0.15             | 364279.74          | 565923.28         | N 32° 0' 5.26" W 104° 15' 14.47" |                          |
|                                                          | 1176.00    | 2.02        | 286.40           | 1175.56     | -28.19       | 11.14      | -28.19     | 0.12             | 364280.64          | 565920.01         | N 32° 0' 5.27" W 104° 15' 14.51" |                          |
|                                                          | 1271.00    | 1.80        | 280.91           | 1270.50     | -31.26       | 11.90      | -31.26     | 0.30             | 364281.40          | 565916.94         | N 32° 0' 5.27" W 104° 15' 14.55" |                          |
|                                                          | 1366.00    | 1.71        | 282.93           | 1365.46     | -34.11       | 12.50      | -34.11     | 0.11             | 364282.00          | 565914.10         | N 32° 0' 5.28" W 104° 15' 14.58" |                          |
|                                                          | 1458.00    | 1.71        | 283.32           | 1457.42     | -36.78       | 13.12      | -36.78     | 0.01             | 364282.62          | 565911.42         | N 32° 0' 5.29" W 104° 15' 14.61" |                          |
|                                                          | 1552.00    | 1.41        | 281.61           | 1551.38     | -39.28       | 13.68      | -39.28     | 0.32             | 364283.18          | 565908.93         | N 32° 0' 5.29" W 104° 15' 14.64" |                          |
|                                                          | 1647.00    | 1.32        | 276.20           | 1646.36     | -41.51       | 14.03      | -41.51     | 0.17             | 364283.53          | 565906.69         | N 32° 0' 5.29" W 104° 15' 14.66" |                          |
|                                                          | 1741.00    | 1.32        | 276.03           | 1740.33     | -43.66       | 14.26      | -43.66     | 0.00             | 364283.76          | 565904.54         | N 32° 0' 5.30" W 104° 15' 14.69" |                          |
|                                                          | 1839.00    | 1.41        | 279.50           | 1838.30     | -45.98       | 14.58      | -45.98     | 0.12             | 364284.08          | 565902.23         | N 32° 0' 5.30" W 104° 15' 14.72" |                          |

| Comments | MD<br>(ft) | Incl<br>(°) | Azim Grid<br>(°) | TVD<br>(ft) | VSEC<br>(ft) | NS<br>(ft) | EW<br>(ft) | DLS<br>(°/100ft) | Northing<br>(ftUS) | Easting<br>(ftUS) | Latitude<br>(N/S ° ' ") | Longitude<br>(E/W ° ' ") |
|----------|------------|-------------|------------------|-------------|--------------|------------|------------|------------------|--------------------|-------------------|-------------------------|--------------------------|
|          | 2016.00    | 1.71        | 293.69           | 2015.24     | -50.54       | 16.00      | -50.54     | 0.28             | 364285.50          | 565897.66         | N 32 0 5.31             | W 104 15 14.77           |
|          | 2109.00    | 1.60        | 294.00           | 2108.19     | -53.15       | 17.15      | -53.15     | 0.10             | 364286.65          | 565895.06         | N 32 0 5.33             | W 104 15 14.80           |
|          | 2203.00    | 1.71        | 284.99           | 2202.15     | -55.85       | 18.11      | -55.85     | 0.31             | 364287.61          | 565892.35         | N 32 0 5.34             | W 104 15 14.83           |
|          | 2297.00    | 1.49        | 292.99           | 2296.11     | -58.33       | 18.95      | -58.33     | 0.33             | 364288.45          | 565889.87         | N 32 0 5.34             | W 104 15 14.86           |
|          | 2391.00    | 1.71        | 304.50           | 2390.08     | -60.61       | 20.23      | -60.61     | 0.41             | 364289.72          | 565887.59         | N 32 0 5.36             | W 104 15 14.89           |
|          | 2484.00    | 1.58        | 291.72           | 2483.04     | -62.94       | 21.49      | -62.95     | 0.42             | 364290.99          | 565885.26         | N 32 0 5.37             | W 104 15 14.91           |
|          | 2578.00    | 1.80        | 285.52           | 2577.00     | -65.57       | 22.36      | -65.57     | 0.30             | 364291.86          | 565882.63         | N 32 0 5.38             | W 104 15 14.94           |
|          | 2673.00    | 1.80        | 291.89           | 2671.95     | -68.39       | 23.32      | -68.39     | 0.21             | 364292.82          | 565879.81         | N 32 0 5.39             | W 104 15 14.98           |
|          | 2767.00    | 1.58        | 283.02           | 2765.91     | -71.03       | 24.16      | -71.03     | 0.36             | 364293.66          | 565877.18         | N 32 0 5.39             | W 104 15 15.01           |
|          | 2861.00    | 1.89        | 283.63           | 2859.87     | -73.79       | 24.82      | -73.80     | 0.33             | 364294.31          | 565874.41         | N 32 0 5.40             | W 104 15 15.04           |
|          | 2955.00    | 1.71        | 280.99           | 2953.82     | -76.68       | 25.45      | -76.68     | 0.21             | 364294.95          | 565871.53         | N 32 0 5.41             | W 104 15 15.07           |
|          | 3050.00    | 2.02        | 278.40           | 3048.77     | -79.73       | 25.96      | -79.73     | 0.34             | 364295.46          | 565868.48         | N 32 0 5.41             | W 104 15 15.11           |
|          | 3146.00    | 2.02        | 275.02           | 3144.71     | -83.08       | 26.36      | -83.09     | 0.12             | 364295.86          | 565865.12         | N 32 0 5.42             | W 104 15 15.15           |
|          | 3239.00    | 1.58        | 274.31           | 3237.66     | -86.00       | 26.60      | -86.00     | 0.47             | 364296.10          | 565862.21         | N 32 0 5.42             | W 104 15 15.18           |
|          | 3334.00    | 1.58        | 272.29           | 3332.63     | -88.61       | 26.75      | -88.61     | 0.06             | 364296.25          | 565859.60         | N 32 0 5.42             | W 104 15 15.21           |
|          | 3429.00    | 1.80        | 261.53           | 3427.59     | -91.40       | 26.58      | -91.40     | 0.41             | 364296.08          | 565856.81         | N 32 0 5.42             | W 104 15 15.24           |
|          | 3523.00    | 1.89        | 257.92           | 3521.54     | -94.37       | 26.04      | -94.37     | 0.16             | 364295.54          | 565853.84         | N 32 0 5.41             | W 104 15 15.28           |
|          | 3617.00    | 1.71        | 262.23           | 3615.49     | -97.28       | 25.53      | -97.28     | 0.24             | 364295.02          | 565850.93         | N 32 0 5.41             | W 104 15 15.31           |
|          | 3711.00    | 2.02        | 251.51           | 3709.44     | -100.24      | 24.81      | -100.24    | 0.50             | 364294.31          | 565847.97         | N 32 0 5.40             | W 104 15 15.35           |
|          | 3805.00    | 1.89        | 249.53           | 3803.39     | -103.26      | 23.74      | -103.26    | 0.16             | 364293.24          | 565844.95         | N 32 0 5.39             | W 104 15 15.38           |
|          | 3900.00    | 1.89        | 247.60           | 3898.34     | -106.18      | 22.60      | -106.18    | 0.07             | 364292.10          | 565842.03         | N 32 0 5.38             | W 104 15 15.42           |
|          | 3994.00    | 1.89        | 247.60           | 3992.29     | -109.04      | 21.42      | -109.04    | 0.00             | 364290.92          | 565839.17         | N 32 0 5.37             | W 104 15 15.45           |
|          | 4087.00    | 1.71        | 251.02           | 4085.24     | -111.77      | 20.38      | -111.77    | 0.23             | 364289.88          | 565836.44         | N 32 0 5.36             | W 104 15 15.48           |
|          | 4181.00    | 1.58        | 244.83           | 4179.20     | -114.27      | 19.37      | -114.27    | 0.23             | 364288.87          | 565833.94         | N 32 0 5.35             | W 104 15 15.51           |
|          | 4275.00    | 1.71        | 231.60           | 4273.16     | -116.54      | 17.95      | -116.55    | 0.43             | 364287.45          | 565831.66         | N 32 0 5.33             | W 104 15 15.54           |
|          | 4369.00    | 1.80        | 236.83           | 4367.12     | -118.88      | 16.27      | -118.88    | 0.20             | 364285.77          | 565829.33         | N 32 0 5.32             | W 104 15 15.56           |
|          | 4464.00    | 1.80        | 226.50           | 4462.07     | -121.21      | 14.43      | -121.21    | 0.34             | 364283.93          | 565827.00         | N 32 0 5.30             | W 104 15 15.59           |
|          | 4557.00    | 1.71        | 223.82           | 4555.03     | -123.23      | 12.42      | -123.23    | 0.13             | 364281.92          | 565824.98         | N 32 0 5.28             | W 104 15 15.61           |
|          | 4652.00    | 1.71        | 229.31           | 4649.99     | -125.29      | 10.48      | -125.29    | 0.17             | 364279.98          | 565822.92         | N 32 0 5.26             | W 104 15 15.64           |
|          | 4746.00    | 1.89        | 237.31           | 4743.94     | -127.66      | 8.73       | -127.66    | 0.33             | 364278.22          | 565820.56         | N 32 0 5.24             | W 104 15 15.67           |
|          | 4840.00    | 1.80        | 227.12           | 4837.89     | -130.04      | 6.88       | -130.04    | 0.36             | 364276.38          | 565818.17         | N 32 0 5.22             | W 104 15 15.69           |
|          | 4939.00    | 2.11        | 229.09           | 4936.83     | -132.56      | 4.63       | -132.56    | 0.32             | 364274.13          | 565815.65         | N 32 0 5.20             | W 104 15 15.72           |
|          | 5034.00    | 2.11        | 228.61           | 5031.77     | -135.19      | 2.33       | -135.19    | 0.02             | 364271.83          | 565813.02         | N 32 0 5.18             | W 104 15 15.75           |
|          | 5128.00    | 2.02        | 236.13           | 5125.71     | -137.87      | 0.26       | -137.87    | 0.30             | 364269.76          | 565810.35         | N 32 0 5.16             | W 104 15 15.78           |
|          | 5222.00    | 2.11        | 232.21           | 5219.65     | -140.61      | -1.72      | -140.61    | 0.18             | 364267.78          | 565807.60         | N 32 0 5.14             | W 104 15 15.82           |
|          | 5316.00    | 1.89        | 237.71           | 5313.59     | -143.29      | -3.61      | -143.29    | 0.31             | 364265.89          | 565804.93         | N 32 0 5.12             | W 104 15 15.85           |
|          | 5411.00    | 1.58        | 240.52           | 5408.55     | -145.75      | -5.09      | -145.75    | 0.34             | 364264.41          | 565802.46         | N 32 0 5.11             | W 104 15 15.88           |
|          | 5506.00    | 1.80        | 239.10           | 5503.50     | -148.16      | -6.52      | -148.16    | 0.24             | 364262.98          | 565800.05         | N 32 0 5.09             | W 104 15 15.90           |
|          | 5600.00    | 2.02        | 221.01           | 5597.45     | -150.50      | -8.55      | -150.50    | 0.65             | 364260.95          | 565797.71         | N 32 0 5.07             | W 104 15 15.93           |
|          | 5695.00    | 1.49        | 234.63           | 5692.41     | -152.61      | -10.53     | -152.61    | 0.71             | 364258.97          | 565795.61         | N 32 0 5.05             | W 104 15 15.96           |
|          | 5790.00    | 1.32        | 248.21           | 5787.38     | -154.63      | -11.65     | -154.63    | 0.39             | 364257.85          | 565793.59         | N 32 0 5.04             | W 104 15 15.98           |
|          | 5884.00    | 0.79        | 276.91           | 5881.36     | -156.28      | -11.98     | -156.28    | 0.78             | 364257.52          | 565791.94         | N 32 0 5.04             | W 104 15 16.00           |
|          | 5978.00    | 1.19        | 285.83           | 5975.35     | -157.86      | -11.63     | -157.86    | 0.45             | 364257.87          | 565790.35         | N 32 0 5.04             | W 104 15 16.02           |
|          | 6072.00    | 1.10        | 289.61           | 6069.33     | -159.65      | -11.06     | -159.65    | 0.12             | 364258.44          | 565788.57         | N 32 0 5.05             | W 104 15 16.04           |
|          | 6166.00    | 1.89        | 267.41           | 6163.30     | -162.05      | -10.83     | -162.05    | 1.03             | 364258.67          | 565786.17         | N 32 0 5.05             | W 104 15 16.08           |
|          | 6261.00    | 2.11        | 262.49           | 6258.24     | -165.35      | -11.13     | -165.35    | 0.29             | 364258.37          | 565782.87         | N 32 0 5.05             | W 104 15 16.10           |
|          | 6356.00    | 2.29        | 254.23           | 6353.17     | -168.91      | -11.87     | -168.91    | 0.38             | 364257.63          | 565779.31         | N 32 0 5.04             | W 104 15 16.14           |

| Comments                | MD<br>(ft) | Incl<br>(°) | Azim Grid<br>(°) | TVD<br>(ft) | VSEC<br>(ft) | NS<br>(ft) | EW<br>(ft) | DLS<br>(°/100ft) | Northing<br>(ftUS) | Easting<br>(ftUS) | Latitude<br>(N/S ° ' ") | Longitude<br>(E/W ° ' ") |
|-------------------------|------------|-------------|------------------|-------------|--------------|------------|------------|------------------|--------------------|-------------------|-------------------------|--------------------------|
| Final Extreme<br>Survey | 6450.00    | 2.50        | 248.69           | 6447.09     | -172.62      | -13.13     | -172.62    | 0.33             | 364256.37          | 565775.59         | N 32° 0' 5.03"          | W 104° 15' 16.19"        |
|                         | 6544.00    | 2.42        | 253.22           | 6541.00     | -176.43      | -14.45     | -176.43    | 0.22             | 364255.05          | 565771.78         | N 32° 0' 5.01"          | W 104° 15' 16.23"        |
|                         | 6638.00    | 2.42        | 248.30           | 6634.92     | -180.18      | -15.75     | -180.18    | 0.22             | 364253.75          | 565768.04         | N 32° 0' 5.00"          | W 104° 15' 16.28"        |
|                         | 6740.00    | 2.28        | 153.77           | 6736.86     | -181.28      | -18.37     | -181.28    | 3.39             | 364251.13          | 565766.93         | N 32° 0' 4.97"          | W 104° 15' 16.29"        |
|                         | 6771.00    | 5.86        | 113.15           | 6767.79     | -179.55      | -19.55     | -179.55    | 14.15            | 364249.95          | 565768.66         | N 32° 0' 4.96"          | W 104° 15' 16.27"        |
|                         | 6803.00    | 9.67        | 105.94           | 6799.49     | -175.47      | -20.93     | -175.47    | 12.27            | 364248.57          | 565772.75         | N 32° 0' 4.95"          | W 104° 15' 16.22"        |
|                         | 6834.00    | 13.24       | 100.89           | 6829.87     | -169.48      | -22.31     | -169.47    | 11.95            | 364247.19          | 565778.74         | N 32° 0' 4.94"          | W 104° 15' 16.15"        |
|                         | 6865.00    | 16.27       | 104.71           | 6859.84     | -161.79      | -24.09     | -161.79    | 10.26            | 364245.41          | 565786.43         | N 32° 0' 4.92"          | W 104° 15' 16.06"        |
|                         | 6898.00    | 18.55       | 101.10           | 6891.33     | -152.16      | -26.27     | -152.16    | 7.64             | 364243.23          | 565796.05         | N 32° 0' 4.90"          | W 104° 15' 15.95"        |
|                         | 6929.00    | 21.53       | 98.29            | 6920.45     | -141.69      | -28.04     | -141.69    | 10.10            | 364241.46          | 565806.52         | N 32° 0' 4.88"          | W 104° 15' 15.83"        |
|                         | 6961.00    | 24.16       | 96.79            | 6949.94     | -129.38      | -29.66     | -129.38    | 8.42             | 364239.84          | 565818.84         | N 32° 0' 4.86"          | W 104° 15' 15.69"        |
|                         | 6992.00    | 26.76       | 93.89            | 6977.92     | -116.11      | -30.89     | -116.11    | 9.36             | 364238.61          | 565832.10         | N 32° 0' 4.85"          | W 104° 15' 15.53"        |
|                         | 7024.00    | 30.70       | 91.70            | 7005.98     | -100.74      | -31.62     | -100.74    | 12.68            | 364237.88          | 565847.47         | N 32° 0' 4.84"          | W 104° 15' 15.35"        |
|                         | 7055.00    | 33.96       | 88.40            | 7032.17     | -84.17       | -31.61     | -84.17     | 11.95            | 364237.89          | 565864.04         | N 32° 0' 4.84"          | W 104° 15' 15.16"        |
|                         | 7087.00    | 36.84       | 86.28            | 7058.25     | -65.65       | -31.08     | -65.64     | 9.00             | 364238.43          | 565882.56         | N 32° 0' 4.85"          | W 104° 15' 14.95"        |
|                         | 7118.00    | 39.69       | 90.65            | 7082.59     | -46.45       | -30.91     | -46.45     | 10.34            | 364238.59          | 565901.75         | N 32° 0' 4.85"          | W 104° 15' 14.72"        |
|                         | 7150.00    | 43.87       | 92.78            | 7106.45     | -25.15       | -31.56     | -25.15     | 13.79            | 364237.94          | 565923.05         | N 32° 0' 4.84"          | W 104° 15' 14.48"        |
|                         | 7181.00    | 49.23       | 93.79            | 7127.76     | -2.69        | -32.86     | -2.69      | 17.45            | 364236.64          | 565945.51         | N 32° 0' 4.83"          | W 104° 15' 14.21"        |
|                         | 7213.00    | 55.20       | 93.63            | 7147.36     | 22.53        | -34.50     | 22.54      | 18.66            | 364235.01          | 565970.73         | N 32° 0' 4.81"          | W 104° 15' 13.92"        |
|                         | 7219.00    | 56.22       | 93.13            | 7150.74     | 27.48        | -34.79     | 27.48      | 18.32            | 364234.72          | 565975.68         | N 32° 0' 4.81"          | W 104° 15' 13.86"        |
| FTP                     | 7244.00    | 60.49       | 91.19            | 7163.85     | 48.74        | -35.58     | 48.75      | 18.32            | 364233.92          | 565996.94         | N 32° 0' 4.80"          | W 104° 15' 13.62"        |
|                         | 7272.00    | 64.39       | 89.16            | 7176.80     | 73.56        | -35.65     | 73.56      | 15.34            | 364233.85          | 566021.76         | N 32° 0' 4.80"          | W 104° 15' 13.33"        |
|                         | 7306.00    | 68.89       | 86.69            | 7190.28     | 104.76       | -35.06     | 104.76     | 13.30            | 364234.44          | 566052.95         | N 32° 0' 4.81"          | W 104° 15' 12.97"        |
|                         | 7338.00    | 72.69       | 88.91            | 7200.81     | 134.97       | -34.43     | 134.97     | 11.89            | 364235.07          | 566083.16         | N 32° 0' 4.81"          | W 104° 15' 12.62"        |
|                         | 7369.00    | 77.70       | 88.37            | 7208.73     | 164.92       | -33.98     | 164.93     | 16.22            | 364235.52          | 566113.11         | N 32° 0' 4.82"          | W 104° 15' 12.27"        |
|                         | 7400.00    | 82.13       | 89.06            | 7214.16     | 195.43       | -33.56     | 195.44     | 14.32            | 364235.94          | 566143.62         | N 32° 0' 4.82"          | W 104° 15' 11.91"        |
|                         | 7433.00    | 85.73       | 88.31            | 7217.64     | 228.23       | -32.81     | 228.24     | 11.14            | 364236.69          | 566176.42         | N 32° 0' 4.83"          | W 104° 15' 11.53"        |
|                         | 7462.00    | 88.00       | 88.24            | 7219.23     | 257.18       | -31.94     | 257.18     | -7.83            | 364237.56          | 566205.35         | N 32° 0' 4.84"          | W 104° 15' 11.20"        |
|                         | 7499.00    | 89.21       | 87.92            | 7220.13     | 294.14       | -30.70     | 294.15     | 3.38             | 364238.80          | 566242.32         | N 32° 0' 4.85"          | W 104° 15' 10.77"        |
|                         | 7599.00    | 92.24       | 91.10            | 7218.87     | 394.11       | -29.84     | 394.11     | 4.39             | 364239.66          | 566342.27         | N 32° 0' 4.86"          | W 104° 15' 9.61"         |
|                         | 7694.00    | 89.69       | 92.23            | 7217.27     | 489.04       | -32.60     | 489.05     | 2.94             | 364236.90          | 566437.20         | N 32° 0' 4.83"          | W 104° 15' 8.50"         |
|                         | 7788.00    | 89.45       | 91.07            | 7217.97     | 583.00       | -35.31     | 583.00     | 1.26             | 364234.19          | 566531.15         | N 32° 0' 4.80"          | W 104° 15' 7.41"         |
|                         | 7883.00    | 89.48       | 90.27            | 7218.66     | 677.99       | -36.42     | 677.99     | 0.84             | 364233.08          | 566626.13         | N 32° 0' 4.79"          | W 104° 15' 6.31"         |
|                         | 7977.00    | 89.35       | 87.95            | 7219.82     | 771.97       | -34.96     | 771.97     | 2.47             | 364234.54          | 566720.10         | N 32° 0' 4.80"          | W 104° 15' 5.22"         |
|                         | 8072.00    | 89.31       | 88.63            | 7220.93     | 866.92       | -32.13     | 866.92     | 0.72             | 364237.38          | 566815.04         | N 32° 0' 4.83"          | W 104° 15' 4.12"         |
|                         | 8166.00    | 89.55       | 88.81            | 7221.86     | 960.89       | -30.03     | 960.89     | 0.32             | 364239.48          | 566909.00         | N 32° 0' 4.85"          | W 104° 15' 3.02"         |
|                         | 8260.00    | 89.97       | 88.73            | 7222.26     | 1054.87      | -28.01     | 1054.87    | 0.45             | 364241.49          | 567002.97         | N 32° 0' 4.87"          | W 104° 15' 1.93"         |
|                         | 8354.00    | 90.28       | 88.64            | 7222.05     | 1148.84      | -25.85     | 1148.84    | 0.34             | 364243.65          | 567096.94         | N 32° 0' 4.89"          | W 104° 15' 0.84"         |
|                         | 8449.00    | 90.21       | 88.30            | 7221.65     | 1243.81      | -23.31     | 1243.81    | 0.37             | 364246.19          | 567191.89         | N 32° 0' 4.92"          | W 104° 14' 59.74"        |
|                         | 8544.00    | 90.41       | 86.67            | 7221.13     | 1338.77      | -20.80     | 1338.77    | 0.44             | 364248.70          | 567286.85         | N 32° 0' 4.94"          | W 104° 14' 58.64"        |
|                         | 8639.00    | 90.62       | 89.14            | 7220.28     | 1433.75      | -18.99     | 1433.75    | 0.54             | 364250.51          | 567381.82         | N 32° 0' 4.96"          | W 104° 14' 57.53"        |
|                         | 8733.00    | 90.34       | 87.96            | 7219.49     | 1527.72      | -16.61     | 1527.72    | 1.29             | 364252.89          | 567475.78         | N 32° 0' 4.88"          | W 104° 14' 56.44"        |
|                         | 8827.00    | 89.72       | 86.52            | 7219.44     | 1621.67      | -13.72     | 1621.67    | 0.89             | 364255.78          | 567569.72         | N 32° 0' 5.01"          | W 104° 14' 55.35"        |
|                         | 8921.00    | 89.42       | 89.50            | 7220.15     | 1715.65      | -12.10     | 1715.65    | 1.09             | 364257.40          | 567663.70         | N 32° 0' 5.02"          | W 104° 14' 54.26"        |
|                         | 9015.00    | 89.52       | 90.32            | 7221.02     | 1809.65      | -11.95     | 1809.65    | 0.88             | 364257.55          | 567757.68         | N 32° 0' 5.02"          | W 104° 14' 53.17"        |
|                         | 9110.00    | 88.35       | 90.53            | 7222.78     | 1904.63      | -12.65     | 1904.63    | 1.25             | 364256.85          | 567852.65         | N 32° 0' 5.02"          | W 104° 14' 52.07"        |
|                         | 9204.00    | 87.87       | 90.34            | 7225.88     | 1998.57      | -13.37     | 1998.57    | 0.55             | 364256.13          | 567946.59         | N 32° 0' 5.01"          | W 104° 14' 50.97"        |

| Comments                   | MD<br>(ft) | Incl<br>(°) | Azim Grid<br>(°) | TVD<br>(ft) | VSEC<br>(ft) | NS<br>(ft) | EW<br>(ft) | DLS<br>(°/100ft) | Northing<br>(ftUS) | Easting<br>(ftUS) | Latitude<br>(N/S ° ' ") | Longitude<br>(E/W ° ' ") |
|----------------------------|------------|-------------|------------------|-------------|--------------|------------|------------|------------------|--------------------|-------------------|-------------------------|--------------------------|
|                            | 9299.00    | 88.11       | 90.27            | 7229.21     | 2093.51      | -13.87     | 2093.51    | 0.26             | 364255.63          | 568041.52         | N 32 0 5.00             | W 104 14 49.87           |
|                            | 9393.00    | 87.25       | 89.72            | 7233.02     | 2187.44      | -13.87     | 2187.44    | 1.09             | 364255.64          | 568135.43         | N 32 0 5.00             | W 104 14 48.78           |
|                            | 9488.00    | 88.28       | 88.71            | 7236.72     | 2282.35      | -12.56     | 2282.35    | 1.52             | 364256.94          | 568230.34         | N 32 0 5.01             | W 104 14 47.68           |
|                            | 9582.00    | 87.35       | 87.99            | 7240.31     | 2376.24      | -9.86      | 2376.24    | 1.25             | 364259.64          | 568324.22         | N 32 0 5.04             | W 104 14 46.59           |
|                            | 9676.00    | 87.52       | 88.09            | 7244.52     | 2470.09      | -6.65      | 2470.09    | 0.21             | 364262.85          | 568418.07         | N 32 0 5.07             | W 104 14 45.50           |
|                            | 9771.00    | 87.32       | 88.10            | 7248.79     | 2564.95      | -3.49      | 2564.95    | 0.21             | 364266.01          | 568512.91         | N 32 0 5.10             | W 104 14 44.40           |
|                            | 9866.00    | 87.73       | 89.04            | 7252.89     | 2659.83      | -1.13      | 2659.83    | 1.08             | 364268.37          | 568607.78         | N 32 0 5.12             | W 104 14 43.30           |
|                            | 9958.00    | 87.59       | 89.91            | 7256.65     | 2751.74      | -0.28      | 2751.74    | 0.96             | 364269.22          | 568699.69         | N 32 0 5.13             | W 104 14 42.23           |
|                            | 10052.00   | 87.39       | 90.30            | 7260.77     | 2845.65      | -0.46      | 2845.65    | 0.47             | 364269.04          | 568793.59         | N 32 0 5.13             | W 104 14 41.14           |
|                            | 10146.00   | 87.18       | 90.96            | 7265.22     | 2939.54      | -1.49      | 2939.54    | 0.74             | 364268.01          | 568887.47         | N 32 0 5.12             | W 104 14 40.05           |
|                            | 10241.00   | 87.90       | 91.65            | 7269.30     | 3034.43      | -3.65      | 3034.43    | 1.05             | 364265.85          | 568982.35         | N 32 0 5.10             | W 104 14 38.95           |
|                            | 10335.00   | 87.59       | 92.57            | 7273.00     | 3128.29      | -7.11      | 3128.29    | 1.03             | 364262.39          | 569076.20         | N 32 0 5.06             | W 104 14 37.86           |
|                            | 10429.00   | 89.11       | 90.97            | 7275.70     | 3222.20      | -10.01     | 3222.20    | 2.35             | 364259.49          | 569170.10         | N 32 0 5.03             | W 104 14 36.77           |
|                            | 10523.00   | 89.21       | 89.48            | 7277.08     | 3316.19      | -10.38     | 3316.19    | 1.59             | 364259.12          | 569264.08         | N 32 0 5.03             | W 104 14 35.67           |
|                            | 10618.00   | 89.52       | 88.60            | 7278.13     | 3411.17      | -8.79      | 3411.17    | 0.98             | 364260.71          | 569359.05         | N 32 0 5.04             | W 104 14 34.57           |
|                            | 10715.00   | 89.83       | 88.32            | 7278.68     | 3508.13      | -6.18      | 3508.13    | 0.43             | 364263.32          | 569456.01         | N 32 0 5.07             | W 104 14 33.44           |
|                            | 10810.00   | 89.00       | 87.53            | 7279.65     | 3603.07      | -2.82      | 3603.07    | 1.14             | 364266.68          | 569550.93         | N 32 0 5.10             | W 104 14 32.34           |
|                            | 10904.00   | 87.63       | 87.88            | 7282.42     | 3696.95      | 0.86       | 3696.95    | 1.48             | 364270.36          | 569644.81         | N 32 0 5.13             | W 104 14 31.25           |
|                            | 10999.00   | 88.80       | 87.31            | 7285.38     | 3791.82      | 4.84       | 3791.82    | 1.37             | 364274.34          | 569739.67         | N 32 0 5.17             | W 104 14 30.15           |
|                            | 11093.00   | 87.08       | 87.13            | 7288.76     | 3885.64      | 9.40       | 3885.64    | 1.84             | 364278.90          | 569833.49         | N 32 0 5.22             | W 104 14 29.06           |
|                            | 11188.00   | 86.01       | 86.26            | 7294.48     | 3980.31      | 14.86      | 3980.31    | 1.45             | 364284.36          | 569928.14         | N 32 0 5.27             | W 104 14 27.96           |
|                            | 11283.00   | 84.70       | 86.03            | 7302.17     | 4074.78      | 21.23      | 4074.78    | 1.40             | 364290.73          | 570022.61         | N 32 0 5.33             | W 104 14 26.86           |
|                            | 11374.00   | 83.87       | 86.85            | 7311.24     | 4165.16      | 26.85      | 4165.15    | 1.28             | 364296.35          | 570112.97         | N 32 0 5.39             | W 104 14 25.82           |
|                            | 11470.00   | 83.56       | 87.49            | 7321.75     | 4260.46      | 31.56      | 4260.46    | 0.74             | 364301.06          | 570208.27         | N 32 0 5.43             | W 104 14 24.71           |
|                            | 11564.00   | 83.00       | 88.87            | 7332.75     | 4353.77      | 34.53      | 4353.76    | 1.58             | 364304.03          | 570301.56         | N 32 0 5.46             | W 104 14 23.62           |
|                            | 11659.00   | 83.56       | 89.27            | 7343.86     | 4448.10      | 36.06      | 4448.10    | 0.72             | 364305.56          | 570395.89         | N 32 0 5.48             | W 104 14 22.53           |
| LTP                        | 11742.00   | 83.25       | 89.71            | 7353.39     | 4530.55      | 36.79      | 4530.55    | 0.65             | 364306.29          | 570478.33         | N 32 0 5.48             | W 104 14 21.57           |
|                            | 11753.00   | 83.21       | 89.77            | 7354.69     | 4541.47      | 36.84      | 4541.47    | 0.65             | 364306.34          | 570489.25         | N 32 0 5.48             | W 104 14 21.44           |
|                            | 11847.00   | 83.42       | 89.29            | 7365.63     | 4634.83      | 37.61      | 4634.83    | 0.55             | 364307.11          | 570582.60         | N 32 0 5.49             | W 104 14 20.36           |
| Final Survey 11-March-2015 | 11932.00   | 82.48       | 89.49            | 7376.07     | 4719.18      | 38.51      | 4719.18    | 1.13             | 364308.00          | 570666.94         | N 32 0 5.50             | W 104 14 19.38           |
| Projection to Bit          | 12011.00   | 82.48       | 89.49            | 7386.41     | 4797.50      | 39.20      | 4797.50    | 0.00             | 364308.70          | 570745.25         | N 32 0 5.51             | W 104 14 18.47           |

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 0 \*\*\* 3-D 95.000% Confidence 2.7955 sigma  
Survey Program:

| Description | Part | MD From<br>(ft) | MD To<br>(ft) | EOU Freq<br>(ft) | Hole Size<br>(in) | Casing Diameter<br>(in) | Survey Tool Type        | Borehole / Survey                                       |
|-------------|------|-----------------|---------------|------------------|-------------------|-------------------------|-------------------------|---------------------------------------------------------|
|             | 1    | 0.000           | 28.000        | 1/98.425         | 30.000            | 30.000                  | SLB_MWD-POOR-Depth Only | Original Borehole / Cimarex Robinson 36 State #1H XEM + |
|             | 1    | 28.000          | 28.000        | Act Stns         | 30.000            | 30.000                  | SLB_MWD-POOR-Depth Only | Original Borehole / Cimarex Robinson 36 State #1H XEM + |
|             | 1    | 28.000          | 6638.000      | Act Stns         | 30.000            | 30.000                  | SLB_MWD-POOR            | Original Borehole / Cimarex Robinson 36 State #1H XEM + |

| Comments | MD<br>(ft) | Incl<br>(°) | Azim Grid<br>(°) | TVD<br>(ft) | VSEC<br>(ft) | NS<br>(ft) | EW<br>(ft) | DLS<br>(°/100ft) | Northing<br>(ftUS) | Easting<br>(ftUS) | Latitude<br>(N/S ° ' ")                                    | Longitude<br>(E/W ° ' ") |
|----------|------------|-------------|------------------|-------------|--------------|------------|------------|------------------|--------------------|-------------------|------------------------------------------------------------|--------------------------|
|          |            | 1           | 6638.000         | 11932.000   | Act Stns     | 30.000     | 30.000     | SLB_MWD-STD      |                    |                   | Original Borehole / Cimarex<br>Robinson 36 State #1H XEM + |                          |
|          |            | 1           | 11932.000        | 12011.000   | Act Stns     | 30.000     | 30.000     | SLB_BLIND+TREND  |                    |                   | Original Borehole / Cimarex<br>Robinson 36 State #1H XEM + |                          |