

Oilfield Services, Central U.S. Land  
Schlumberger Drilling and Measurements  
Drilling Group  
Geo Market Area: South West Texas Basin  
7220 W I-H 20  
Midland, Texas 79706  
Phone : (432) 742-5400 (Main)  
Fax : (432) 742-5606 (Shared)

# Schlumberger

RECEIVED

JUL 25 2019

DISTRICT II-ARTESIA O.C.D.

June 10, 2019

OXY USA WTP LP  
PO BOX 4294  
Houston, TX 77210

Re:

4, 19S, 29E, EDDY NM  
N 32.69409 W -104.08794

CLIENT: OXY USA WTP LP  
WELL: Turkey Track 4-3 State 22H  
FIELD: Turkey Track; Bone Spring

RIG: H&P 556  
COUNTY: Eddy  
API NO: 30-015-44537  
JOB NO: 19MLH0203

Enclosed, please find the original copy of the survey performed on the referenced well by Drilling & Measurements, a division of Schlumberger Technology Corporation (P-5 No. 754900).  
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>  |
|-----------------------------------------|------------------------------------------------|------------------------------|---------------------------------|------------------------|
| Jared Chandler<br>FE                    | Turkey Track 4-3 State<br>22H<br>Original Hole | 7971.00 Ft to<br>18106.00 Ft | May 28, 2019 to<br>June 9, 2019 | TelePacer<br>SlimPulse |

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

Andrew Salomon  
Field Service Manager

Oilfield Services, Central U.S. Land  
Schlumberger Drilling and Measurements  
Drilling Group  
Geo Market Area: South West Texas Basin  
7220 W I-H 20  
Midland, Texas 79706  
Phone : (432) 742-5400 (Main)  
Fax : (432) 742-5606 (Shared)

**Schlumberger**

Well Reference:

4, 19S, 29E, EDDY NM  
N 32.69409 W -104.08794

I, Jared Chandler certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of May 28, 2019 through June 09, 2019, conduct or supervise the taking of the TelePacer & SlimPulse surveys from a depth of 7971.00 feet to a depth of 18106.00 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 OXY USA WTP LP for the Turkey Track 4-3 State 22H Well (Original Hole) API No. 30-015-44537 in New Mexico; 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  
Jared Chandler  
FE

*Jared Chandler*

Subscribed and Sworn to before me this 12 day of June (month) 2019 (yr)

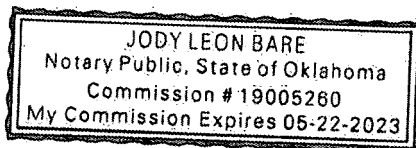
My Commission expires:

05-22-2023

*Jody Leon Bare*  
Notary Public

(signature)

Grady, Oklahoma  
(County State)



**Schlumberger**

OXY

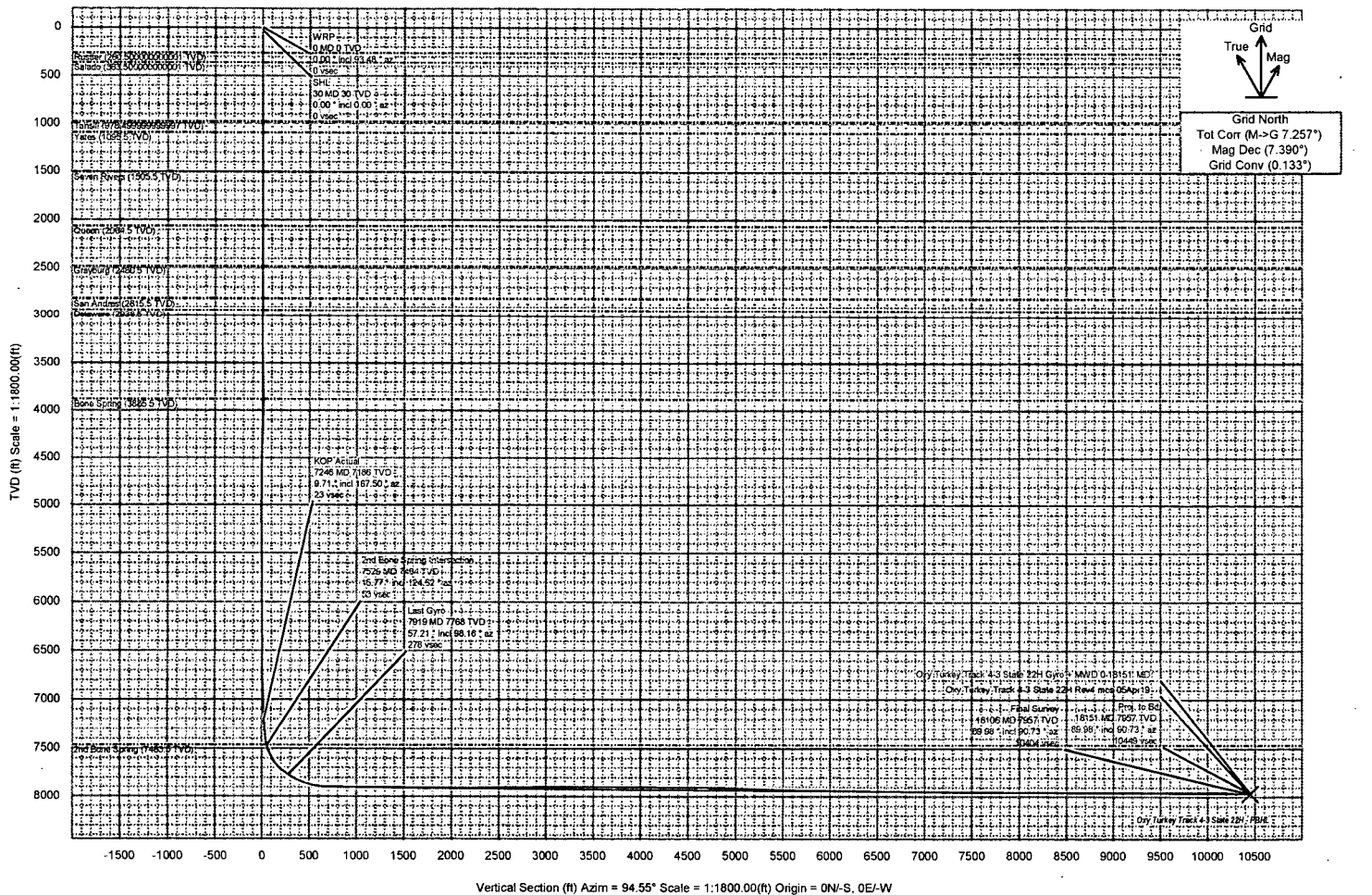
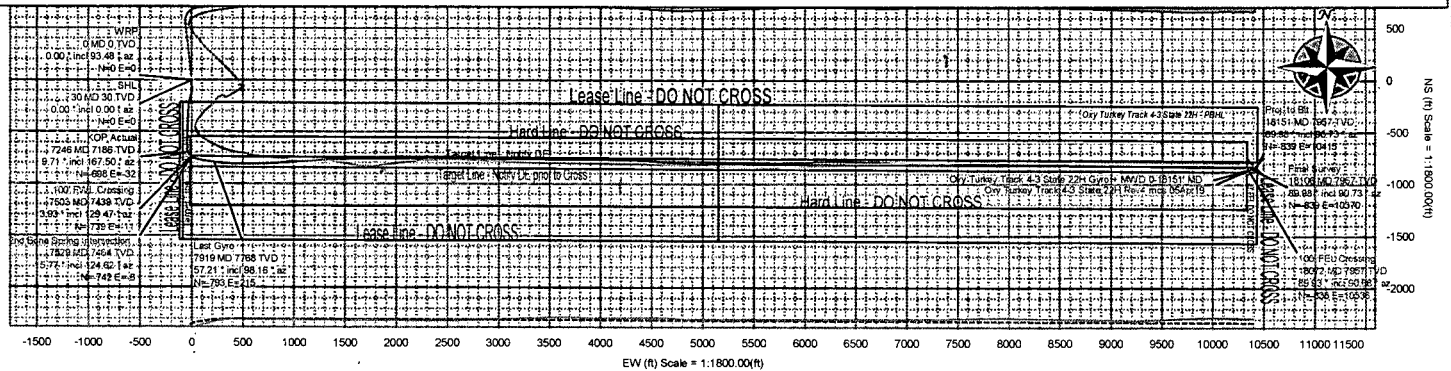


| Borehole:         | Well:                          | Field:                  | Structure:                     |
|-------------------|--------------------------------|-------------------------|--------------------------------|
| Original Borehole | Oxy Turkey Track 4-3 State 22H | NM Eddy County (NAD 83) | Oxy Turkey Track 4-3 State 22H |

| Gravity & Magnetic Parameters                                                              | Surface Location                                                                                | Miscellaneous                                                                                    |
|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Model: IFR1<br>MagDec: 7.39°                                                               | NAD83 New Mexico State Plane, Eastern Zone, US Feet<br>Lat: N 32 41 38.71<br>Lon: W 104 5 16.60 | Slot: Oxy Turkey Track 4-3 State 22H<br>Plan: Oxy Turkey Track 4-3 State 22H Gyro + MWD 0-18151' |
| Dip: 60.622°<br>FS: 48015nT<br>Date: 27-May-2019<br>Gravity FS: 998.616mgn (9.80665 Based) | Northing: 616327.37NUS<br>Easting: 616826.75NUS<br>Grid Conv: 0.1325°<br>Scale Fact: 0.99991562 | TVD Ref: RKB=30'(3442.7ft above MSL)                                                             |

## Critical Points

| Critical Point               | MD       | INCL  | AZIM   | TVD     | VSEC     | N(°)/S(-) | E(°)/W(-) | DLS  |
|------------------------------|----------|-------|--------|---------|----------|-----------|-----------|------|
| WRP                          | 0.00     | 0.00  | 93.48  | 0.00    | 0.00     | 0.00      | 0.00      |      |
| SHL                          | 30.00    | 0.00  | 0.00   | 30.00   | 0.00     | 0.00      | 0.00      | 0.00 |
| KOP Actual                   | 7246.00  | 9.71  | 167.50 | 7185.97 | 23.02    | -697.89   | -32.46    | 2.04 |
| 100' FWL Crossing            | 7503.00  | 13.93 | 129.47 | 7438.66 | 47.45    | -738.51   | -11.19    | 8.63 |
| 2nd Bone Spring Intersection | 7528.70  | 15.77 | 124.62 | 7463.50 | 53.01    | -742.46   | -5.93     | 8.63 |
| Last Gyro                    | 7919.00  | 57.21 | 98.16  | 7767.88 | 277.70   | -792.63   | 215.48    | 7.39 |
| 100' FEL Crossing            | 18071.50 | 89.93 | 90.68  | 7957.15 | 10369.67 | -838.36   | 10335.73  | 0.22 |
| Final Survey                 | 18106.00 | 89.98 | 90.73  | 7957.18 | 10404.09 | -838.78   | 10370.23  | 0.22 |
| Proj. to Bit                 | 18151.00 | 89.98 | 90.73  | 7957.20 | 10448.99 | -839.36   | 10415.23  | 0.00 |



Vertical Section (ft) Azim = 94.55° Scale = 1:1800.00(ft) Origin = ON-S, 0E-W

# Oxy Turkey Track 4-3 State 22H Gyro + MWD 0-18151' MD Survey Geodetic Report

(Def Survey)



Report Date: June 10, 2019 - 11:03 AM  
 Client: OXY  
 Field: NM Eddy County (NAD 83)  
 Structure / Slot: Oxy Turkey Track 4-3 State 22H / Oxy Turkey Track 4-3 State 22H  
 Well: Oxy Turkey Track 4-3 State 22H  
 Borehole: Original Borehole  
 UWI / API#: Unknown / 30-015-44537  
 Survey Name: Oxy Turkey Track 4-3 State 22H Gyro + MWD 0-18151' MD  
 Survey Date: May 24, 2019  
 Tort / AHD / DDI / ERD Ratio: 206.533' / 11195.863 ft / 6.722 / 1.407  
 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet  
 Location Lat / Long: N 32° 41' 38.71270", W 104° 5' 16.59845"  
 Location Grid N/E Y/X: N 616327.370 ftUS, E 616826.750 ftUS  
 CRS Grid Convergence Angle: 0.1325°  
 Grid Scale Factor: 0.99991562  
 Version / Patch: 2.10.760.0

Survey / DLS Computation: Minimum Curvature / Lubinski  
 Vertical Section Azimuth: 94.551° (Grid North)  
 Vertical Section Origin: 0.000 ft, 0.000 ft  
 TVD Reference Datum: RKB=30'  
 TVD Reference Elevation: 3442.700 ft above MSL  
 Seabed / Ground Elevation: 3412.700 ft above MSL  
 Magnetic Declination: 7.390°  
 Total Gravity Field Strength: 998.5154mgN (9.80665 Based)  
 Gravity Model: GARM  
 Total Magnetic Field Strength: 48015.000 nT  
 Magnetic Dip Angle: 60.522°  
 Declination Date: May 27, 2019  
 Magnetic Declination Model: IFR1  
 North Reference: Grid North  
 Grid Convergence Used: 0.1325°  
 Total Corr Mag North->Grid North: 7.2575°  
 Local Coord Referenced To: Well Head

| Comments | MD<br>(ft) | Incl<br>(°) | Azim Grid<br>(°) | TVD<br>(ft) | VSEC<br>(ft) | NS<br>(ft) | EW<br>(ft) | DLS<br>(°/100m) | Northing<br>(ftUS) | Easting<br>(ftUS) | Latitude<br>(N/S ° ' ") | Longitude<br>(E/W ° ' ") |
|----------|------------|-------------|------------------|-------------|--------------|------------|------------|-----------------|--------------------|-------------------|-------------------------|--------------------------|
| WRP      | 0.00       | 0.00        | 93.48            | 0.00        | 0.00         | 0.00       | 0.00       | N/A             | 616327.37          | 616826.75         | N 32 41 38.71 W 104     | 5 16.60                  |
| SHL      | 30.00      | 0.00        | 0.00             | 30.00       | 0.00         | 0.00       | 0.00       | 0.00            | 616327.37          | 616826.75         | N 32 41 38.71 W 104     | 5 16.60                  |
|          | 77.00      | 0.58        | 134.60           | 77.00       | 0.18         | -0.17      | 0.17       | 1.23            | 616327.20          | 616826.92         | N 32 41 38.71 W 104     | 5 16.60                  |
|          | 168.00     | 0.68        | 149.26           | 167.99      | 0.85         | -0.95      | 0.77       | 0.21            | 616326.42          | 616827.52         | N 32 41 38.70 W 104     | 5 16.59                  |
|          | 259.00     | 0.46        | 160.92           | 258.99      | 1.31         | -1.76      | 1.17       | 0.27            | 616325.61          | 616827.92         | N 32 41 38.70 W 104     | 5 16.58                  |
|          | 350.00     | 0.49        | 164.82           | 349.99      | 1.58         | -2.48      | 1.39       | 0.05            | 616324.89          | 616828.14         | N 32 41 38.69 W 104     | 5 16.58                  |
|          | 440.00     | 0.13        | 134.61           | 439.98      | 1.79         | -2.93      | 1.56       | 0.43            | 616324.44          | 616828.31         | N 32 41 38.68 W 104     | 5 16.58                  |
|          | 530.00     | 0.08        | 109.15           | 529.98      | 1.93         | -3.02      | 1.70       | 0.07            | 616324.35          | 616828.45         | N 32 41 38.68 W 104     | 5 16.58                  |
|          | 621.00     | 0.10        | 83.64            | 620.98      | 2.07         | -3.03      | 1.83       | 0.05            | 616324.34          | 616828.58         | N 32 41 38.68 W 104     | 5 16.58                  |
|          | 713.00     | 0.09        | 98.85            | 712.98      | 2.22         | -3.03      | 1.99       | 0.03            | 616324.34          | 616828.74         | N 32 41 38.68 W 104     | 5 16.58                  |
|          | 804.00     | 0.10        | 89.56            | 803.98      | 2.37         | -3.04      | 2.14       | 0.02            | 616324.33          | 616828.89         | N 32 41 38.68 W 104     | 5 16.57                  |
|          | 896.00     | 0.10        | 77.52            | 895.98      | 2.53         | -3.03      | 2.29       | 0.02            | 616324.34          | 616829.04         | N 32 41 38.68 W 104     | 5 16.57                  |
|          | 987.00     | 0.09        | 76.86            | 986.98      | 2.67         | -2.99      | 2.44       | 0.01            | 616324.38          | 616829.19         | N 32 41 38.68 W 104     | 5 16.57                  |
|          | 1078.00    | 0.07        | 73.80            | 1077.98     | 2.79         | -2.96      | 2.56       | 0.02            | 616324.41          | 616829.31         | N 32 41 38.68 W 104     | 5 16.57                  |
|          | 1169.00    | 0.09        | 69.52            | 1168.98     | 2.91         | -2.92      | 2.68       | 0.02            | 616324.45          | 616829.43         | N 32 41 38.68 W 104     | 5 16.57                  |
|          | 1262.00    | 0.09        | 71.66            | 1261.98     | 3.04         | -2.87      | 2.82       | 0.00            | 616324.50          | 616829.57         | N 32 41 38.68 W 104     | 5 16.57                  |
|          | 1353.00    | 0.09        | 71.03            | 1352.98     | 3.17         | -2.83      | 2.96       | 0.00            | 616324.54          | 616829.71         | N 32 41 38.68 W 104     | 5 16.56                  |
|          | 1447.00    | 0.11        | 64.27            | 1446.98     | 3.32         | -2.76      | 3.11       | 0.02            | 616324.61          | 616829.86         | N 32 41 38.69 W 104     | 5 16.56                  |
|          | 1542.00    | 0.09        | 63.19            | 1541.98     | 3.46         | -2.69      | 3.26       | 0.02            | 616324.68          | 616830.01         | N 32 41 38.69 W 104     | 5 16.56                  |
|          | 1637.00    | 0.11        | 60.67            | 1636.98     | 3.60         | -2.61      | 3.40       | 0.02            | 616324.76          | 616830.15         | N 32 41 38.69 W 104     | 5 16.56                  |
|          | 1731.00    | 0.11        | 61.07            | 1730.98     | 3.75         | -2.52      | 3.56       | 0.00            | 616324.85          | 616830.31         | N 32 41 38.69 W 104     | 5 16.56                  |
|          | 1826.00    | 0.09        | 56.17            | 1825.98     | 3.89         | -2.44      | 3.70       | 0.02            | 616324.93          | 616830.45         | N 32 41 38.69 W 104     | 5 16.56                  |
|          | 1921.00    | 0.11        | 46.64            | 1920.98     | 4.00         | -2.33      | 3.83       | 0.03            | 616325.04          | 616830.58         | N 32 41 38.69 W 104     | 5 16.55                  |
|          | 2015.00    | 0.10        | 55.59            | 2014.98     | 4.13         | -2.23      | 3.96       | 0.02            | 616325.14          | 616830.71         | N 32 41 38.69 W 104     | 5 16.55                  |
|          | 2110.00    | 0.09        | 57.61            | 2109.98     | 4.25         | -2.14      | 4.10       | 0.01            | 616325.23          | 616830.85         | N 32 41 38.69 W 104     | 5 16.55                  |
|          | 2204.00    | 0.10        | 55.51            | 2203.98     | 4.38         | -2.05      | 4.23       | 0.01            | 616325.32          | 616830.98         | N 32 41 38.69 W 104     | 5 16.55                  |
|          | 2299.00    | 0.10        | 67.32            | 2298.98     | 4.51         | -1.97      | 4.37       | 0.02            | 616325.40          | 616831.12         | N 32 41 38.69 W 104     | 5 16.55                  |
|          | 2394.00    | 0.09        | 76.95            | 2393.98     | 4.66         | -1.93      | 4.52       | 0.02            | 616325.44          | 616831.27         | N 32 41 38.69 W 104     | 5 16.55                  |
|          | 2488.00    | 0.07        | 95.03            | 2487.98     | 4.79         | -1.91      | 4.65       | 0.03            | 616325.46          | 616831.40         | N 32 41 38.69 W 104     | 5 16.54                  |
|          | 2583.00    | 0.30        | 187.14           | 2582.98     | 4.83         | -2.17      | 4.68       | 0.33            | 616325.20          | 616831.43         | N 32 41 38.69 W 104     | 5 16.54                  |
|          | 2677.00    | 0.84        | 198.67           | 2676.98     | 4.65         | -3.06      | 4.43       | 0.58            | 616324.31          | 616831.17         | N 32 41 38.68 W 104     | 5 16.55                  |
|          | 2772.00    | 1.42        | 198.16           | 2771.96     | 4.21         | -4.84      | 3.84       | 0.61            | 616322.53          | 616830.59         | N 32 41 38.66 W 104     | 5 16.55                  |
|          | 2867.00    | 2.00        | 199.53           | 2866.91     | 3.50         | -7.52      | 2.91       | 0.61            | 616319.85          | 616829.66         | N 32 41 38.64 W 104     | 5 16.56                  |
|          | 2961.00    | 2.42        | 200.50           | 2960.84     | 2.53         | -10.93     | 1.67       | 0.45            | 616316.44          | 616828.42         | N 32 41 38.60 W 104     | 5 16.58                  |
|          | 3056.00    | 2.92        | 198.28           | 3055.74     | 1.41         | -15.10     | 0.21       | 0.54            | 616312.27          | 616826.96         | N 32 41 38.56 W 104     | 5 16.60                  |
|          | 3151.00    | 3.44        | 188.40           | 3150.60     | 0.64         | -20.22     | -0.97      | 0.79            | 616307.15          | 616825.78         | N 32 41 38.51 W 104     | 5 16.61                  |
|          | 3246.00    | 3.84        | 182.63           | 3245.40     | 0.56         | -26.22     | -1.53      | 0.57            | 616301.15          | 616825.22         | N 32 41 38.45 W 104     | 5 16.62                  |
|          | 3340.00    | 4.21        | 177.35           | 3339.17     | 1.10         | -32.81     | -1.51      | 0.56            | 616294.56          | 616825.24         | N 32 41 38.39 W 104     | 5 16.62                  |
|          | 3435.00    | 4.91        | 171.27           | 3433.87     | 2.47         | -40.31     | -0.73      | 0.89            | 616287.06          | 616826.02         | N 32 41 38.31 W 104     | 5 16.61                  |
|          | 3529.00    | 6.16        | 169.16           | 3527.43     | 4.73         | -49.24     | 0.82       | 1.35            | 616278.13          | 616827.57         | N 32 41 38.23 W 104     | 5 16.59                  |
|          | 3624.00    | 7.39        | 173.28           | 3621.77     | 7.28         | -60.31     | 2.50       | 1.39            | 616267.06          | 616829.25         | N 32 41 38.12 W 104     | 5 16.57                  |
|          | 3719.00    | 8.23        | 176.82           | 3715.89     | 9.39         | -73.17     | 3.59       | 1.02            | 616254.20          | 616830.34         | N 32 41 37.99 W 104     | 5 16.56                  |
|          | 3813.00    | 8.36        | 178.48           | 3808.90     | 11.01        | -86.72     | 4.14       | 0.29            | 616240.66          | 616830.89         | N 32 41 37.85 W 104     | 5 16.55                  |
|          | 3908.00    | 8.23        | 182.95           | 3902.91     | 11.93        | -100.41    | 3.98       | 0.69            | 616226.96          | 616830.73         | N 32 41 37.72 W 104     | 5 16.55                  |
|          | 4003.00    | 8.62        | 188.34           | 3996.89     | 11.65        | -114.25    | 2.60       | 0.93            | 616213.13          | 616829.35         | N 32 41 37.58 W 104     | 5 16.57                  |
|          | 4097.00    | 9.66        | 193.37           | 4089.69     | 9.98         | -128.89    | -0.25      | 1.39            | 616198.49          | 616826.50         | N 32 41 37.44 W 104     | 5 16.60                  |
|          | 4193.00    | 10.80       | 193.69           | 4184.16     | 7.31         | -145.47    | -4.24      | 1.19            | 616181.91          | 616822.31         | N 32 41 37.27 W 104     | 5 16.65                  |
|          | 4287.00    | 10.65       | 194.09           | 4276.52     | 4.48         | -162.45    | -6.44      | 0.18            | 616164.93          | 616818.31         | N 32 41 37.11 W 104     | 5 16.70                  |
|          | 4383.00    | 10.71       | 193.70           | 4370.86     | 1.59         | -179.72    | -12.71     | 0.10            | 616147.67          | 616814.04         | N 32 41 36.93 W 104     | 5 16.75                  |
|          | 4478.00    | 10.68       | 193.48           | 4464.21     | -1.18        | -196.86    | -16.86     | 0.05            | 616130.53          | 616809.90         | N 32 41 36.77 W 104     | 5 16.80                  |
|          | 4574.00    | 10.52       | 190.53           | 4558.57     | -3.47        | -214.12    | -20.53     | 0.59            | 616113.27          | 616806.22         | N 32 41 36.59 W 104     | 5 16.84                  |
|          | 4670.00    | 10.71       | 186.78           | 4652.93     | -4.73        | -231.60    | -23.19     | 0.75            | 616095.79          | 616803.57         | N 32 41 36.42 W 104     | 5 16.88                  |
|          | 4766.00    | 10.70       | 186.69           | 4747.26     | -5.41        | -249.31    | -25.28     | 0.02            | 616078.08          | 616801.48         | N 32 41 36.25 W 104     | 5 16.90                  |
|          | 4862.00    | 10.71       | 186.84           | 4841.59     | -6.10        | -267.01    | -27.38     | 0.03            | 616060.38          | 616799.38         | N 32 41 36.07 W 104     | 5 16.93                  |
|          | 4957.00    | 10.67       | 186.77           | 4934.94     | -6.80        | -284.51    | -29.47     | 0.04            | 616042.88          | 616797.29         | N 32 41 35.90 W 104     | 5 16.95                  |
|          | 5052.00    | 10.75       | 187.40           | 5028.28     | -7.58        | -302.03    | -31.64     | 0.15            | 616025.36          | 616795.11         | N 32 41 35.73 W 104     | 5 16.98                  |
|          | 5148.00    | 10.84       | 183.57           | 5122.59     | -7.87        | -319.92    | -33.36     | 0.75            | 616007.48          | 616793.39         | N 32 41 35.55 W 104     | 5 17.00                  |
|          | 5244.00    | 10.89       | 175.78           | 5216.87     | -6.33        | -337.98    | -33.25     | 1.53            | 615989.42          | 616793.50         | N 32 41 35.37 W 104     | 5 17.00                  |
|          | 5339.00    | 10.56       | 188.86           | 5310.23     | -5.61        | -355.53    | -33.93     | 2.58            | 615971.87          | 616792.82         | N 32 41 35.20 W 104     | 5 17.01                  |
|          | 5434.00    | 10.80       | 180.41           | 5403.59     | -5.63        | -373.03    | -35.34     | 1.67            | 615954.37          | 616791.41         | N 32 41 35.02 W 104     | 5 17.02                  |
|          | 5529.00    | 10.79       | 180.30           | 5496.90     | -4.32        | -390.82    | -35.45     | 0.02            | 615936.58          | 616791.30         | N 32 41 34.85 W 104     | 5 17.02                  |
|          | 5625.00    | 10.81       | 178.99           | 5591.20     | -2.79        | -408.81    | -35.34     | 0.26            | 615918.59          | 616791.42         | N 32 41 34.67 W 104     | 5 17.02                  |
|          | 5720.00    | 10.67       | 179.44           | 5684.54     | -1.14        | -426.51    | -35.09     | 0.17            | 615900.89          | 616791.66         | N 32 41 34.49 W 104     | 5 17.02                  |
|          | 5816.00    | 10.43       | 189.84           | 5778.93     | -1.15        | -443.96    | -36.49     | 2.00            | 615883.45          | 616790.26         | N 32 41 34.32 W 104     | 5 17.04                  |
|          | 5912.00    | 10.24       | 183.26           | 5873.37     | -1.76        | -461.04    | -38.46     | 1.24            | 615866.36          | 616788.29         | N 32 41 34.15 W 104     | 5 17.06                  |
|          | 6008.00    | 10.27       | 183.71           | 5967.84     | -1.44        | -478.10    | -39.50     | 0.09            | 615849.31          | 616787.25         | N 32 41 33.98 W 104     | 5 17.07                  |
|          | 6104.00    | 10.13       | 178.98           | 6062.32     | -0.49        | -495.09    | -39.90     | 0.88            | 615832.33          | 616786.85         | N 32 41 33.82 W 104     | 5 17.08                  |
|          | 6199.00    | 9.55        | 185.17           | 6155.93     | 0.23         | -511.29    | -40.47     | 1.27            | 615816.13          | 616786.29         | N 32 41 33.65 W 104     | 5 17.09                  |
|          | 6292.00    | 10.65       | 179.11           | 6247.49     | 0.96         | -527.56    | -41.03     | 1.64            | 615799.85          | 616785.73         | N 32 41 33.49 W 104     | 5 17.09                  |
|          | 6387.00    | 10.41       | 183.64           | 6340.89     | 1.93         | -544.91    | -41.44     | 0.91            | 615782.51          | 616785.32         | N 32 41 33.32 W 104     | 5 17.10                  |
|          | 6483.00    | 10.65       | 178.50           | 6435.27     | 3.01         | -562.43    | -41.76     | 1.01            | 615764.99          | 616785.00         | N 32 41 33.15 W 104     | 5 17.10                  |
|          | 6579.00    | 10.41       | 187.23           | 6529.66     | 3.54         | -579.90    | -42.61     | 1.68            | 615747.52          | 616784.14         | N 32 41 32.98 W 104     | 5 17.11                  |
|          | 6675.00    | 10.21       | 179.37           | 6624.12     | 3.90         | -597.02    | -43.61     | 1.48            | 615730.40          | 616783.14         | N 32 41 32.81 W 104     | 5 17.12                  |
|          | 6770.00    | 10.65       | 179.41           | 6717.55     | 5.45         | -614.21    | -43.43     | 0.46            | 615713.21          | 616783.32         | N 32 41 32.64 W 104     | 5 17.12                  |
|          | 6865.00    | 11.13       | 166.90           | 6810.85     | 9            |            |            |                 |                    |                   |                         |                          |

| 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>(RUS) | Easting<br>(RUS) | Latitude<br>(N/S ° ' '') | Longitude<br>(E/W ° ' '') |
|------------------------------------------------------------|------------|-------------|------------------|-------------|--------------|------------|------------|------------------|-------------------|------------------|--------------------------|---------------------------|
|                                                            | 7342.00    | 10.21       | 158.09           | 7280.53     | 29.18        | -713.89    | -27.54     | 1.77             | 615613.74         | 616799.22        | N 32 41 31.65 W 104      | 5 16.94                   |
|                                                            | 7437.00    | 9.93        | 149.42           | 7374.07     | 37.65        | -728.55    | -20.23     | 1.62             | 615598.88         | 616806.52        | N 32 41 31.50 W 104      | 5 16.85                   |
| 100' FWL<br>Crossing<br>2nd Bone<br>Spring<br>Intersection | 7503.00    | 13.93       | 129.47           | 7438.66     | 47.45        | -738.51    | -11.19     | 8.63             | 615588.92         | 616815.56        | N 32 41 31.41 W 104      | 5 16.75                   |
|                                                            | 7528.70    | 15.77       | 124.62           | 7463.50     | 53.01        | -742.46    | -5.93      | 8.63             | 615584.97         | 616820.82        | N 32 41 31.37 W 104      | 5 16.69                   |
|                                                            | 7533.00    | 16.09       | 123.92           | 7467.64     | 54.03        | -743.13    | -4.95      | 8.63             | 615584.31         | 616821.80        | N 32 41 31.36 W 104      | 5 16.68                   |
|                                                            | 7628.00    | 25.52       | 108.62           | 7556.40     | 85.45        | -757.05    | 25.46      | 11.38            | 615570.39         | 616852.20        | N 32 41 31.22 W 104      | 5 16.32                   |
|                                                            | 7724.00    | 35.79       | 101.84           | 7638.90     | 133.50       | -769.45    | 72.67      | 11.27            | 615557.99         | 616899.41        | N 32 41 31.10 W 104      | 5 15.77                   |
|                                                            | 7820.00    | 49.91       | 98.82            | 7709.11     | 198.29       | -780.90    | 136.76     | 14.86            | 615546.54         | 616963.50        | N 32 41 30.98 W 104      | 5 15.02                   |
|                                                            | 7919.00    | 57.21       | 98.16            | 7767.88     | 277.70       | -792.63    | 215.48     | 7.39             | 615534.81         | 617042.21        | N 32 41 30.87 W 104      | 5 14.10                   |
|                                                            | 7971.00    | 59.72       | 98.07            | 7795.07     | 321.93       | -798.88    | 259.35     | 4.83             | 615528.56         | 617086.08        | N 32 41 30.80 W 104      | 5 13.59                   |
|                                                            | 8064.00    | 66.97       | 93.90            | 7836.78     | 404.94       | -807.44    | 341.95     | 8.76             | 615520.00         | 617168.67        | N 32 41 30.72 W 104      | 5 12.62                   |
|                                                            | 8158.00    | 73.87       | 91.36            | 7868.27     | 493.39       | -811.46    | 430.36     | 7.77             | 615515.98         | 617257.07        | N 32 41 30.67 W 104      | 5 11.58                   |
|                                                            | 8253.00    | 81.07       | 89.92            | 7888.87     | 585.85       | -812.48    | 523.03     | 7.72             | 615514.96         | 617349.73        | N 32 41 30.66 W 104      | 5 10.50                   |
|                                                            | 8349.00    | 89.25       | 88.20            | 7896.96     | 680.98       | -810.91    | 618.59     | 8.71             | 615516.53         | 617445.28        | N 32 41 30.68 W 104      | 5 9.38                    |
|                                                            | 8419.00    | 89.82       | 87.90            | 7897.53     | 750.53       | -808.52    | 688.54     | 0.92             | 615518.92         | 617515.23        | N 32 41 30.70 W 104      | 5 8.56                    |
|                                                            | 8515.00    | 89.51       | 86.84            | 7898.09     | 845.77       | -804.12    | 784.44     | 1.15             | 615523.32         | 617611.12        | N 32 41 30.74 W 104      | 5 7.44                    |
|                                                            | 8610.00    | 89.71       | 83.70            | 7898.74     | 939.51       | -796.29    | 879.10     | 3.31             | 615531.15         | 617705.77        | N 32 41 30.81 W 104      | 5 6.33                    |
|                                                            | 8706.00    | 89.37       | 81.72            | 7899.51     | 1033.46      | -784.11    | 974.32     | 2.09             | 615543.33         | 617800.98        | N 32 41 30.93 W 104      | 5 5.22                    |
|                                                            | 8802.00    | 89.23       | 84.59            | 7900.68     | 1127.55      | -772.67    | 1069.61    | 2.99             | 615554.77         | 617896.27        | N 32 41 31.04 W 104      | 5 4.10                    |
|                                                            | 8897.00    | 89.34       | 87.98            | 7901.87     | 1221.55      | -766.51    | 1164.39    | 3.57             | 615560.92         | 617991.04        | N 32 41 31.10 W 104      | 5 2.99                    |
|                                                            | 8993.00    | 89.61       | 90.26            | 7902.75     | 1317.10      | -765.04    | 1260.37    | 2.39             | 615562.40         | 618087.01        | N 32 41 31.11 W 104      | 5 1.87                    |
|                                                            | 9089.00    | 89.51       | 90.24            | 7903.48     | 1412.83      | -765.46    | 1356.37    | 0.11             | 615561.98         | 618183.00        | N 32 41 31.11 W 104      | 5 0.75                    |
|                                                            | 9182.00    | 89.65       | 87.09            | 7904.16     | 1505.33      | -763.29    | 1449.33    | 3.39             | 615564.15         | 618275.95        | N 32 41 31.13 W 104      | 4 59.66                   |
|                                                            | 9276.00    | 89.51       | 87.74            | 7904.85     | 1598.60      | -759.05    | 1543.23    | 0.71             | 615568.38         | 618369.85        | N 32 41 31.17 W 104      | 4 58.56                   |
|                                                            | 9372.00    | 89.65       | 87.09            | 7905.56     | 1693.85      | -754.72    | 1639.13    | 0.69             | 615572.71         | 618465.74        | N 32 41 31.21 W 104      | 4 57.44                   |
|                                                            | 9468.00    | 89.40       | 87.01            | 7906.35     | 1789.02      | -749.78    | 1735.00    | 0.27             | 615577.65         | 618561.60        | N 32 41 31.25 W 104      | 4 56.32                   |
|                                                            | 9559.00    | 88.13       | 87.05            | 7908.31     | 1879.22      | -745.07    | 1825.85    | 1.40             | 615582.37         | 618652.45        | N 32 41 31.30 W 104      | 4 55.25                   |
|                                                            | 9650.00    | 89.30       | 89.18            | 7909.72     | 2059.20      | -740.52    | 2006.77    | 1.24             | 615586.92         | 618743.37        | N 32 41 31.33 W 104      | 4 54.19                   |
|                                                            | 9740.00    | 90.57       | 90.09            | 7909.82     | 2148.87      | -739.95    | 2096.76    | 1.74             | 615587.49         | 618833.35        | N 32 41 31.34 W 104      | 4 53.14                   |
|                                                            | 9830.00    | 91.61       | 90.21            | 7908.09     | 2239.58      | -740.18    | 2187.75    | 1.15             | 615587.25         | 618923.33        | N 32 41 31.34 W 104      | 4 52.08                   |
|                                                            | 9921.00    | 90.64       | 90.11            | 7906.32     | 2329.30      | -740.43    | 2277.73    | 1.08             | 615587.00         | 619014.31        | N 32 41 31.34 W 104      | 4 51.02                   |
|                                                            | 10014.00   | 90.20       | 89.58            | 7905.64     | 2421.98      | -740.18    | 2370.72    | 0.74             | 615587.25         | 619104.28        | N 32 41 31.33 W 104      | 4 49.97                   |
|                                                            | 10195.00   | 90.81       | 89.54            | 7904.84     | 2512.63      | -739.48    | 2461.72    | 0.67             | 615587.95         | 619197.27        | N 32 41 31.33 W 104      | 4 48.88                   |
|                                                            | 10286.00   | 90.68       | 90.04            | 7903.65     | 2603.31      | -739.15    | 2552.71    | 0.57             | 615588.28         | 619288.25        | N 32 41 31.34 W 104      | 4 47.81                   |
|                                                            | 10377.00   | 90.54       | 90.12            | 7902.69     | 2694.03      | -739.28    | 2643.70    | 0.18             | 615588.16         | 619379.24        | N 32 41 31.34 W 104      | 4 46.75                   |
|                                                            | 10468.00   | 90.51       | 92.23            | 7901.85     | 2784.86      | -741.14    | 2734.68    | 2.32             | 615586.29         | 619470.23        | N 32 41 31.32 W 104      | 4 45.68                   |
|                                                            | 10560.00   | 90.57       | 92.80            | 7900.98     | 2876.80      | -745.18    | 2826.58    | 0.62             | 615582.25         | 619561.19        | N 32 41 31.27 W 104      | 4 44.62                   |
|                                                            | 10652.00   | 90.54       | 92.58            | 7900.09     | 2968.75      | -749.50    | 2918.48    | 0.24             | 615577.94         | 619653.09        | N 32 41 31.23 W 104      | 4 43.54                   |
|                                                            | 10743.00   | 90.13       | 90.18            | 7899.56     | 3059.60      | -751.69    | 3009.44    | 2.68             | 615575.75         | 619744.97        | N 32 41 31.20 W 104      | 4 42.47                   |
|                                                            | 10832.00   | 90.13       | 89.81            | 7899.13     | 3248.00      | -751.67    | 3198.44    | 0.20             | 615575.76         | 619835.93        | N 32 41 31.20 W 104      | 4 41.41                   |
|                                                            | 11122.00   | 89.99       | 90.08            | 7898.93     | 3437.39      | -751.49    | 3388.44    | 0.16             | 615575.76         | 620024.91        | N 32 41 31.19 W 104      | 4 39.19                   |
|                                                            | 11216.00   | 89.61       | 90.14            | 7899.26     | 3531.10      | -751.67    | 3482.44    | 0.41             | 615575.76         | 620214.90        | N 32 41 31.19 W 104      | 4 38.07                   |
|                                                            | 11311.00   | 89.23       | 90.02            | 7900.22     | 3625.81      | -751.80    | 3577.43    | 0.42             | 615575.76         | 620308.89        | N 32 41 31.19 W 104      | 4 36.97                   |
|                                                            | 11500.00   | 89.82       | 90.12            | 7901.79     | 3814.23      | -752.03    | 3766.43    | 0.32             | 615575.40         | 620403.88        | N 32 41 31.18 W 104      | 4 35.87                   |
|                                                            | 11595.00   | 89.54       | 90.51            | 7902.32     | 3908.96      | -752.56    | 3861.42    | 0.51             | 615574.88         | 620592.85        | N 32 41 31.18 W 104      | 4 34.76                   |
|                                                            | 11690.00   | 89.51       | 90.31            | 7903.11     | 4003.71      | -753.24    | 3956.42    | 0.21             | 615574.20         | 620687.84        | N 32 41 31.17 W 104      | 4 33.64                   |
|                                                            | 11784.00   | 89.58       | 90.22            | 7903.86     | 4097.45      | -753.67    | 4050.41    | 0.12             | 615573.76         | 620782.83        | N 32 41 31.16 W 104      | 4 32.55                   |
|                                                            | 11879.00   | 89.58       | 90.12            | 7904.55     | 4192.17      | -753.95    | 4145.41    | 0.11             | 615573.48         | 620876.81        | N 32 41 31.16 W 104      | 4 31.44                   |
|                                                            | 11973.00   | 89.75       | 90.13            | 7905.10     | 4285.88      | -754.16    | 4239.41    | 0.18             | 615573.28         | 620971.80        | N 32 41 31.16 W 104      | 4 30.32                   |
|                                                            | 12068.00   | 89.43       | 91.08            | 7905.78     | 4380.66      | -755.16    | 4334.40    | 1.06             | 615572.27         | 621065.79        | N 32 41 31.15 W 104      | 4 29.23                   |
|                                                            | 12162.00   | 89.74       | 93.45            | 7906.46     | 4474.57      | -758.88    | 4428.32    | 2.54             | 615568.56         | 621160.78        | N 32 41 31.14 W 104      | 4 28.11                   |
|                                                            | 12257.00   | 89.74       | 93.68            | 7906.89     | 4569.56      | -764.78    | 4523.13    | 0.24             | 615562.65         | 621254.69        | N 32 41 31.10 W 104      | 4 27.01                   |
|                                                            | 12351.00   | 89.98       | 93.83            | 7907.12     | 4663.55      | -770.94    | 4616.93    | 0.30             | 615556.50         | 621349.49        | N 32 41 31.04 W 104      | 4 25.90                   |
|                                                            | 12446.00   | 89.12       | 92.91            | 7907.87     | 4758.52      | -776.52    | 4711.76    | 1.33             | 615550.91         | 621443.28        | N 32 41 30.98 W 104      | 4 24.80                   |
|                                                            | 12540.00   | 88.85       | 90.47            | 7909.53     | 4852.38      | -779.30    | 4805.70    | 2.61             | 615548.14         | 621538.10        | N 32 41 30.92 W 104      | 4 23.69                   |
|                                                            | 12635.00   | 88.33       | 91.40            | 7911.87     | 4947.16      | -780.84    | 4900.66    | 1.12             | 615546.59         | 621632.03        | N 32 41 30.87 W 104      | 4 22.60                   |
|                                                            | 12729.00   | 87.88       | 91.61            | 7914.98     | 5040.98      | -783.31    | 4994.57    | 0.53             | 615544.13         | 621726.98        | N 32 41 30.89 W 104      | 4 21.49                   |
|                                                            | 12819.00   | 88.43       | 91.31            | 7921.10     | 5230.60      | -788.15    | 5184.41    | 0.33             | 615539.29         | 621726.98        | N 32 41 30.87 W 104      | 4 20.39                   |
|                                                            | 13013.00   | 88.50       | 91.20            | 7923.62     | 5324.41      | -790.21    | 5278.35    | 0.14             | 615537.23         | 621726.98        | N 32 41 30.87 W 104      | 4 19.28                   |
|                                                            | 13108.00   | 88.47       | 91.14            | 7926.13     | 5419.22      | -792.15    | 5373.30    | 0.07             | 615535.29         | 621820.89        | N 32 41 30.84 W 104      | 4 18.18                   |
|                                                            | 13203.00   | 88.64       | 90.95            | 7928.52     | 5514.01      | -793.88    | 5468.26    | 0.27             | 615533.56         | 622010.71        | N 32 41 30.79 W 104      | 4 17.06                   |
|                                                            | 13297.00   | 88.64       | 91.07            | 7930.75     | 5607.80      | -795.54    | 5562.21    | 0.13             | 615531.90         | 622104.65        | N 32 41 30.77 W 104      | 4 15.96                   |
|                                                            | 13392.00   | 88.92       | 91.28            | 7932.78     | 5702.62      | -797.48    | 5657.17    | 0.37             | 615529.95         | 622199.59        | N 32 41 30.75 W 104      | 4 14.86                   |
|                                                            | 13487.00   | 89.91       | 89.37            | 7933.75     | 5797.35      | -798.02    | 5752.16    | 2.26             | 615529.42         | 622294.53        | N 32 41 30.73 W 104      | 4 13.75                   |
|                                                            | 13582.00   | 89.43       | 87.93            | 7934.09     | 5891.84      | -795.78    | 5847.13    | 1.54             | 615531.65         | 622388.48        | N 32 41 30.71 W 104      | 4 12.64                   |
|                                                            | 13771.00   | 89.63       | 88.00            | 7935.58     | 6078.59      | -789.07    | 6036.01    | 0.13             | 615538.36         | 622483.43        | N 32 41 30.69 W 104      | 4 11.54                   |
|                                                            | 13866.00   | 89.60       | 87.82            | 7936.38     | 6173.95      | -785.51    | 6130.94    | 0.26             | 615541.83         | 622578.41        | N 32 41 30.68 W 104      | 4 10.43                   |
|                                                            | 13960.00   | 89.12       | 88.09            | 7937.43     | 6267.32      | -782.25    | 6224.87    | 0.59             | 615545.18         | 622673.28        | N 32 41 30.68 W 104      | 4 9.31                    |
|                                                            | 14055.00   | 88.85       | 90.57            | 7938.12     | 6361.90      | -781.14    | 6319.84    | 2.63             | 615546.29         | 622768.23        | N 32 41 30.70 W 104      | 4 8.20                    |
|                                                            | 14149.00   | 89.12       | 90.91            | 7940.78     | 6455.68      | -782.36    | 6413.82    | 0.46             | 615543.34         | 622862.23        | N 32 41 30.76 W 104      | 4 7.09                    |
|                                                            | 14244.00   | 89.02       | 91.19            | 7942.32     | 6550.49      | -784.10    | 6508.79    | 0.31             | 615544.37         | 622957.10        | N 32 41 30.79 W 104      | 4 5.99                    |
|                                                            | 14339.00   | 89.09       | 91.19            | 7943.89     | 6645.31      | -786.07    | 6603.76    | 0.07             | 615544.37         | 623051.09        | N 32 41 30.82 W 104      | 4 4.88                    |
|                                                            | 14433.00   | 88.88       | 91.45            | 7945.56     | 6739.15      | -788.24    | 6697.72    | 0.36             | 615539.20         | 623146.05        | N 32 41 30.83 W 104      | 4 3.78                    |
|                                                            | 14528.00   | 89.02       | 91.31            | 7947.30     | 6833.99      | -790.52    | 6792.68    | 0.21             | 615536.91         | 623240.02        | N 32 41 30.82 W 104      | 4 2.67                    |
|                                                            | 14622.00   | 88.81       | 91.11            | 7949.08     | 6927.81      | -792.51    | 6886.64    | 0.31             | 615534.93         | 623334.98        | N 32 41 30.80 W 104      | 4 1.57                    |
|                                                            | 14811.00   | 89.60       | 91.32            | 7951.70     | 7116.47      | -796.52    | 7075.58    | 0.43             | 615530.92         | 623429.94        | N 32 41 30.78 W 104      | 4 0.46                    |
|                                                            | 14906.00   | 89.53       | 91.23            |             |              |            |            |                  |                   |                  |                          |                           |

| 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 ° ' ") |
|----------------------|------------|-------------|------------------|-------------|--------------|------------|------------|------------------|--------------------|-------------------|-------------------------|--------------------------|
|                      | 17903.00   | 89.95       | 90.44            | 7956.78     | 10201.58     | -836.72    | 10167.24   | 0.12             | 615490.72          | 626993.11         | N 32 41 30.19           | W 104 3 17.85            |
|                      | 17998.00   | 89.81       | 90.57            | 7956.98     | 10296.34     | -837.56    | 10262.24   | 0.20             | 615489.88          | 627088.10         | N 32 41 30.17           | W 104 3 16.54            |
| 100' FEL<br>Crossing | 18071.50   | 89.93       | 90.68            | 7957.15     | 10369.67     | -838.36    | 10335.73   | 0.22             | 615489.08          | 627161.59         | N 32 41 30.16           | W 104 3 15.68            |
| Final Survey         | 18106.00   | 89.98       | 90.73            | 7957.18     | 10404.09     | -838.78    | 10370.23   | 0.22             | 615488.66          | 627196.08         | N 32 41 30.16           | W 104 3 15.28            |
| Proj. to Bit         | 18151.00   | 89.98       | 90.73            | 7957.20     | 10448.99     | -839.36    | 10415.23   | 0.00             | 615488.08          | 627241.08         | N 32 41 30.15           | W 104 3 14.75            |

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           | 30.000        | 1/98.425         | 30.000    | 30.000                  | NAL_NSG+MSHOT-Depth Only | Original Borehole / Oxy Turkey<br>Track 4-3 State 22H Gyro + MWD<br>0-18151' |
|             | 1    | 30.000          | 30.000        | Act Stns         | 30.000    | 30.000                  | NAL_NSG+MSHOT-Depth Only | Original Borehole / Oxy Turkey<br>Track 4-3 State 22H Gyro + MWD<br>0-18151' |
|             | 1    | 30.000          | 7919.000      | Act Stns         | 30.000    | 30.000                  | NAL_NSG+MSHOT            | Original Borehole / Oxy Turkey<br>Track 4-3 State 22H Gyro + MWD<br>0-18151' |
|             | 1    | 7919.000        | 18151.000     | Act Stns         | 30.000    | 30.000                  | NAL_MWD_IFR1+MS          | Original Borehole / Oxy Turkey<br>Track 4-3 State 22H Gyro + MWD             |

...Oxy Turkey Track 4-3 State 22H\Original Borehole\Oxy Turkey Track 4-3 State 22H Gyro + MWD 0-18151'