

# Provide Signature Page for Directional Survey

30-015-44731

Schlumberger

## Oxy Corral Fly 35-26 Federal Com 36H Gyro+IFR 0-20483 MD Survey Geodetic Report (Def Survey)

Report Date: December 29, 2018 - 01:16 AM  
Client: Oxy  
Field: NM Eddy County (NAD 83)  
Structure / Slot: Oxy Corral Fly 35-26 Federal Com 36H / Oxy Corral Fly 35-26 Federal Com 36H  
Well: Oxy Corral Fly 35-26 Federal Com 36H  
Borehole: Original Borehole  
UW / APUS: H&P 363 / Unknown  
Survey Name: Oxy Corral Fly 35-26 Federal Com 36H Gyro+IFR 0-20483 MD  
Survey Date: November 20, 2018  
Tort / AHD / DD / ERD Ratio: 219.117' / 11308.221 ft / 6.690 / 1.091  
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet  
Location Lat / Long: N 32° 9' 55.22981", W 103° 57' 2.28122"  
Location Grid NE Y/X: N 424096 850 NUS, E 659756 830 NUS  
CRS Grid Convergence Angle: 0.2037°  
Grid Scale Factor: 0.99992515  
Version / Patch: 2.10.753.0

Survey / DLS Computation: Minimum Curvature / Lubinski  
Vertical Section Azimuth: 4.320° (Grid North)  
Vertical Section Origin: 0.000 ft, 0.000 ft  
TVD Reference Datum: RKB - 26.5'  
TVD Reference Elevation: 3098.700 ft above MSL  
Seabed / Ground Elevation: 3072.200 ft above MSL  
Magnetic Declination: 6.896°  
Total Gravity Field Strength: 988.4533 mgn (9.80665 Based)  
Gravity Model: GARM  
Total Magnetic Field Strength: 47938.900 nT  
Magnetic Dip Angle: 59.893°  
Declination Date: December 13, 2018  
Magnetic Declination Model: IFR  
North Reference: Grid North  
Grid Convergence Used: 0.2037°  
Total Corr Mag North-Grid: 6.6923°  
North: Local Coord Referenced To: Structure Reference Point

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ARTESIA DISTRICT

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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>(ft/100ft) | Northing<br>(ftUS) | Easting<br>(ftUS)                 | Latitude<br>(N/S ° ' ")          | Longitude<br>(E/W ° ' ") |
|------------|------------|-------------|------------------|-------------|--------------|------------|------------|-------------------|--------------------|-----------------------------------|----------------------------------|--------------------------|
| WRP<br>SHL | 0.00       | 0.00        | 0.00             | 0.00        | 0.00         | 0.00       | 0.00       | N/A               | 424096.86          | 659756.83                         | N 32° 9' 55.23" W 103° 57' 2.28" |                          |
|            | 26.50      | 0.00        | 0.00             | 26.50       | 0.00         | 0.00       | 0.00       | 0.00              | 424096.86          | 659756.83                         | N 32° 9' 55.23" W 103° 57' 2.28" |                          |
|            | 94.50      | 0.71        | 155.33           | 94.50       | -0.37        | -0.38      | 0.18       | 1.04              | 424096.48          | 659757.01                         | N 32° 9' 55.23" W 103° 57' 2.28" |                          |
| Last Gyro  | 180.50     | 0.63        | 168.51           | 180.49      | -1.29        | -1.33      | 0.49       | 0.20              | 424095.53          | 659757.32                         | N 32° 9' 55.22" W 103° 57' 2.28" |                          |
|            | 267.50     | 0.77        | 146.61           | 267.49      | -2.21        | -2.29      | 0.91       | 0.34              | 424094.57          | 659757.74                         | N 32° 9' 55.21" W 103° 57' 2.27" |                          |
|            | 351.50     | 0.86        | 157.41           | 351.48      | -3.34        | -3.47      | 1.53       | 0.19              | 424093.39          | 659758.36                         | N 32° 9' 55.20" W 103° 57' 2.26" |                          |
|            | 446.50     | 0.71        | 156.30           | 446.47      | -4.37        | -4.54      | 1.98       | 0.18              | 424092.32          | 659758.81                         | N 32° 9' 55.18" W 103° 57' 2.26" |                          |
|            | 545.00     | 0.44        | 161.82           | 544.96      | -5.29        | -5.46      | 2.35       | 0.28              | 424091.41          | 659759.18                         | N 32° 9' 55.18" W 103° 57' 2.25" |                          |
|            | 639.00     | 0.15        | 107.61           | 638.96      | -5.62        | -5.84      | 2.58       | 0.40              | 424091.03          | 659759.41                         | N 32° 9' 55.17" W 103° 57' 2.25" |                          |
|            | 733.00     | 0.07        | 182.96           | 732.96      | -5.71        | -5.93      | 2.69       | 0.16              | 424090.93          | 659759.52                         | N 32° 9' 55.17" W 103° 57' 2.25" |                          |
|            | 916.00     | 0.06        | 135.44           | 915.96      | -5.89        | -6.11      | 2.75       | 0.03              | 424090.75          | 659759.58                         | N 32° 9' 55.17" W 103° 57' 2.25" |                          |
|            | 1010.00    | 0.17        | 195.38           | 1009.98     | -6.05        | -6.28      | 2.75       | 0.16              | 424090.58          | 659759.58                         | N 32° 9' 55.17" W 103° 57' 2.25" |                          |
|            | 1104.00    | 0.11        | 185.00           | 1103.98     | -6.28        | -6.50      | 2.71       | 0.07              | 424090.36          | 659759.54                         | N 32° 9' 55.17" W 103° 57' 2.25" |                          |
|            | 1198.00    | 0.03        | 43.41            | 1197.98     | -6.35        | -6.58      | 2.72       | 0.14              | 424090.28          | 659759.53                         | N 32° 9' 55.16" W 103° 57' 2.25" |                          |
|            | 1292.00    | 0.17        | 219.99           | 1291.98     | -6.45        | -6.66      | 2.64       | 0.05              | 424090.20          | 659759.47                         | N 32° 9' 55.16" W 103° 57' 2.25" |                          |
|            | 1386.00    | 0.21        | 227.15           | 1385.96     | -6.69        | -6.89      | 2.43       | 0.02              | 424089.97          | 659759.26                         | N 32° 9' 55.16" W 103° 57' 2.25" |                          |
|            | 1480.00    | 0.23        | 229.81           | 1479.96     | -6.94        | -7.13      | 2.16       | 0.02              | 424089.73          | 659758.99                         | N 32° 9' 55.16" W 103° 57' 2.26" |                          |
|            | 1574.00    | 0.38        | 160.87           | 1573.88     | -7.36        | -7.54      | 2.11       | 0.39              | 424088.32          | 659758.94                         | N 32° 9' 55.16" W 103° 57' 2.26" |                          |
|            | 1668.00    | 0.53        | 147.60           | 1667.96     | -8.00        | -8.21      | 2.45       | 0.19              | 424088.68          | 659759.28                         | N 32° 9' 55.15" W 103° 57' 2.25" |                          |
|            | 1765.00    | 0.17        | 127.35           | 1764.95     | -8.44        | -8.67      | 2.80       | 0.39              | 424088.19          | 659759.63                         | N 32° 9' 55.14" W 103° 57' 2.25" |                          |
|            | 1859.00    | 0.03        | 2.64             | 1858.95     | -8.49        | -8.73      | 2.92       | 0.20              | 424088.13          | 659759.75                         | N 32° 9' 55.14" W 103° 57' 2.25" |                          |
|            | 1953.00    | 0.11        | 328.53           | 1952.95     | -8.39        | -8.63      | 2.87       | 0.09              | 424088.23          | 659759.70                         | N 32° 9' 55.14" W 103° 57' 2.25" |                          |
|            | 2048.00    | 0.03        | 41.45            | 2047.95     | -8.30        | -8.53      | 2.84       | 0.11              | 424088.33          | 659759.67                         | N 32° 9' 55.15" W 103° 57' 2.25" |                          |
|            | 2142.00    | 0.06        | 88.78            | 2141.95     | -8.27        | -8.51      | 2.90       | 0.05              | 424088.35          | 659759.73                         | N 32° 9' 55.15" W 103° 57' 2.25" |                          |
|            | 2237.00    | 0.10        | 95.91            | 2236.95     | -8.27        | -8.52      | 3.04       | 0.04              | 424088.34          | 659759.87                         | N 32° 9' 55.15" W 103° 57' 2.25" |                          |
|            | 2331.00    | 0.09        | 158.19           | 2330.95     | -8.34        | -8.60      | 3.15       | 0.10              | 424088.26          | 659759.98                         | N 32° 9' 55.14" W 103° 57' 2.24" |                          |
|            | 2426.00    | 0.23        | 208.17           | 2425.95     | -8.58        | -8.84      | 3.08       | 0.20              | 424088.02          | 659759.91                         | N 32° 9' 55.14" W 103° 57' 2.25" |                          |
|            | 2520.00    | 0.15        | 132.25           | 2519.95     | -8.83        | -9.08      | 3.09       | 0.26              | 424087.78          | 659759.92                         | N 32° 9' 55.14" W 103° 57' 2.25" |                          |
|            | 2614.00    | 0.12        | 127.21           | 2613.95     | -8.96        | -9.23      | 3.26       | 0.03              | 424087.63          | 659760.08                         | N 32° 9' 55.14" W 103° 57' 2.25" |                          |
|            | 2710.00    | 0.22        | 210.66           | 2709.95     | -9.18        | -9.45      | 3.24       | 0.25              | 424087.41          | 659760.07                         | N 32° 9' 55.14" W 103° 57' 2.24" |                          |
|            | 2810.00    | 0.12        | 117.07           | 2809.95     | -9.38        | -9.66      | 3.24       | 0.26              | 424087.20          | 659760.07                         | N 32° 9' 55.14" W 103° 57' 2.24" |                          |
|            | 2904.00    | 0.30        | 128.62           | 2903.95     | -9.58        | -9.86      | 3.52       | 0.20              | 424087.00          | 659760.35                         | N 32° 9' 55.13" W 103° 57' 2.24" |                          |
|            | 2999.00    | 0.18        | 73.48            | 2998.95     | -9.65        | -9.97      | 3.85       | 0.26              | 424086.89          | 659760.68                         | N 32° 9' 55.13" W 103° 57' 2.24" |                          |
|            | 3093.00    | 0.09        | 63.80            | 3092.95     | -9.56        | -9.80      | 4.06       | 0.10              | 424086.96          | 659760.89                         | N 32° 9' 55.13" W 103° 57' 2.23" |                          |
|            | 3188.00    | 0.17        | 254.84           | 3187.95     | -9.57        | -9.90      | 3.99       | 0.27              | 424086.86          | 659760.82                         | N 32° 9' 55.13" W 103° 57' 2.23" |                          |
|            | 3282.00    | 0.23        | 86.72            | 3281.95     | -9.58        | -9.93      | 4.05       | 0.42              | 424086.84          | 659760.82                         | N 32° 9' 55.13" W 103° 57' 2.23" |                          |
|            | 3378.00    | 0.88        | 65.31            | 3375.95     | -9.22        | -9.61      | 4.89       | 0.71              | 424087.25          | 659761.72                         | N 32° 9' 55.13" W 103° 57' 2.22" |                          |
|            | 3471.00    | 1.47        | 62.67            | 3470.92     | -8.22        | -8.75      | 6.64       | 0.58              | 424088.11          | 659763.47                         | N 32° 9' 55.14" W 103° 57' 2.20" |                          |
|            | 3565.00    | 2.01        | 60.13            | 3564.88     | -6.67        | -7.37      | 9.14       | 0.52              | 424088.49          | 659765.97                         | N 32° 9' 55.16" W 103° 57' 2.18" |                          |
| 3661.00    | 2.51       | 62.66       | 3660.81          | -4.62       | -5.57        | 12.46      | 0.14       | 424091.28         | 659769.29          | N 32° 9' 55.17" W 103° 57' 2.14"  |                                  |                          |
| 3755.00    | 2.84       | 62.99       | 3754.61          | -2.61       | -3.64        | 18.22      | 0.53       | 424093.22         | 659773.05          | N 32° 9' 55.19" W 103° 57' 2.09"  |                                  |                          |
| 3849.00    | 2.80       | 60.78       | 3848.61          | -0.02       | -1.54        | 20.15      | 0.20       | 424095.32         | 659776.88          | N 32° 9' 55.21" W 103° 57' 2.05"  |                                  |                          |
| 3944.00    | 3.14       | 58.62       | 3943.48          | 2.79        | 0.95         | 24.40      | 0.38       | 424097.81         | 659781.23          | N 32° 9' 55.24" W 103° 57' 2.00"  |                                  |                          |
| 4038.00    | 3.12       | 59.67       | 4037.34          | 5.74        | 3.58         | 28.81      | 0.06       | 424100.44         | 659785.63          | N 32° 9' 55.26" W 103° 57' 1.95"  |                                  |                          |
| 4132.00    | 3.01       | 57.06       | 4131.29          | 8.69        | 6.22         | 33.08      | 0.19       | 424103.08         | 659789.91          | N 32° 9' 55.29" W 103° 57' 1.90"  |                                  |                          |
| 4233.00    | 3.04       | 56.31       | 4232.06          | 11.95       | 9.14         | 37.54      | 0.05       | 424106.00         | 659794.37          | N 32° 9' 55.32" W 103° 57' 1.84"  |                                  |                          |
| 4328.00    | 3.25       | 58.78       | 4328.92          | 15.08       | 11.94        | 41.94      | 0.26       | 424108.80         | 659798.76          | N 32° 9' 55.35" W 103° 57' 1.79"  |                                  |                          |
| 4422.00    | 3.24       | 57.31       | 4420.77          | 18.21       | 14.75        | 46.45      | 0.09       | 424111.61         | 659803.28          | N 32° 9' 55.37" W 103° 57' 1.74"  |                                  |                          |
| 4516.00    | 3.59       | 54.92       | 4514.60          | 21.68       | 17.88        | 51.10      | 0.40       | 424114.74         | 659807.92          | N 32° 9' 55.40" W 103° 57' 1.69"  |                                  |                          |
| 4612.00    | 3.80       | 55.89       | 4610.40          | 25.56       | 21.39        | 55.19      | 0.23       | 424118.25         | 659813.01          | N 32° 9' 55.44" W 103° 57' 1.63"  |                                  |                          |
| 4707.00    | 4.19       | 57.68       | 4705.17          | 29.59       | 25.01        | 61.73      | 0.43       | 424121.87         | 659818.55          | N 32° 9' 55.48" W 103° 57' 1.58"  |                                  |                          |
| 4801.00    | 4.48       | 61.77       | 4798.90          | 33.81       | 28.58        | 67.85      | 0.44       | 424125.43         | 659824.68          | N 32° 9' 55.51" W 103° 57' 1.49"  |                                  |                          |
| 4906.00    | 5.24       | 63.12       | 4893.56          | 37.84       | 32.28        | 74.97      | 0.83       | 424129.14         | 659831.80          | N 32° 9' 55.55" W 103° 57' 1.41"  |                                  |                          |
| 4990.00    | 5.94       | 63.96       | 4887.11          | 42.52       | 36.38        | 83.17      | 0.75       | 424133.22         | 659840.00          | N 32° 9' 55.59" W 103° 57' 1.31"  |                                  |                          |
| 5088.00    | 7.18       | 66.70       | 5082.48          | 47.81       | 40.91        | 93.15      | 1.33       | 424137.77         | 659849.97          | N 32° 9' 55.63" W 103° 57' 1.20"  |                                  |                          |
| 5180.00    | 8.68       | 67.70       | 5175.58          | 53.72       | 45.93        | 105.11     | 1.60       | 424142.79         | 659861.93          | N 32° 9' 55.68" W 103° 57' 1.06"  |                                  |                          |
| 5274.00    | 9.85       | 68.20       | 5268.38          | 60.43       | 51.61        | 119.13     | 1.25       | 424148.46         | 659875.95          | N 32° 9' 55.74" W 103° 57' 0.89"  |                                  |                          |
| 5364.00    | 10.66      | 68.48       | 5358.92          | 67.45       | 57.52        | 134.02     | 0.90       | 424154.38         | 659890.84          | N 32° 9' 55.78" W 103° 57' 0.72"  |                                  |                          |
| 5463.00    | 11.01      | 67.57       | 5449.15          | 75.70       | 64.48        | 151.28     | 0.39       | 424161.35         | 659908.10          | N 32° 9' 55.86" W 103° 57' 0.52"  |                                  |                          |
| 5558.00    | 11.61      | 67.84       | 5447.31          | 84.17       | 71.68        | 168.47     | 0.64       | 424168.54         | 659925.28          | N 32° 9' 55.93" W 103° 57' 0.32"  |                                  |                          |
| 5652.00    | 12.19      | 67.07       | 5639.29          | 93.05       | 79.24        | 186.32     | 0.62       | 424176.09         | 659943.13          | N 32° 9' 56.01" W 103° 57' 0.11"  |                                  |                          |
| 5747.00    | 12.38      | 66.23       | 5732.11          | 102.43      | 87.25        | 204.87     | 0.27       | 424184.10         | 659961.69          | N 32° 9' 56.09" W 103° 56' 59.89" |                                  |                          |
| 5841.00    | 11.83      | 64.30       | 5826.00          | 112.04      | 95.53        | 222.85     | 0.64       | 424192.38         | 659979.68          | N 32° 9' 56.17" W 103° 56' 59.68" |                                  |                          |
| 5936.00    | 12.11      | 63.99       | 5915.94          | 121.68      | 104.08       | 240.47     | 0.20       | 424200.91         | 659997.28          | N 32° 9' 56.25" W 103° 56' 59.48" |                                  |                          |
| 6032.00    | 11.67      | 58.81       | 6100.89          | 142.97      | 122.63       | 274.65     | 0.60       | 424218.48         | 660031.46          | N 32° 9' 56.43" W 103° 56' 59.08" |                                  |                          |
| 6128.00    | 11.56      | 57.34       | 6193.95          | 154.26      | 132.73       | 290.90     | 0.35       | 424229.58         | 660047.70          | N 32° 9' 56.53" W 103° 56' 58.89" |                                  |                          |
| 6219.00    | 11.91      | 55.65       | 6285.98          | 165.99      | 143.28       | 306.93     | 0.62       | 424240.13         | 660063.64          | N 32° 9' 56.64" W 103° 56' 58.71" |                                  |                          |
| 6313.00    | 12.14      | 55.12       | 6378.90          | 178.43      | 154.53       | 323.12     | 0.27       | 424251.37         | 660079.93          | N 32° 9' 56.75" W 103° 56' 58.52" |                                  |                          |
| 6408.00    | 11.80      | 53.78       | 6471.82          | 191.11      | 166.03       | 339.22     | 0.39       | 424262.87         | 660098.02          | N 32° 9' 56.86" W 103° 56' 58.33" |                                  |                          |
| 6504.00    | 11.84      | 52.69       | 6564.78          | 203.95      | 177.72       | 354.87     | 0.24       | 424274.57         | 660116.87          | N 32° 9' 56.98" W 103° 56' 58.15" |                                  |                          |
| 6602.00    | 11.26      | 49.21       | 6656.88          | 216.87      | 189.57       | 369.50     | 0.95       | 424286.42         | 660128.30          | N 32° 9' 57.09" W 103° 56' 57.97" |                                  |                          |
| 6709.00    | 10.58      | 50.32       | 6732.48          | 227.10      | 199.00       | 380.63     | 0.97       | 424295.84         | 660137.44          | N 32° 9' 57.19" W 103° 56' 57.84" |                                  |                          |
| 6804.00    | 9.91       | 53.16       | 6825.97          | 238.53      | 209.46       | 391.88     | 0.87       | 424306.30         | 660150.68          | N 32° 9' 57.29" W 103° 56' 57.69" |                                  |                          |
| 6904.00    | 9.88       | 54.34       | 6916.70          | 248.57      | 218.58       | 406.31     | 1.01       | 424315.43         | 660163.11          | N 32° 9' 57.38" W 103° 56' 57.55" |                                  |                          |
| 7022.00    | 7.77       | 57.75       | 7011.69          | 257.07      | 226.25       | 417.65     | 1.39       | 424323.09         | 660174.44          | N 32° 9' 57.45" W 103° 56' 57.41" |                                  |                          |
| 7147.00    | 6.79       | 62.70       | 7105.93          | 263.84      | 232.25       | 4          |            |                   |                    |                                   |                                  |                          |

| Comments                                         | MD<br>(ft) | Incl<br>(°) | Azin<br>(°) | Grid<br>(ft) | TVD<br>(ft) | VSEC<br>(ft) | NS<br>(ft) | EW<br>(ft) | DLS<br>(ft/100ft) | Northing<br>(ft) | Easting<br>(ft)                    | Latitude<br>(N/S ° ' ") | Longitude<br>(E/W ° ' ") |
|--------------------------------------------------|------------|-------------|-------------|--------------|-------------|--------------|------------|------------|-------------------|------------------|------------------------------------|-------------------------|--------------------------|
|                                                  | 7430.00    | 5.63        | 83.59       | 7387.50      | 274.87      | 241.30       | 454.89     | 1.05       | 424338.15         | 660211.49        | N 32° 8' 57.60" W 103° 56' 56.95"  |                         |                          |
|                                                  | 7524.00    | 6.32        | 88.87       | 7480.99      | 276.13      | 241.83       | 464.45     | 1.01       | 424338.87         | 660221.24        | N 32° 9' 57.81" W 103° 56' 58.87"  |                         |                          |
|                                                  | 7619.00    | 6.98        | 98.64       | 7575.35      | 278.10      | 240.98       | 475.38     | 1.27       | 424337.82         | 660232.18        | N 32° 9' 57.60" W 103° 56' 58.74"  |                         |                          |
|                                                  | 7713.00    | 6.67        | 95.10       | 7668.89      | 275.60      | 239.83       | 486.47     | 0.96       | 424336.47         | 660243.26        | N 32° 9' 57.58" W 103° 56' 58.61"  |                         |                          |
|                                                  | 7808.00    | 6.47        | 90.07       | 7763.07      | 275.48      | 239.14       | 497.32     | 0.64       | 424335.98         | 660254.11        | N 32° 9' 57.58" W 103° 56' 58.49"  |                         |                          |
|                                                  | 7902.00    | 6.05        | 92.34       | 7856.51      | 276.98      | 238.03       | 507.56     | 0.52       | 424335.77         | 660264.35        | N 32° 9' 57.58" W 103° 56' 58.37"  |                         |                          |
|                                                  | 7996.00    | 7.66        | 88.89       | 7949.83      | 277.14      | 238.74       | 518.78     | 1.74       | 424335.56         | 660275.57        | N 32° 9' 57.57" W 103° 56' 58.24"  |                         |                          |
|                                                  | 8091.00    | 9.06        | 77.92       | 8043.83      | 278.74      | 240.31       | 532.42     | 2.34       | 424337.18         | 660288.21        | N 32° 9' 57.59" W 103° 56' 58.08"  |                         |                          |
|                                                  | 8185.00    | 11.11       | 68.57       | 8136.37      | 285.76      | 245.17       | 548.08     | 2.78       | 424342.01         | 660304.88        | N 32° 9' 57.64" W 103° 56' 55.89"  |                         |                          |
|                                                  | 8280.00    | 12.11       | 63.93       | 8229.43      | 294.78      | 252.90       | 565.57     | 1.44       | 424349.74         | 660322.35        | N 32° 9' 57.71" W 103° 56' 55.69"  |                         |                          |
|                                                  | 8374.00    | 11.67       | 61.51       | 8321.42      | 304.92      | 261.76       | 582.78     | 0.71       | 424358.60         | 660339.56        | N 32° 9' 57.80" W 103° 56' 55.49"  |                         |                          |
|                                                  | 8469.00    | 11.55       | 60.08       | 8414.47      | 315.48      | 271.09       | 599.47     | 0.33       | 424367.93         | 660356.25        | N 32° 9' 57.89" W 103° 56' 55.30"  |                         |                          |
|                                                  | 8563.00    | 11.83       | 60.89       | 8506.52      | 326.08      | 280.47       | 615.04     | 0.35       | 424377.31         | 660372.82        | N 32° 9' 57.98" W 103° 56' 55.10"  |                         |                          |
|                                                  | 8658.00    | 10.29       | 64.77       | 8599.76      | 335.63      | 288.83       | 632.23     | 1.80       | 424385.67         | 660389.01        | N 32° 9' 58.07" W 103° 56' 54.91"  |                         |                          |
|                                                  | 8752.00    | 9.65        | 70.44       | 8692.34      | 342.96      | 295.04       | 647.25     | 1.25       | 424391.88         | 660404.03        | N 32° 9' 58.13" W 103° 56' 54.74"  |                         |                          |
|                                                  | 8846.00    | 8.56        | 79.39       | 8785.16      | 347.95      | 298.97       | 661.55     | 1.90       | 424395.81         | 660418.33        | N 32° 9' 58.16" W 103° 56' 54.57"  |                         |                          |
|                                                  | 8941.00    | 8.75        | 82.19       | 8879.08      | 351.29      | 301.25       | 675.65     | 0.49       | 424398.09         | 660432.43        | N 32° 9' 58.19" W 103° 56' 54.41"  |                         |                          |
|                                                  | 9035.00    | 8.12        | 78.10       | 8972.06      | 354.65      | 303.58       | 689.23     | 0.93       | 424400.43         | 660446.01        | N 32° 9' 58.21" W 103° 56' 54.25"  |                         |                          |
|                                                  | 9129.00    | 7.76        | 73.23       | 9065.16      | 358.79      | 306.79       | 701.81     | 0.81       | 424403.63         | 660458.58        | N 32° 9' 58.24" W 103° 56' 54.10"  |                         |                          |
|                                                  | 9224.00    | 7.31        | 68.66       | 9159.34      | 363.71      | 310.84       | 713.58     | 0.79       | 424407.68         | 660470.35        | N 32° 9' 58.28" W 103° 56' 53.97"  |                         |                          |
|                                                  | 9318.00    | 7.56        | 81.03       | 9252.56      | 367.72      | 313.99       | 725.28     | 1.72       | 424410.82         | 660482.03        | N 32° 9' 58.31" W 103° 56' 53.83"  |                         |                          |
|                                                  | 9412.00    | 7.53        | 84.49       | 9345.74      | 370.20      | 315.54       | 737.49     | 0.48       | 424412.30         | 660494.27        | N 32° 9' 58.33" W 103° 56' 53.69"  |                         |                          |
|                                                  | 9491.00    | 7.71        | 83.12       | 9424.04      | 372.11      | 318.67       | 747.91     | 0.32       | 424413.51         | 660504.88        | N 32° 9' 58.34" W 103° 56' 53.57"  |                         |                          |
|                                                  | 9541.00    | 8.07        | 75.23       | 9517.63      | 377.33      | 320.38       | 758.12     | 0.87       | 424417.22         | 660524.89        | N 32° 9' 58.37" W 103° 56' 53.33"  |                         |                          |
|                                                  | 9736.00    | 17.62       | 30.73       | 9665.34      | 392.35      | 334.39       | 782.01     | 13.93      | 424431.23         | 660538.78        | N 32° 9' 58.51" W 103° 56' 53.17"  |                         |                          |
|                                                  | 9830.00    | 21.89       | 19.70       | 9753.88      | 421.86      | 363.00       | 795.15     | 5.84       | 424459.83         | 660551.91        | N 32° 9' 58.79" W 103° 56' 53.02"  |                         |                          |
|                                                  | 9925.00    | 22.85       | 20.58       | 9841.79      | 458.50      | 398.80       | 807.54     | 1.27       | 424493.83         | 660564.31        | N 32° 9' 58.13" W 103° 56' 52.87"  |                         |                          |
|                                                  | 10020.00   | 28.03       | 10.45       | 9927.59      | 498.45      | 436.06       | 818.08     | 7.10       | 424532.89         | 660574.85        | N 32° 9' 58.52" W 103° 56' 52.87"  |                         |                          |
|                                                  | 10114.00   | 37.69       | 7.99        | 10006.46     | 547.21      | 486.36       | 828.11     | 10.37      | 424583.18         | 660582.87        | N 32° 10' 0.01" W 103° 56' 52.65"  |                         |                          |
|                                                  | 10209.00   | 44.79       | 9.68        | 10077.85     | 609.59      | 548.19       | 835.78     | 7.56       | 424845.01         | 660592.55        | N 32° 10' 0.62" W 103° 56' 52.54"  |                         |                          |
|                                                  | 10304.00   | 50.97       | 6.36        | 10141.54     | 679.86      | 617.93       | 845.51     | 7.00       | 424714.74         | 660602.27        | N 32° 10' 1.31" W 103° 56' 52.42"  |                         |                          |
|                                                  | 10398.00   | 59.64       | 1.53        | 10195.02     | 757.03      | 694.93       | 858.65     | 10.14      | 424791.74         | 660607.41        | N 32° 10' 2.08" W 103° 56' 52.36"  |                         |                          |
| Wolfcamp<br>Interseccion<br>340' FSL<br>Crossing | 10454.11   | 60.51       | 1.63        | 10228.00     | 814.26      | 752.20       | 852.23     | 1.32       | 424849.01         | 660608.99        | N 32° 10' 2.84" W 103° 56' 52.34"  |                         |                          |
|                                                  | 10492.00   | 60.88       | 1.68        | 10241.85     | 838.56      | 776.51       | 852.93     | 1.32       | 424873.32         | 660609.70        | N 32° 10' 2.88" W 103° 56' 52.33"  |                         |                          |
|                                                  | 10493.00   | 60.89       | 1.68        | 10242.14     | 839.43      | 777.39       | 852.96     | 1.32       | 424874.19         | 660609.72        | N 32° 10' 2.89" W 103° 56' 52.33"  |                         |                          |
|                                                  | 10587.00   | 71.15       | 2.41        | 10280.29     | 925.13      | 863.10       | 856.04     | 10.94      | 424959.90         | 660612.81        | N 32° 10' 3.74" W 103° 56' 52.29"  |                         |                          |
|                                                  | 10682.00   | 73.48       | 2.31        | 10309.16     | 1015.58     | 953.53       | 859.77     | 2.43       | 425050.31         | 660616.53        | N 32° 10' 4.83" W 103° 56' 52.24"  |                         |                          |
|                                                  | 10777.00   | 85.24       | 1.34        | 10326.69     | 1108.69     | 1046.68      | 862.72     | 12.44      | 425143.46         | 660619.48        | N 32° 10' 5.56" W 103° 56' 52.20"  |                         |                          |
|                                                  | 10839.00   | 87.45       | 1.83        | 10330.64     | 1170.49     | 1108.52      | 864.43     | 3.65       | 425205.30         | 660621.20        | N 32° 10' 6.17" W 103° 56' 52.18"  |                         |                          |
|                                                  | 10921.00   | 87.35       | 0.71        | 10334.36     | 1252.29     | 1190.42      | 866.25     | 1.37       | 425287.19         | 660623.01        | N 32° 10' 6.98" W 103° 56' 52.15"  |                         |                          |
|                                                  | 11017.00   | 88.69       | 358.09      | 10337.68     | 1347.87     | 1286.34      | 865.24     | 3.06       | 425383.11         | 660622.01        | N 32° 10' 7.93" W 103° 56' 52.16"  |                         |                          |
|                                                  | 11110.00   | 89.90       | 357.09      | 10338.82     | 1440.22     | 1379.25      | 861.33     | 1.69       | 425476.01         | 660618.10        | N 32° 10' 8.85" W 103° 56' 52.20"  |                         |                          |
|                                                  | 11205.00   | 90.90       | 357.31      | 10338.16     | 1534.48     | 1474.14      | 856.69     | 1.08       | 425570.88         | 660613.45        | N 32° 10' 9.79" W 103° 56' 52.25"  |                         |                          |
|                                                  | 11300.00   | 90.14       | 355.79      | 10337.30     | 1628.60     | 1568.96      | 850.97     | 1.79       | 425685.70         | 660607.74        | N 32° 10' 10.72" W 103° 56' 52.32" |                         |                          |
|                                                  | 11394.00   | 89.38       | 353.82      | 10337.69     | 1721.30     | 1662.56      | 842.46     | 2.25       | 425759.30         | 660599.23        | N 32° 10' 11.65" W 103° 56' 52.41" |                         |                          |
|                                                  | 11489.00   | 89.45       | 351.86      | 10338.68     | 1814.39     | 1756.81      | 830.62     | 2.06       | 425853.54         | 660587.39        | N 32° 10' 12.58" W 103° 56' 52.55" |                         |                          |
|                                                  | 11584.00   | 88.73       | 353.54      | 10340.17     | 1907.43     | 1851.03      | 818.55     | 1.92       | 425947.75         | 660575.32        | N 32° 10' 13.52" W 103° 56' 52.68" |                         |                          |
|                                                  | 11678.00   | 89.66       | 354.87      | 10341.49     | 1999.95     | 1944.53      | 809.06     | 1.73       | 426041.25         | 660565.83        | N 32° 10' 14.44" W 103° 56' 52.79" |                         |                          |
|                                                  | 11773.00   | 89.59       | 354.67      | 10342.11     | 2093.64     | 2039.14      | 800.41     | 0.22       | 426135.84         | 660557.17        | N 32° 10' 15.38" W 103° 56' 52.89" |                         |                          |
|                                                  | 11777.00   | 89.59       | 354.81      | 10342.14     | 2097.58     | 2043.12      | 800.04     | 3.57       | 426139.82         | 660556.81        | N 32° 10' 15.42" W 103° 56' 52.89" |                         |                          |
|                                                  | 11868.00   | 89.52       | 358.06      | 10342.85     | 2187.70     | 2133.93      | 794.38     | 3.57       | 426230.83         | 660551.15        | N 32° 10' 16.32" W 103° 56' 52.95" |                         |                          |
|                                                  | 11962.00   | 90.07       | 1.01        | 10343.19     | 2281.37     | 2227.91      | 793.62     | 3.19       | 426324.80         | 660550.39        | N 32° 10' 17.25" W 103° 56' 52.96" |                         |                          |
|                                                  | 12057.00   | 89.83       | 0.78        | 10343.27     | 2376.20     | 2322.90      | 795.10     | 0.35       | 426419.58         | 660551.87        | N 32° 10' 18.19" W 103° 56' 52.93" |                         |                          |
| Enter Target<br>Box                              | 12135.00   | 89.83       | 0.59        | 10343.50     | 2454.04     | 2400.90      | 798.04     | 0.24       | 426497.57         | 660552.81        | N 32° 10' 18.96" W 103° 56' 52.92" |                         |                          |
|                                                  | 12151.00   | 89.83       | 0.55        | 10343.55     | 2470.00     | 2418.90      | 796.20     | 0.24       | 426513.57         | 660552.96        | N 32° 10' 19.12" W 103° 56' 52.92" |                         |                          |
|                                                  | 12340.00   | 89.90       | 1.35        | 10344.00     | 2658.68     | 2605.87      | 799.33     | 0.42       | 426702.53         | 660556.10        | N 32° 10' 20.88" W 103° 56' 52.87" |                         |                          |
|                                                  | 12435.00   | 90.04       | 1.64        | 10344.05     | 2753.56     | 2700.84      | 801.81     | 0.34       | 426797.49         | 660558.58        | N 32° 10' 21.83" W 103° 56' 52.84" |                         |                          |
|                                                  | 12530.00   | 90.00       | 1.57        | 10344.01     | 2848.45     | 2795.80      | 804.47     | 0.88       | 426892.44         | 660561.24        | N 32° 10' 22.87" W 103° 56' 52.81" |                         |                          |
|                                                  | 12624.00   | 90.80       | 0.99        | 10344.18     | 2942.32     | 2889.77      | 806.57     | 0.65       | 426986.41         | 660563.34        | N 32° 10' 23.80" W 103° 56' 52.78" |                         |                          |
|                                                  | 12719.00   | 90.07       | 1.47        | 10344.28     | 3037.18     | 2984.75      | 808.61     | 0.58       | 427081.38         | 660565.38        | N 32° 10' 24.74" W 103° 56' 52.75" |                         |                          |
|                                                  | 12813.00   | 90.00       | 1.64        | 10344.23     | 3131.07     | 3078.72      | 811.16     | 0.20       | 427175.34         | 660567.93        | N 32° 10' 25.67" W 103° 56' 52.72" |                         |                          |
|                                                  | 12908.00   | 89.86       | 1.36        | 10344.34     | 3225.96     | 3173.68      | 813.65     | 0.33       | 427270.30         | 660570.41        | N 32° 10' 26.61" W 103° 56' 52.68" |                         |                          |
|                                                  | 13002.00   | 89.56       | 1.27        | 10344.82     | 3318.83     | 3267.66      | 815.80     | 0.33       | 427364.27         | 660572.57        | N 32° 10' 27.54" W 103° 56' 52.85" |                         |                          |
|                                                  | 13097.00   | 89.83       | 0.71        | 10345.32     | 3414.66     | 3362.84      | 817.44     | 0.65       | 427459.24         | 660574.21        | N 32° 10' 28.47" W 103° 56' 52.83" |                         |                          |
|                                                  | 13192.00   | 89.80       | 0.72        | 10345.63     | 3509.48     | 3457.63      | 818.63     | 0.03       | 427554.23         | 660575.40        | N 32° 10' 29.41" W 103° 56' 52.81" |                         |                          |
|                                                  | 13287.00   | 89.73       | 0.88        | 10346.02     | 3604.30     | 3552.62      | 819.98     | 0.18       | 427649.21         | 660576.72        | N 32° 10' 30.35" W 103° 56' 52.59" |                         |                          |
|                                                  | 13381.00   | 89.49       | 0.80        | 10346.66     | 3698.12     | 3646.61      | 821.33     | 0.27       | 427743.19         | 660578.10        | N 32° 10' 31.28" W 103° 56' 52.57" |                         |                          |
|                                                  | 13476.00   | 90.28       | 0.42        | 10346.85     | 3792.92     | 3741.61      | 822.35     | 0.92       | 427838.18         | 660579.11        | N 32° 10' 32.22" W 103° 56' 52.56" |                         |                          |
|                                                  | 13571.00   | 90.59       | 359.96      | 10346.13     | 3887.67     | 3836.60      | 822.66     | 0.58       | 427933.17         | 660579.43        | N 32° 10' 33.16" W 103° 56' 52.55" |                         |                          |
|                                                  | 13665.00   | 90.42       | 359.26      | 10345.30     | 3981.35     | 3930.60      | 822.02     | 0.77       | 428027.15         | 660578.79        | N 32° 10' 34.09" W 103° 56' 52.55" |                         |                          |
|                                                  | 13760.00   | 90.69       | 359.52      | 10344.38     | 4075.99     | 4025.59      | 821.01     | 0.39       | 428122.14         | 660577.78        | N 32° 10' 35.03" W 103° 56' 52.56" |                         |                          |
|                                                  | 13855.00   | 90.55       | 359.24      | 10343.35     | 4170.63     | 4120.57      | 819.98     | 0.33       | 428217.12         | 660576.75        | N 32° 10' 35.97" W 103° 56' 52.57" |                         |                          |
|                                                  | 13949.00   | 90.24       | 359.09      | 10342.71     | 4264.       |              |            |            |                   |                  |                                    |                         |                          |

| Comments                                           | MD<br>(ft) | Incl<br>(°) | Azin Grid<br>(°) | TVD<br>(ft) | VSEC<br>(ft) | NS<br>(ft) | EW<br>(ft) | DLS<br>(°/100ft) | Northing<br>(ft) | Easting<br>(ft) | Latitude<br>(N/S ° ° ' '') | Longitude<br>(E/W ° ° ' '') |
|----------------------------------------------------|------------|-------------|------------------|-------------|--------------|------------|------------|------------------|------------------|-----------------|----------------------------|-----------------------------|
|                                                    | 17168.00   | 89.76       | 359.41           | 10344.92    | 7471.73      | 7433.12    | 792.91     | 0.58             | 431529.41        | 660549.67       | N 32 11 8.75               | W 103 56 52.76              |
|                                                    | 17263.00   | 88.76       | 359.39           | 10346.15    | 7568.37      | 7528.11    | 791.91     | 1.05             | 431624.39        | 660548.66       | N 32 11 9.69               | W 103 56 52.76              |
|                                                    | 17356.00   | 88.70       | 359.30           | 10348.21    | 7659.00      | 7621.08    | 790.85     | 0.12             | 431717.35        | 660547.82       | N 32 11 10.61              | W 103 56 52.76              |
|                                                    | 17450.00   | 88.32       | 358.57           | 10350.66    | 7752.63      | 7715.04    | 789.92     | 0.50             | 431811.31        | 660546.69       | N 32 11 11.54              | W 103 56 52.77              |
|                                                    | 17545.00   | 89.31       | 359.84           | 10352.62    | 7847.30      | 7810.02    | 789.43     | 1.08             | 431906.28        | 660545.20       | N 32 11 12.48              | W 103 56 52.77              |
|                                                    | 17640.00   | 89.11       | 359.21           | 10353.83    | 7941.95      | 7905.01    | 788.65     | 0.70             | 432001.26        | 660545.41       | N 32 11 13.42              | W 103 56 52.78              |
|                                                    | 17734.00   | 89.17       | 0.93             | 10354.52    | 8035.68      | 7999.00    | 788.76     | 2.15             | 432095.25        | 660545.53       | N 32 11 14.35              | W 103 56 52.77              |
|                                                    | 17829.00   | 89.56       | 1.59             | 10354.75    | 8130.55      | 8093.98    | 790.85     | 0.95             | 432190.21        | 660547.82       | N 32 11 15.29              | W 103 56 52.74              |
|                                                    | 17923.00   | 89.59       | 1.75             | 10355.44    | 8224.45      | 8187.93    | 793.59     | 0.17             | 432284.16        | 660550.36       | N 32 11 16.22              | W 103 56 52.71              |
|                                                    | 18018.00   | 89.69       | 1.59             | 10356.04    | 8319.35      | 8282.89    | 796.36     | 0.20             | 432379.11        | 660553.13       | N 32 11 17.16              | W 103 56 52.67              |
|                                                    | 18112.00   | 89.93       | 1.64             | 10356.35    | 8413.24      | 8376.85    | 799.01     | 0.26             | 432473.07        | 660555.77       | N 32 11 18.09              | W 103 56 52.64              |
|                                                    | 18207.00   | 89.59       | 1.69             | 10356.75    | 8508.14      | 8471.81    | 801.77     | 0.36             | 432568.02        | 660558.53       | N 32 11 19.03              | W 103 56 52.60              |
|                                                    | 18301.00   | 89.62       | 1.66             | 10357.40    | 8602.03      | 8565.77    | 804.51     | 0.05             | 432661.97        | 660561.28       | N 32 11 19.96              | W 103 56 52.57              |
|                                                    | 18395.00   | 89.68       | 2.31             | 10357.14    | 8695.95      | 8659.71    | 807.77     | 1.33             | 432755.91        | 660564.54       | N 32 11 20.89              | W 103 56 52.52              |
|                                                    | 18490.00   | 89.14       | 1.50             | 10357.28    | 8790.87      | 8754.65    | 810.93     | 1.84             | 432850.84        | 660567.70       | N 32 11 21.83              | W 103 56 52.48              |
|                                                    | 18584.00   | 89.59       | 1.67             | 10358.33    | 8884.75      | 8848.61    | 813.53     | 0.51             | 432944.79        | 660570.30       | N 32 11 22.76              | W 103 56 52.45              |
|                                                    | 18679.00   | 89.73       | 1.79             | 10358.89    | 8979.65      | 8943.57    | 816.40     | 0.19             | 433039.74        | 660573.16       | N 32 11 23.70              | W 103 56 52.41              |
|                                                    | 18773.00   | 89.49       | 1.28             | 10359.53    | 9073.54      | 9037.53    | 818.91     | 0.60             | 433133.70        | 660575.68       | N 32 11 24.63              | W 103 56 52.38              |
|                                                    | 18868.00   | 89.45       | 0.27             | 10360.41    | 9168.35      | 9132.52    | 820.20     | 1.06             | 433228.68        | 660578.97       | N 32 11 25.57              | W 103 56 52.36              |
|                                                    | 18961.00   | 89.38       | 359.76           | 10361.36    | 9261.09      | 9225.51    | 820.22     | 0.55             | 433321.66        | 660576.99       | N 32 11 26.49              | W 103 56 52.35              |
|                                                    | 19056.00   | 89.52       | 359.67           | 10362.27    | 9355.78      | 9320.51    | 819.75     | 0.18             | 433416.65        | 660576.52       | N 32 11 27.43              | W 103 56 52.36              |
|                                                    | 19150.00   | 89.21       | 358.80           | 10363.31    | 9449.40      | 9414.49    | 818.50     | 0.98             | 433510.63        | 660575.26       | N 32 11 28.36              | W 103 56 52.37              |
|                                                    | 19245.00   | 90.28       | 359.82           | 10363.73    | 9544.03      | 9509.48    | 817.35     | 1.56             | 433605.81        | 660574.12       | N 32 11 29.30              | W 103 56 52.38              |
|                                                    | 19339.00   | 89.69       | 359.61           | 10363.76    | 9637.73      | 9603.48    | 816.88     | 0.67             | 433699.60        | 660573.65       | N 32 11 30.23              | W 103 56 52.38              |
|                                                    | 19434.00   | 89.90       | 359.59           | 10364.10    | 9732.41      | 9698.48    | 816.22     | 0.22             | 433794.59        | 660572.99       | N 32 11 31.17              | W 103 56 52.38              |
|                                                    | 19523.00   | 89.93       | 359.71           | 10364.38    | 9820.78      | 9687.47    | 815.07     | 0.07             | 433883.57        | 660571.83       | N 32 11 32.04              | W 103 56 52.39              |
|                                                    | 19718.00   | 90.21       | 359.82           | 10364.26    | 10015.48     | 9982.47    | 814.69     | 0.32             | 434078.56        | 660571.44       | N 32 11 33.04              | W 103 56 52.39              |
|                                                    | 19813.00   | 89.90       | 359.38           | 10364.17    | 10110.15     | 10077.47   | 814.01     | 0.57             | 434173.55        | 660570.78       | N 32 11 34.02              | W 103 56 52.39              |
|                                                    | 19907.00   | 90.17       | 359.87           | 10364.11    | 10203.84     | 10171.47   | 813.40     | 0.80             | 434267.54        | 660570.17       | N 32 11 35.85              | W 103 56 52.39              |
|                                                    | 20002.00   | 90.93       | 359.82           | 10363.20    | 10298.54     | 10266.46   | 813.14     | 0.87             | 434362.53        | 660569.91       | N 32 11 36.79              | W 103 56 52.39              |
|                                                    | 20097.00   | 90.11       | 359.71           | 10362.34    | 10393.24     | 10361.46   | 812.75     | 0.87             | 434457.52        | 660569.52       | N 32 11 37.73              | W 103 56 52.39              |
|                                                    | 20191.00   | 89.42       | 358.22           | 10362.73    | 10486.83     | 10455.44   | 811.05     | 1.75             | 434551.49        | 660568.82       | N 32 11 38.66              | W 103 56 52.41              |
|                                                    | 20285.00   | 90.21       | 359.10           | 10363.03    | 10580.37     | 10549.41   | 808.86     | 1.26             | 434645.46        | 660568.52       | N 32 11 39.59              | W 103 56 52.43              |
|                                                    | 20380.00   | 88.52       | 359.18           | 10363.25    | 10674.97     | 10644.40   | 807.41     | 0.73             | 434740.44        | 660568.18       | N 32 11 40.53              | W 103 56 52.44              |
|                                                    | 20474.00   | 89.93       | 359.28           | 10363.52    | 10770.75     | 10700.39   | 806.65     | 0.76             | 434835.43        | 660567.82       | N 32 11 41.46              | W 103 56 52.45              |
| Final Survey<br>340° FNL<br>Crossing<br>Proj to TD | 20483.00   | 89.93       | 359.28           | 10363.58    | 10777.57     | 10747.39   | 806.06     | 0.00             | 434930.42        | 660567.34       | N 32 11 41.55              | W 103 56 52.46              |

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 Casing Diameter<br>(in) | Survey Tool Type         | Borehole / Survey                                                                 |
|-------------|------|-----------------|---------------|------------------|-----------------------------------|--------------------------|-----------------------------------------------------------------------------------|
|             | 1    | 0.000           | 26.500        | 1/98.425         | 30.000                            | NAL_NSG+MSHOT-Depth Only | Original Borehole / Oxy Corral Fly<br>35-26 Federal Com 36H<br>Gyro+IFR 0-20483MD |
|             | 1    | 26.500          | 26.500        | Act Sns          | 30.000                            | NAL_NSG+MSHOT-Depth Only | Original Borehole / Oxy Corral Fly<br>35-26 Federal Com 36H<br>Gyro+IFR 0-20483MD |
|             | 1    | 26.500          | 446.500       | Act Sns          | 30.000                            | NAL_NSG+MSHOT            | Original Borehole / Oxy Corral Fly<br>35-26 Federal Com 36H                       |
|             | 1    | 446.500         | 20483.000     | Act Sns          | 30.000                            | NAL_MWD_IFR1+MS          | Original Borehole / Oxy Corral Fly<br>35-26 Federal Com 36H                       |

...Original Borehole/Oxy Corral Fly 35-26 Federal Com 36H Gyro+IFR 0-20483MD

**Schlumberger**

Oxy



| Borehole:         | Well:                                | Field:                  | Structure:                           |
|-------------------|--------------------------------------|-------------------------|--------------------------------------|
| Original Borehole | Oxy Corral Fly 35-26 Federal Com 36H | NM Eddy County (NAD 83) | Oxy Corral Fly 35-26 Federal Com 36H |

| Gravity & Magnetic Parameters |        |      |            | Surface Location |                            |      |                 | Miscellaneous |                   |             |            |
|-------------------------------|--------|------|------------|------------------|----------------------------|------|-----------------|---------------|-------------------|-------------|------------|
| Model:                        | SPK    | Dir: | 30.235'    | Date:            | 13-Dec-2018                | Lat: | N 32° 0' 55.27" | Longitude:    | 106° 05' 58.00" W | Grid Zone:  | 18QJG      |
| MagDec:                       | 6.896° | FB:  | 479.18 SUT | Gravity FB:      | 998.43 m/s² (9.80665 m/s²) | Lat: | N 32° 17' 2.28" | Longitude:    | 106° 05' 58.00" W | Scale Fact: | 0.99999317 |

| Critical Points       |          |       |        |          |          |           |           |
|-----------------------|----------|-------|--------|----------|----------|-----------|-----------|
| Critical Point        | MD       | INCL  | AZIM   | TVD      | VSEC     | N(+)/S(-) | E(+)/W(-) |
| WRP                   | 0.00     | 0.00  | 0.00   | 0.00     | 0.00     | 0.00      | 0.00      |
| SHL                   | 26.50    | 0.00  | 0.00   | 26.50    | 0.00     | 0.00      | 0.00      |
| Last Gyro             | 446.50   | 0.71  | 156.30 | 446.47   | -4.37    | -4.54     | 1.98      |
| KOP Actual            | 9641.00  | 8.07  | 76.23  | 9572.63  | 377.33   | 320.38    | 768.12    |
| LL Crossing           | 10020.65 | 28.10 | 10.44  | 9928.16  | 496.75   | 436.36    | 618.14    |
| Wolfcamp Intersection | 10464.11 | 60.51 | 1.63   | 10228.00 | 814.26   | 752.20    | 852.23    |
| 340' FSL Crossing     | 10492.00 | 60.88 | 1.68   | 10241.65 | 838.56   | 776.51    | 852.93    |
| Exit Target Box       | 11777.00 | 89.59 | 354.81 | 10342.14 | 2097.58  | 2043.12   | 800.04    |
| Enter Target Box      | 12135.00 | 89.83 | 0.59   | 10343.50 | 2454.04  | 2400.90   | 798.04    |
| Final Survey          | 20436.00 | 89.93 | 359.28 | 10363.52 | 10730.75 | 10700.39  | 806.65    |
| 340' FNL Crossing     | 20442.00 | 89.93 | 359.28 | 10363.53 | 10736.73 | 10706.39  | 806.58    |
| Proj to TD            | 20483.00 | 89.93 | 359.28 | 10363.58 | 10777.57 | 10747.39  | 806.06    |

