

RECEIVED  
FEB 10 2020  
EMNRD-OCD ARTESIA



**Weatherford**

Drilling Services  
10000 West County Rd. 116  
P.O. Box 61028  
Midland, TX USA 79711  
Tel. (432) 561-8892 Fax (432) 561-8895

XTO Energy  
6401 Holliday Hill Road  
Midland, TX 79707

Date: January 8, 2019

Attention: Terry West

Re: XTO Energy  
Well: Buttercup 27-34 Federal 2H  
Eddy County, New Mexico

Enclosed, please find the original survey performed on the referenced well by Precision Energy Services, Inc. (P-5 No. 676004), a Weatherford company. Other information required by your office is as follows:

| <u>Name &amp; Title<br/>Of Surveyor</u> | <u>Well<br/>Number</u> | <u>Surveyed<br/>Depths</u> | <u>Dates<br/>Performed</u> | <u>Type of<br/>Survey</u>     |
|-----------------------------------------|------------------------|----------------------------|----------------------------|-------------------------------|
| Jeff Johnson<br>MWD Ops. Coordinator    | 2H                     | 1,630 MD<br>19,229 MD      | 11/22/2018<br>12/29/2018   | Measurement<br>While Drilling |

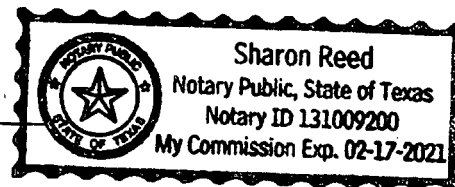
A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Jeff Johnson  
MWD Ops. Coordinator

On this, the 8<sup>th</sup> day of January, 2019, before me a notary public, the undersigned, officer, personally appeared Jeff Johnson, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness hereof, I hereunto set my hand and official seal.

Notary Public



RECEIVED

FEB 10 2020

EMNRD-OCDARTESIA



5D Survey Report

**XTO Energy**

**Field Name:** *Eddy Co., NM (NAD 27 NME)*  
**Site Name:** *Buttercup 27-34 Federal Pad*  
**Well Name:** *Buttercup 27-34 Federal #2H*  
**Survey:** *Definitive survey*

8 January 2019



**Weatherford®**



**Comment:**

**Comment:** Eddy Co., NM

**Comment:**

**+N/-S:** -0.00 US ft      **+E/-W:** 0.00 US ft      **Az:** 179.82°

**Rig Height (Well TVD Reference):** 30.50US ft **Elevation above MSL:** 3327.50US ft **Inclination:** 0.00° **Azimuth:** 0.00°

**Company:**

**Dip:** 60.34°

|  | Name | Start MD(USFt) | End MD(USFt) | Source Survey |
|--|------|----------------|--------------|---------------|
|  | MWD  | 0.00           | 1426.00      | WellBenders   |
|  | MWD  | 1426.00        | 3998.00      | WFT MWD_1     |
|  | MWD  | 3998.00        | 6734.00      | WFT MWD_2     |

Survey Tool Ranges:

| Name | Start MD(USft) | End MD(USft) | Source Survey |
|------|----------------|--------------|---------------|
| MWD  | 6734.00        | 6968.00      | WFT MWD_3     |
| MWD  | 6968.00        | 8282.00      | WFT MWD_4     |
| MWD  | 8282.00        | 11527.00     | WFT MWD_5     |
| MWD  | 11527.00       | 16896.00     | WFT MWD_6     |
| MWD  | 16896.00       | 19282.00     | WFT MWD_9     |

## Casing Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)

| MD (US ft) | Inc (°) | Az (°) | TVD (US ft) | N.Offset (US ft) | E.Offset (US ft) | TVD (MSL) (US ft) | Northing (US ft) | Easting (US ft) | Name      |
|------------|---------|--------|-------------|------------------|------------------|-------------------|------------------|-----------------|-----------|
| 1550.00    | 2.19    | 110.10 | 1548.97     | -40.06           | -3.57            | -1778.53          | 597488.84        | 615388.43       | 13 3/8 in |
| 4080.00    | 2.02    | 310.39 | 4076.91     | 2.91             | -18.88           | 749.41            | 597531.81        | 615373.12       | 9 5/8 in  |

Wellpath created using minimum curvature.

## Survey Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)

| MD (US ft) | Inc (°) | Az (°) | TVD (US ft) | VS (US ft) | N.Offset (US ft) | E.Offset (US ft) | Northing (US ft) | Easting (US ft) | Clos.Dist (US ft) | Clos.Az (°) | Comment                                          |
|------------|---------|--------|-------------|------------|------------------|------------------|------------------|-----------------|-------------------|-------------|--------------------------------------------------|
| 1426.00    | 2.30    | 112.80 | 1425.07     | 38.26      | -38.28           | -8.09            | 597490.62        | 615383.91       | 39.13             | 191.94      | Tie On WellBenders<br>13 3/8 in<br>First WFT SVY |
| 1550.00    | 2.19    | 110.10 | 1548.97     | 40.05      | -40.06           | -3.57            | 597488.84        | 615388.43       | 40.22             | 185.09      |                                                  |
| 1630.00    | 2.13    | 108.22 | 1628.92     | 41.05      | -41.05           | -0.72            | 597487.85        | 615391.28       | 41.06             | 181.00      |                                                  |
| 1725.00    | 1.19    | 115.15 | 1723.87     | 42.03      | -42.03           | 1.85             | 597486.87        | 615393.85       | 42.07             | 177.48      |                                                  |
| 1820.00    | 0.63    | 287.10 | 1818.87     | 42.30      | -42.29           | 2.25             | 597486.61        | 615394.25       | 42.35             | 176.96      |                                                  |
| 1914.00    | 1.61    | 291.10 | 1912.85     | 41.67      | -41.66           | 0.52             | 597487.24        | 615392.52       | 41.67             | 179.28      |                                                  |
| 2008.00    | 2.45    | 285.22 | 2006.79     | 40.65      | -40.66           | -2.65            | 597488.24        | 615389.35       | 40.75             | 183.73      |                                                  |
| 2102.00    | 3.95    | 286.35 | 2100.64     | 39.20      | -39.22           | -7.70            | 597489.68        | 615384.30       | 39.97             | 191.10      |                                                  |
| 2196.00    | 4.92    | 286.55 | 2194.36     | 37.12      | -37.16           | -14.67           | 597491.74        | 615377.33       | 39.95             | 201.54      |                                                  |
| 2290.00    | 3.66    | 282.81 | 2288.09     | 35.28      | -35.35           | -21.46           | 597493.55        | 615370.54       | 41.35             | 211.26      |                                                  |
| 2385.00    | 2.22    | 248.70 | 2382.97     | 35.26      | -35.35           | -26.13           | 597493.55        | 615365.87       | 43.95             | 216.47      |                                                  |
| 2479.00    | 1.12    | 217.90 | 2476.93     | 36.64      | -36.73           | -28.39           | 597492.17        | 615363.61       | 46.42             | 217.70      |                                                  |
| 2573.00    | 1.22    | 77.53  | 2570.93     | 37.15      | -37.24           | -27.98           | 597491.66        | 615364.02       | 46.58             | 216.92      |                                                  |
| 2668.00    | 2.39    | 47.16  | 2665.88     | 35.59      | -35.68           | -25.54           | 597493.22        | 615366.46       | 43.87             | 215.60      |                                                  |
| 2762.00    | 3.23    | 22.58  | 2759.77     | 31.82      | -31.90           | -23.08           | 597497.00        | 615368.92       | 39.37             | 215.89      |                                                  |
| 2857.00    | 2.70    | 16.59  | 2854.64     | 27.21      | -27.28           | -21.42           | 597501.62        | 615370.58       | 34.68             | 218.13      |                                                  |
| 2951.00    | 2.52    | 341.83 | 2948.55     | 23.13      | -23.20           | -21.43           | 597505.70        | 615370.57       | 31.58             | 222.73      |                                                  |
| 3046.00    | 2.79    | 322.46 | 3043.45     | 19.30      | -19.38           | -23.49           | 597509.52        | 615368.51       | 30.45             | 230.48      |                                                  |
| 3141.00    | 2.04    | 338.50 | 3138.36     | 15.89      | -15.97           | -25.52           | 597512.93        | 615366.48       | 30.10             | 237.96      |                                                  |
| 3235.00    | 1.77    | 24.64  | 3232.32     | 13.01      | -13.10           | -25.52           | 597515.80        | 615366.48       | 28.69             | 242.84      |                                                  |
| 3329.00    | 1.83    | 56.55  | 3326.27     | 10.87      | -10.95           | -23.67           | 597517.95        | 615368.33       | 26.08             | 245.17      |                                                  |
| 3424.00    | 1.95    | 54.00  | 3421.22     | 9.10       | -9.16            | -21.09           | 597519.74        | 615370.91       | 23.00             | 246.52      |                                                  |
| 3518.00    | 2.20    | 57.00  | 3515.16     | 7.18       | -7.24            | -18.29           | 597521.66        | 615373.71       | 19.67             | 248.40      |                                                  |
| 3613.00    | 2.28    | 52.77  | 3610.09     | 5.06       | -5.10            | -15.25           | 597523.80        | 615376.75       | 16.08             | 251.50      |                                                  |
| 3707.00    | 1.22    | 51.56  | 3704.04     | 3.31       | -3.35            | -12.98           | 597525.55        | 615379.02       | 13.41             | 255.53      |                                                  |
| 3802.00    | 1.00    | 316.48 | 3799.03     | 2.08       | -2.12            | -12.76           | 597526.78        | 615379.24       | 12.93             | 260.57      |                                                  |
| 3896.00    | 1.60    | 308.16 | 3893.01     | 0.67       | -0.71            | -14.36           | 597528.19        | 615377.64       | 14.37             | 267.15      |                                                  |
| 3989.00    | 1.75    | 310.49 | 3985.97     | -1.06      | 1.01             | -16.46           | 597529.91        | 615375.54       | 16.49             | 273.51      |                                                  |
| 3998.00    | 1.89    | 305.79 | 3994.96     | -1.24      | 1.19             | -16.68           | 597530.09        | 615375.32       | 16.72             | 274.07      |                                                  |
| 4080.00    | 2.02    | 310.39 | 4076.91     | -2.97      | 2.91             | -18.88           | 597531.81        | 615373.12       | 19.10             | 278.77      | 9 5/8 in                                         |
| 4183.00    | 2.20    | 315.35 | 4179.85     | -5.56      | 5.50             | -21.65           | 597534.40        | 615370.35       | 22.34             | 284.24      |                                                  |
| 4278.00    | 0.30    | 250.24 | 4274.82     | -6.78      | 6.71             | -23.17           | 597535.61        | 615368.83       | 24.12             | 286.15      |                                                  |
| 4373.00    | 0.20    | 221.08 | 4369.82     | -6.57      | 6.50             | -23.51           | 597535.40        | 615368.49       | 24.39             | 285.46      |                                                  |
| 4467.00    | 0.69    | 256.85 | 4463.82     | -6.32      | 6.25             | -24.17           | 597535.15        | 615367.83       | 24.96             | 284.50      |                                                  |
| 4562.00    | 0.45    | 173.13 | 4558.81     | -5.83      | 5.75             | -24.68           | 597534.65        | 615367.32       | 25.34             | 283.11      |                                                  |
| 4657.00    | 0.78    | 134.44 | 4653.81     | -5.00      | 4.92             | -24.18           | 597533.82        | 615367.82       | 24.67             | 281.51      |                                                  |
| 4751.00    | 0.58    | 116.53 | 4747.80     | -4.34      | 4.26             | -23.29           | 597533.16        | 615368.71       | 23.68             | 280.37      |                                                  |
| 4845.00    | 0.44    | 116.17 | 4841.80     | -3.96      | 3.89             | -22.54           | 597532.79        | 615369.46       | 22.88             | 279.80      |                                                  |
| 4939.00    | 0.49    | 97.71  | 4935.79     | -3.75      | 3.68             | -21.82           | 597532.58        | 615370.18       | 22.13             | 279.57      |                                                  |
| 5033.00    | 0.38    | 97.23  | 5029.79     | -3.65      | 3.59             | -21.11           | 597532.49        | 615370.89       | 21.42             | 279.64      |                                                  |
| 5127.00    | 0.36    | 105.74 | 5123.79     | -3.53      | 3.47             | -20.52           | 597532.37        | 615371.48       | 20.81             | 279.59      |                                                  |
| 5221.00    | 0.36    | 73.63  | 5217.79     | -3.53      | 3.47             | -19.95           | 597532.37        | 615372.05       | 20.25             | 279.87      |                                                  |

Wellpath created using minimum curvature.

Survey Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)

## Survey Report

| Survey Points: (Relative to Slot centre)(TVD relative to Well TVD Reference) |            |             |                |               |                     |                     |                     |                    |                      |                |         |
|------------------------------------------------------------------------------|------------|-------------|----------------|---------------|---------------------|---------------------|---------------------|--------------------|----------------------|----------------|---------|
| MD<br>(US ft)                                                                | Inc<br>(°) | g Az<br>(°) | TVD<br>(US ft) | VS<br>(US ft) | N.Offset<br>(US ft) | E.Offset<br>(US ft) | Northing<br>(US ft) | Easting<br>(US ft) | Clos.Dist<br>(US ft) | Clos.Az<br>(°) | Comment |
| 5316.00                                                                      | 0.60       | 51.96       | 5312.78        | -3.92         | 3.86                | -19.27              | 597532.76           | 615372.73          | 19.66                | 281.33         |         |
| 5410.00                                                                      | 0.44       | 43.95       | 5406.78        | -4.48         | 4.42                | -18.64              | 597533.32           | 615373.36          | 19.15                | 283.35         |         |
| 5505.00                                                                      | 0.63       | 31.60       | 5501.78        | -5.19         | 5.13                | -18.11              | 597534.03           | 615373.89          | 18.82                | 285.82         |         |
| 5599.00                                                                      | 0.56       | 55.34       | 5595.77        | -5.89         | 5.83                | -17.46              | 597534.73           | 615374.54          | 18.41                | 288.47         |         |
| 5694.00                                                                      | 0.79       | 24.81       | 5690.76        | -6.74         | 6.69                | -16.80              | 597535.59           | 615375.20          | 18.09                | 291.71         |         |
| 5789.00                                                                      | 0.77       | 215.48      | 5785.76        | -6.82         | 6.77                | -16.90              | 597535.67           | 615375.10          | 18.20                | 291.82         |         |
| 5883.00                                                                      | 1.26       | 207.90      | 5879.75        | -5.39         | 5.34                | -17.75              | 597534.24           | 615374.25          | 18.54                | 286.74         |         |
| 5978.00                                                                      | 1.43       | 216.62      | 5974.72        | -3.52         | 3.46                | -18.95              | 597532.36           | 615373.05          | 19.26                | 280.36         |         |
| 6073.00                                                                      | 1.39       | 234.52      | 6069.69        | -1.91         | 1.84                | -20.59              | 597530.74           | 615371.41          | 20.67                | 275.12         |         |
| 6168.00                                                                      | 1.14       | 220.39      | 6164.67        | -0.52         | 0.45                | -22.14              | 597529.35           | 615369.86          | 22.15                | 271.18         |         |
| 6262.00                                                                      | 1.33       | 222.30      | 6258.65        | 0.99          | -1.06               | -23.48              | 597527.84           | 615368.52          | 23.51                | 267.41         |         |
| 6357.00                                                                      | 0.84       | 145.49      | 6353.63        | 2.38          | -2.45               | -23.83              | 597526.45           | 615368.17          | 23.96                | 264.12         |         |
| 6452.00                                                                      | 0.80       | 144.49      | 6448.62        | 3.49          | -3.57               | -23.05              | 597525.33           | 615368.95          | 23.32                | 261.20         |         |
| 6546.00                                                                      | 1.75       | 346.27      | 6542.61        | 2.63          | -2.71               | -23.01              | 597526.19           | 615368.99          | 23.17                | 263.29         |         |
| 6640.00                                                                      | 1.64       | 330.72      | 6636.57        | 0.06          | -0.14               | -24.01              | 597528.76           | 615367.99          | 24.01                | 269.67         |         |
| 6734.00                                                                      | 0.73       | 264.87      | 6730.55        | -1.06         | 0.98                | -25.26              | 597529.88           | 615366.74          | 25.28                | 272.22         |         |
| 6828.00                                                                      | 0.87       | 157.06      | 6824.55        | -0.35         | 0.27                | -25.58              | 597529.17           | 615366.42          | 25.58                | 270.60         |         |
| 6968.00                                                                      | 1.77       | 165.17      | 6964.51        | 2.72          | -2.80               | -24.61              | 597526.10           | 615367.39          | 24.77                | 263.51         |         |
| 7025.00                                                                      | 2.73       | 174.24      | 7021.47        | 4.92          | -5.00               | -24.25              | 597523.90           | 615367.75          | 24.76                | 258.35         |         |
| 7057.00                                                                      | 4.51       | 173.27      | 7053.40        | 6.93          | -7.01               | -24.03              | 597521.89           | 615367.97          | 25.03                | 253.74         |         |
| 7088.00                                                                      | 5.96       | 189.19      | 7084.27        | 9.73          | -9.81               | -24.14              | 597519.09           | 615367.86          | 26.06                | 247.89         |         |
| 7119.00                                                                      | 9.13       | 196.00      | 7115.00        | 13.68         | -13.76              | -25.08              | 597515.14           | 615366.92          | 28.60                | 241.24         |         |
| 7150.00                                                                      | 13.03      | 194.13      | 7145.42        | 19.43         | -19.52              | -26.61              | 597509.38           | 615365.39          | 33.00                | 233.74         |         |
| 7197.00                                                                      | 19.03      | 191.91      | 7190.57        | 32.07         | -32.16              | -29.49              | 597496.74           | 615362.51          | 43.63                | 222.51         |         |
| 7244.00                                                                      | 21.99      | 191.55      | 7234.59        | 48.18         | -48.29              | -32.83              | 597480.61           | 615359.17          | 58.39                | 214.21         |         |
| 7291.00                                                                      | 27.48      | 186.22      | 7277.26        | 67.59         | -67.71              | -35.77              | 597461.19           | 615356.23          | 76.57                | 207.85         |         |
| 7339.00                                                                      | 32.23      | 188.81      | 7318.88        | 91.26         | -91.38              | -38.93              | 597437.52           | 615353.07          | 99.33                | 203.08         |         |
| 7386.00                                                                      | 35.70      | 193.38      | 7357.86        | 116.98        | -117.12             | -44.03              | 597411.78           | 615347.97          | 125.12               | 200.60         |         |
| 7433.00                                                                      | 39.21      | 196.66      | 7395.17        | 144.54        | -144.70             | -51.46              | 597384.20           | 615340.54          | 153.58               | 199.58         |         |
| 7480.00                                                                      | 43.57      | 198.17      | 7430.42        | 174.15        | -174.34             | -60.78              | 597354.56           | 615331.22          | 184.63               | 199.22         |         |
| 7527.00                                                                      | 47.44      | 197.63      | 7463.36        | 206.01        | -206.24             | -71.07              | 597322.66           | 615320.93          | 218.14               | 199.02         |         |
| 7574.00                                                                      | 50.69      | 198.23      | 7494.15        | 239.75        | -240.01             | -82.01              | 597288.89           | 615309.99          | 253.64               | 198.86         |         |
| 7621.00                                                                      | 54.13      | 200.74      | 7522.82        | 274.81        | -275.11             | -94.44              | 597253.79           | 615297.56          | 290.87               | 198.95         |         |
| 7668.00                                                                      | 59.65      | 199.80      | 7548.48        | 311.68        | -312.02             | -108.07             | 597216.88           | 615283.93          | 330.21               | 199.10         |         |
| 7715.00                                                                      | 65.79      | 197.71      | 7570.02        | 351.18        | -351.56             | -121.47             | 597177.34           | 615270.53          | 371.96               | 199.06         |         |
| 7762.00                                                                      | 68.66      | 197.42      | 7588.21        | 392.45        | -392.87             | -134.55             | 597136.03           | 615257.45          | 415.27               | 198.90         |         |
| 7808.00                                                                      | 71.58      | 196.92      | 7603.85        | 433.74        | -434.20             | -147.31             | 597094.70           | 615244.69          | 458.51               | 198.74         |         |
| 7839.00                                                                      | 75.43      | 196.03      | 7612.65        | 462.21        | -462.70             | -155.74             | 597066.20           | 615236.26          | 488.21               | 198.60         |         |
| 7871.00                                                                      | 77.46      | 195.52      | 7620.15        | 492.12        | -492.64             | -164.20             | 597036.26           | 615227.80          | 519.28               | 198.43         |         |
| 7902.00                                                                      | 77.81      | 195.39      | 7626.79        | 521.28        | -521.82             | -172.27             | 597007.08           | 615219.73          | 549.52               | 198.27         |         |
| 7934.00                                                                      | 77.81      | 195.76      | 7633.54        | 551.38        | -551.95             | -180.66             | 596976.95           | 615211.34          | 580.77               | 198.12         |         |
| 7965.00                                                                      | 78.10      | 196.26      | 7640.01        | 580.50        | -581.09             | -189.03             | 596947.81           | 615202.97          | 611.06               | 198.02         |         |
| 7997.00                                                                      | 78.18      | 196.04      | 7646.59        | 610.55        | -611.17             | -197.74             | 596917.73           | 615194.26          | 642.36               | 197.93         |         |
| 8091.00                                                                      | 77.88      | 195.30      | 7666.09        | 699.01        | -699.71             | -222.57             | 596829.19           | 615169.43          | 734.26               | 197.65         |         |
| 8186.00                                                                      | 77.31      | 194.97      | 7686.49        | 788.49        | -789.27             | -246.80             | 596739.63           | 615145.20          | 826.96               | 197.36         |         |
| 8282.00                                                                      | 76.17      | 194.14      | 7708.51        | 878.86        | -879.71             | -270.28             | 596649.19           | 615121.72          | 920.30               | 197.08         |         |
| 8376.00                                                                      | 79.10      | 194.59      | 7728.64        | 967.73        | -968.65             | -293.06             | 596560.25           | 615098.94          | 1012.01              | 196.83         |         |
| 8471.00                                                                      | 78.17      | 194.71      | 7747.36        | 1057.76       | -1058.76            | -316.62             | 596470.14           | 615075.38          | 1105.09              | 196.65         |         |
| 8566.00                                                                      | 78.31      | 194.77      | 7766.72        | 1147.63       | -1148.70            | -340.28             | 596380.20           | 615051.72          | 1198.05              | 196.50         |         |
| 8661.00                                                                      | 78.45      | 194.63      | 7785.86        | 1237.56       | -1238.71            | -363.89             | 596290.19           | 615028.11          | 1291.06              | 196.37         |         |
| 8757.00                                                                      | 78.32      | 194.50      | 7805.19        | 1328.50       | -1329.72            | -387.54             | 596199.18           | 615004.46          | 1385.05              | 196.25         |         |
| 8852.00                                                                      | 77.45      | 194.47      | 7825.12        | 1418.36       | -1419.65            | -410.77             | 596109.25           | 614981.23          | 1477.89              | 196.14         |         |
| 8947.00                                                                      | 76.09      | 194.51      | 7846.86        | 1507.82       | -1509.19            | -433.91             | 596019.71           | 614958.09          | 1570.33              | 196.04         |         |
| 9040.00                                                                      | 75.94      | 195.78      | 7869.34        | 1594.85       | -1596.30            | -457.49             | 595932.60           | 614934.51          | 1660.56              | 195.99         |         |
| 9135.00                                                                      | 76.66      | 196.16      | 7891.84        | 1683.51       | -1685.03            | -482.88             | 595843.87           | 614909.12          | 1752.86              | 195.99         |         |
| 9230.00                                                                      | 76.80      | 195.81      | 7913.65        | 1772.31       | -1773.92            | -508.35             | 595754.98           | 614883.65          | 1845.32              | 195.99         |         |
| 9324.00                                                                      | 77.53      | 195.71      | 7934.53        | 1860.44       | -1862.12            | -533.24             | 595666.78           | 614858.76          | 1936.97              | 195.98         |         |
| 9418.00                                                                      | 80.37      | 194.91      | 7952.54        | 1949.34       | -1951.10            | -557.59             | 595577.80           | 614834.41          | 2029.21              | 195.95         |         |
| 9513.00                                                                      | 80.94      | 195.22      | 7967.97        | 2039.78       | -2041.62            | -581.96             | 595487.28           | 614810.04          | 2122.94              | 195.91         |         |

| Survey Points: (Relative to Slot centre)(TVD relative to Well TVD Reference) |            |           |                |               |                     |                     |                     |                    |                      |                |         |
|------------------------------------------------------------------------------|------------|-----------|----------------|---------------|---------------------|---------------------|---------------------|--------------------|----------------------|----------------|---------|
| MD<br>(US ft)                                                                | Inc<br>(°) | Az<br>(°) | TVD<br>(US ft) | VS<br>(US ft) | N.Offset<br>(US ft) | E.Offset<br>(US ft) | Northing<br>(US ft) | Easting<br>(US ft) | Clos.Dist<br>(US ft) | Clos.Az<br>(°) | Comment |
| 9608.00                                                                      | 78.52      | 194.36    | 7984.91        | 2130.07       | -2131.99            | -605.82             | 595396.91           | 614786.18          | 2216.39              | 195.86         |         |
| 9702.00                                                                      | 77.46      | 194.17    | 8004.46        | 2219.11       | -2221.09            | -628.48             | 595307.81           | 614763.52          | 2308.30              | 195.80         |         |
| 9797.00                                                                      | 76.60      | 194.23    | 8025.79        | 2308.78       | -2310.84            | -651.19             | 595218.06           | 614740.81          | 2400.84              | 195.74         |         |
| 9891.00                                                                      | 77.53      | 194.29    | 8046.83        | 2397.50       | -2399.63            | -673.75             | 595129.27           | 614718.25          | 2492.42              | 195.68         |         |
| 9986.00                                                                      | 78.16      | 193.97    | 8066.83        | 2487.49       | -2489.69            | -696.42             | 595039.21           | 614695.58          | 2585.26              | 195.63         |         |
| 10081.00                                                                     | 78.09      | 194.04    | 8086.38        | 2577.62       | -2579.90            | -718.92             | 594949.00           | 614673.08          | 2678.19              | 195.57         |         |
| 10175.00                                                                     | 78.25      | 193.91    | 8105.65        | 2666.83       | -2669.18            | -741.14             | 594859.72           | 614650.86          | 2770.16              | 195.52         |         |
| 10269.00                                                                     | 78.38      | 193.82    | 8124.69        | 2756.13       | -2758.55            | -763.20             | 594770.35           | 614628.80          | 2862.17              | 195.47         |         |
| 10364.00                                                                     | 77.23      | 193.57    | 8144.76        | 2846.28       | -2848.76            | -785.18             | 594680.14           | 614606.82          | 2954.99              | 195.41         |         |
| 10458.00                                                                     | 76.65      | 193.83    | 8166.00        | 2935.17       | -2937.72            | -806.87             | 594591.18           | 614585.13          | 3046.52              | 195.36         |         |
| 10552.00                                                                     | 76.59      | 193.87    | 8187.75        | 3023.89       | -3026.51            | -828.76             | 594502.39           | 614563.24          | 3137.93              | 195.31         |         |
| 10646.00                                                                     | 76.31      | 194.07    | 8209.77        | 3112.50       | -3115.19            | -850.82             | 594413.71           | 614541.18          | 3229.29              | 195.28         |         |
| 10740.00                                                                     | 77.89      | 195.88    | 8230.76        | 3200.94       | -3203.70            | -874.50             | 594325.20           | 614517.50          | 3320.91              | 195.27         |         |
| 10835.00                                                                     | 78.45      | 196.06    | 8250.24        | 3290.25       | -3293.09            | -900.08             | 594235.81           | 614491.92          | 3413.89              | 195.29         |         |
| 10930.00                                                                     | 78.46      | 196.77    | 8269.25        | 3379.45       | -3382.38            | -926.39             | 594146.52           | 614465.61          | 3506.95              | 195.32         |         |
| 11023.00                                                                     | 77.75      | 193.99    | 8288.42        | 3467.11       | -3470.11            | -950.52             | 594058.79           | 614441.48          | 3597.94              | 195.32         |         |
| 11116.00                                                                     | 76.31      | 193.66    | 8309.29        | 3555.04       | -3558.11            | -972.18             | 593970.79           | 614419.82          | 3688.53              | 195.28         |         |
| 11211.00                                                                     | 77.24      | 194.18    | 8331.03        | 3644.73       | -3647.87            | -994.43             | 593881.03           | 614397.57          | 3780.99              | 195.25         |         |
| 11306.00                                                                     | 77.88      | 194.54    | 8351.49        | 3734.53       | -3737.74            | -1017.43            | 593791.16           | 614374.57          | 3873.75              | 195.23         |         |
| 11400.00                                                                     | 77.96      | 194.41    | 8371.16        | 3823.46       | -3826.74            | -1040.41            | 593702.16           | 614351.59          | 3965.66              | 195.21         |         |
| 11432.00                                                                     | 78.31      | 193.67    | 8377.74        | 3853.81       | -3857.12            | -1048.01            | 593671.78           | 614343.99          | 3996.97              | 195.20         |         |
| 11464.00                                                                     | 78.37      | 192.93    | 8384.21        | 3884.29       | -3887.62            | -1055.22            | 593641.28           | 614336.78          | 4028.29              | 195.19         |         |
| 11495.00                                                                     | 79.10      | 192.03    | 8390.27        | 3913.95       | -3917.31            | -1061.79            | 593611.59           | 614330.21          | 4058.66              | 195.17         |         |
| 11527.00                                                                     | 80.30      | 191.46    | 8395.99        | 3944.76       | -3948.13            | -1068.20            | 593580.77           | 614323.80          | 4090.08              | 195.14         |         |
| 11613.00                                                                     | 78.39      | 185.78    | 8411.90        | 4028.24       | -4031.65            | -1080.87            | 593497.25           | 614311.13          | 4174.03              | 195.01         |         |
| 11660.00                                                                     | 77.52      | 180.64    | 8421.72        | 4074.10       | -4077.53            | -1083.45            | 593451.37           | 614308.55          | 4219.02              | 194.88         |         |
| 11707.00                                                                     | 77.95      | 175.96    | 8431.70        | 4120.00       | -4123.42            | -1082.08            | 593405.48           | 614309.92          | 4263.04              | 194.70         |         |
| 11754.00                                                                     | 78.89      | 173.64    | 8441.14        | 4165.86       | -4169.27            | -1077.91            | 593359.63           | 614314.09          | 4306.36              | 194.50         |         |
| 11802.00                                                                     | 79.88      | 173.39    | 8449.98        | 4212.76       | -4216.15            | -1072.58            | 593312.75           | 614319.42          | 4350.44              | 194.27         |         |
| 11849.00                                                                     | 77.31      | 175.42    | 8459.28        | 4258.62       | -4261.99            | -1068.08            | 593266.91           | 614323.92          | 4393.79              | 194.07         |         |
| 11896.00                                                                     | 77.66      | 175.83    | 8469.46        | 4304.38       | -4307.74            | -1064.58            | 593221.16           | 614327.42          | 4437.34              | 193.88         |         |
| 11991.00                                                                     | 78.24      | 179.38    | 8489.30        | 4397.20       | -4400.55            | -1060.71            | 593128.35           | 614331.29          | 4526.58              | 193.55         |         |
| 12084.00                                                                     | 78.23      | 180.53    | 8508.26        | 4488.24       | -4491.60            | -1060.63            | 593037.30           | 614331.37          | 4615.12              | 193.29         |         |
| 12177.00                                                                     | 79.09      | 180.57    | 8526.55        | 4579.42       | -4582.78            | -1061.51            | 592946.12           | 614330.49          | 4704.11              | 193.04         |         |
| 12271.00                                                                     | 81.08      | 180.70    | 8542.73        | 4672.00       | -4675.36            | -1062.54            | 592853.54           | 614329.46          | 4794.58              | 192.80         |         |
| 12366.00                                                                     | 86.43      | 180.04    | 8553.06        | 4766.40       | -4769.76            | -1063.14            | 592759.14           | 614328.86          | 4886.81              | 192.57         |         |
| 12460.00                                                                     | 89.44      | 178.49    | 8556.45        | 4860.32       | -4863.68            | -1061.94            | 592665.22           | 614330.06          | 4978.26              | 192.32         |         |
| 12555.00                                                                     | 91.68      | 178.39    | 8555.52        | 4955.28       | -4958.63            | -1059.35            | 592570.27           | 614332.65          | 5070.53              | 192.06         |         |
| 12650.00                                                                     | 90.56      | 178.72    | 8553.67        | 5050.24       | -5053.58            | -1056.96            | 592475.32           | 614335.04          | 5162.93              | 191.81         |         |
| 12744.00                                                                     | 88.04      | 180.14    | 8554.81        | 5144.22       | -5147.56            | -1056.02            | 592381.34           | 614335.98          | 5254.77              | 191.59         |         |
| 12839.00                                                                     | 89.30      | 180.53    | 8557.02        | 5239.19       | -5242.53            | -1056.58            | 592286.37           | 614335.42          | 5347.94              | 191.39         |         |
| 12933.00                                                                     | 88.11      | 179.92    | 8559.14        | 5333.16       | -5336.50            | -1056.95            | 592192.40           | 614335.05          | 5440.17              | 191.20         |         |
| 13028.00                                                                     | 89.58      | 179.65    | 8561.06        | 5428.14       | -5431.48            | -1056.59            | 592097.42           | 614335.41          | 5533.30              | 191.01         |         |
| 13123.00                                                                     | 87.69      | 180.37    | 8563.32        | 5523.10       | -5526.45            | -1056.61            | 592002.45           | 614335.39          | 5626.55              | 190.82         |         |
| 13217.00                                                                     | 88.53      | 179.95    | 8566.42        | 5617.05       | -5620.40            | -1056.87            | 591908.50           | 614335.13          | 5718.90              | 190.65         |         |
| 13311.00                                                                     | 89.93      | 179.57    | 8567.69        | 5711.04       | -5714.39            | -1056.47            | 591814.51           | 614335.53          | 5811.22              | 190.47         |         |
| 13405.00                                                                     | 91.54      | 179.66    | 8566.48        | 5805.03       | -5808.37            | -1055.84            | 591720.53           | 614336.16          | 5903.56              | 190.30         |         |
| 13499.00                                                                     | 90.56      | 180.92    | 8564.76        | 5899.00       | -5902.35            | -1056.32            | 591626.55           | 614335.68          | 5996.13              | 190.15         |         |
| 13593.00                                                                     | 91.75      | 181.52    | 8562.86        | 5992.96       | -5996.31            | -1058.32            | 591532.59           | 614333.68          | 6088.99              | 190.01         |         |
| 13688.00                                                                     | 89.79      | 181.17    | 8561.59        | 6087.91       | -6091.27            | -1060.55            | 591437.63           | 614331.45          | 6182.91              | 189.88         |         |
| 13782.00                                                                     | 90.56      | 181.30    | 8561.30        | 6181.88       | -6185.25            | -1062.57            | 591343.65           | 614329.43          | 6275.85              | 189.75         |         |
| 13876.00                                                                     | 91.89      | 181.16    | 8559.29        | 6275.83       | -6279.20            | -1064.59            | 591249.70           | 614327.41          | 6368.81              | 189.62         |         |
| 13971.00                                                                     | 90.77      | 181.70    | 8557.08        | 6370.76       | -6374.14            | -1066.96            | 591154.76           | 614325.04          | 6462.83              | 189.50         |         |
| 14065.00                                                                     | 92.03      | 182.18    | 8554.79        | 6464.67       | -6468.06            | -1070.14            | 591060.84           | 614321.86          | 6555.99              | 189.39         |         |
| 14159.00                                                                     | 91.12      | 181.43    | 8552.20        | 6558.57       | -6561.98            | -1073.10            | 590966.92           | 614318.90          | 6649.14              | 189.29         |         |
| 14254.00                                                                     | 89.72      | 180.26    | 8551.51        | 6653.55       | -6656.96            | -1074.50            | 590871.94           | 614317.50          | 6743.12              | 189.17         |         |
| 14348.00                                                                     | 91.40      | 180.79    | 8550.59        | 6747.54       | -6750.95            | -1075.36            | 590777.95           | 614316.64          | 6836.06              | 189.05         |         |
| 14442.00                                                                     | 89.86      | 180.23    | 8549.56        | 6841.52       | -6844.94            | -1076.20            | 590683.96           | 614315.80          | 6929.02              | 188.94         |         |
| 14536.00                                                                     | 87.69      | 179.17    | 8551.56        | 6935.49       | -6938.91            | -1075.71            | 590589.99           | 614316.29          | 7021.79              | 188.81         |         |

# Survey Report

| Survey Points: (Relative to Slot centre)(TVD relative to Well TVD Reference) |            |           |                |               |                     |                     |                     |                    |                      |                |                        |
|------------------------------------------------------------------------------|------------|-----------|----------------|---------------|---------------------|---------------------|---------------------|--------------------|----------------------|----------------|------------------------|
| MD<br>(US ft)                                                                | Inc<br>(°) | Az<br>(°) | TVD<br>(US ft) | VS<br>(US ft) | N.Offset<br>(US ft) | E.Offset<br>(US ft) | Northing<br>(US ft) | Easting<br>(US ft) | Clos.Dist<br>(US ft) | Clos.Az<br>(°) | Comment                |
| 14630.00                                                                     | 89.16      | 179.49    | 8554.15        | 7029.45       | -7032.86            | -1074.61            | 590496.04           | 614317.39          | 7114.49              | 188.69         |                        |
| 14724.00                                                                     | 91.47      | 179.43    | 8553.63        | 7123.44       | -7126.85            | -1073.72            | 590402.05           | 614318.28          | 7207.28              | 188.57         |                        |
| 14819.00                                                                     | 93.29      | 179.53    | 8549.69        | 7218.35       | -7221.76            | -1072.86            | 590307.14           | 614319.14          | 7301.02              | 188.45         |                        |
| 14913.00                                                                     | 91.82      | 179.08    | 8545.50        | 7312.25       | -7315.66            | -1071.72            | 590213.24           | 614320.28          | 7393.74              | 188.33         |                        |
| 15007.00                                                                     | 90.21      | 179.12    | 8543.83        | 7406.23       | -7409.63            | -1070.25            | 590119.27           | 614321.75          | 7486.52              | 188.22         |                        |
| 15101.00                                                                     | 92.17      | 179.17    | 8541.88        | 7500.20       | -7503.59            | -1068.85            | 590025.31           | 614323.15          | 7579.33              | 188.11         |                        |
| 15196.00                                                                     | 90.35      | 179.69    | 8539.79        | 7595.17       | -7598.56            | -1067.90            | 589930.34           | 614324.10          | 7673.23              | 188.00         |                        |
| 15290.00                                                                     | 91.61      | 179.55    | 8538.18        | 7689.15       | -7692.54            | -1067.28            | 589836.36           | 614324.72          | 7766.23              | 187.90         |                        |
| 15385.00                                                                     | 91.33      | 178.75    | 8535.75        | 7784.11       | -7787.50            | -1065.87            | 589741.40           | 614326.13          | 7860.10              | 187.79         |                        |
| 15479.00                                                                     | 88.95      | 178.63    | 8535.52        | 7878.09       | -7881.47            | -1063.72            | 589647.43           | 614328.28          | 7952.93              | 187.69         |                        |
| 15572.00                                                                     | 90.63      | 178.68    | 8535.86        | 7971.06       | -7974.44            | -1061.54            | 589554.46           | 614330.46          | 8044.78              | 187.58         |                        |
| 15667.00                                                                     | 91.40      | 178.42    | 8534.17        | 8066.02       | -8069.39            | -1059.13            | 589459.51           | 614332.87          | 8138.60              | 187.48         |                        |
| 15762.00                                                                     | 88.88      | 178.15    | 8533.94        | 8160.98       | -8164.34            | -1056.29            | 589364.56           | 614335.71          | 8232.39              | 187.37         |                        |
| 15856.00                                                                     | 89.09      | 177.64    | 8535.61        | 8254.91       | -8258.26            | -1052.84            | 589270.64           | 614339.16          | 8325.10              | 187.27         |                        |
| 15951.00                                                                     | 90.49      | 177.25    | 8535.95        | 8349.83       | -8353.16            | -1048.60            | 589175.74           | 614343.40          | 8418.73              | 187.16         |                        |
| 16045.00                                                                     | 91.96      | 177.05    | 8533.95        | 8443.70       | -8447.02            | -1043.93            | 589081.88           | 614348.07          | 8511.29              | 187.05         |                        |
| 16140.00                                                                     | 91.40      | 177.05    | 8531.16        | 8538.55       | -8541.86            | -1039.04            | 588987.04           | 614352.96          | 8604.82              | 186.94         |                        |
| 16234.00                                                                     | 90.49      | 176.07    | 8529.61        | 8632.38       | -8635.67            | -1033.40            | 588893.23           | 614358.60          | 8697.29              | 186.82         |                        |
| 16329.00                                                                     | 90.28      | 176.96    | 8528.97        | 8727.22       | -8730.49            | -1027.63            | 588798.41           | 614364.37          | 8790.77              | 186.71         |                        |
| 16423.00                                                                     | 90.56      | 179.17    | 8528.28        | 8821.17       | -8824.43            | -1024.46            | 588704.47           | 614367.54          | 8883.70              | 186.62         |                        |
| 16518.00                                                                     | 90.42      | 180.29    | 8527.47        | 8916.17       | -8919.43            | -1024.01            | 588609.47           | 614367.99          | 8978.02              | 186.55         |                        |
| 16612.00                                                                     | 90.49      | 181.09    | 8526.72        | 9010.15       | -9013.42            | -1025.14            | 588515.48           | 614366.86          | 9071.53              | 186.49         |                        |
| 16707.00                                                                     | 92.87      | 182.21    | 8523.94        | 9105.05       | -9108.33            | -1027.87            | 588420.57           | 614364.13          | 9166.14              | 186.44         |                        |
| 16802.00                                                                     | 94.83      | 182.01    | 8517.56        | 9199.76       | -9203.04            | -1031.36            | 588325.86           | 614360.64          | 9260.65              | 186.39         |                        |
| 16896.00                                                                     | 93.63      | 182.37    | 8510.63        | 9293.42       | -9296.72            | -1034.95            | 588232.18           | 614357.05          | 9354.15              | 186.35         |                        |
| 17004.00                                                                     | 88.88      | 183.03    | 8508.26        | 9401.23       | -9404.54            | -1040.03            | 588124.36           | 614351.97          | 9461.87              | 186.31         |                        |
| 17099.00                                                                     | 90.00      | 183.10    | 8509.19        | 9496.07       | -9499.40            | -1045.11            | 588029.50           | 614346.89          | 9556.72              | 186.28         |                        |
| 17193.00                                                                     | 92.03      | 182.55    | 8507.53        | 9589.92       | -9593.26            | -1049.74            | 587935.64           | 614342.26          | 9650.53              | 186.24         |                        |
| 17287.00                                                                     | 90.49      | 182.81    | 8505.46        | 9683.78       | -9687.14            | -1054.14            | 587841.76           | 614337.86          | 9744.32              | 186.21         |                        |
| 17382.00                                                                     | 92.31      | 182.68    | 8503.14        | 9778.62       | -9781.99            | -1058.68            | 587746.91           | 614333.32          | 9839.12              | 186.18         |                        |
| 17476.00                                                                     | 91.12      | 181.32    | 8500.32        | 9872.51       | -9875.89            | -1061.96            | 587653.01           | 614330.04          | 9932.82              | 186.14         |                        |
| 17571.00                                                                     | 90.35      | 181.47    | 8499.11        | 9967.46       | -9970.85            | -1064.28            | 587558.05           | 614327.72          | 10027.49             | 186.09         |                        |
| 17665.00                                                                     | 89.23      | 180.73    | 8499.45        | 10061.44      | -10064.83           | -1066.08            | 587464.07           | 614325.92          | 10121.14             | 186.05         |                        |
| 17760.00                                                                     | 91.12      | 180.51    | 8499.16        | 10156.42      | -10159.82           | -1067.11            | 587369.08           | 614324.89          | 10215.71             | 186.00         |                        |
| 17854.00                                                                     | 90.70      | 179.99    | 8497.67        | 10250.41      | -10253.81           | -1067.52            | 587275.09           | 614324.48          | 10309.23             | 185.94         |                        |
| 17949.00                                                                     | 88.95      | 179.53    | 8497.96        | 10345.40      | -10348.81           | -1067.12            | 587180.09           | 614324.88          | 10403.68             | 185.89         |                        |
| 18043.00                                                                     | 90.21      | 178.97    | 8498.65        | 10439.39      | -10442.79           | -1065.89            | 587086.11           | 614326.11          | 10497.05             | 185.83         |                        |
| 18138.00                                                                     | 89.16      | 179.24    | 8499.17        | 10534.38      | -10537.78           | -1064.41            | 586991.12           | 614327.59          | 10591.40             | 185.77         |                        |
| 18233.00                                                                     | 90.21      | 179.22    | 8499.69        | 10629.37      | -10632.77           | -1063.13            | 586896.13           | 614328.87          | 10685.78             | 185.71         |                        |
| 18328.00                                                                     | 91.19      | 178.57    | 8498.53        | 10724.35      | -10727.74           | -1061.30            | 586801.16           | 614330.70          | 10780.11             | 185.65         |                        |
| 18422.00                                                                     | 89.44      | 178.55    | 8498.01        | 10818.33      | -10821.71           | -1058.94            | 586707.19           | 614333.06          | 10873.39             | 185.59         |                        |
| 18517.00                                                                     | 87.62      | 179.36    | 8500.45        | 10913.28      | -10916.65           | -1057.20            | 586612.25           | 614334.80          | 10967.73             | 185.53         |                        |
| 18612.00                                                                     | 87.41      | 178.62    | 8504.57        | 11008.18      | -11011.55           | -1055.53            | 586517.35           | 614336.47          | 11062.02             | 185.48         |                        |
| 18707.00                                                                     | 90.07      | 178.43    | 8506.66        | 11103.12      | -11106.49           | -1053.09            | 586422.41           | 614338.91          | 11156.30             | 185.42         |                        |
| 18801.00                                                                     | 91.33      | 177.56    | 8505.51        | 11197.07      | -11200.42           | -1049.80            | 586328.48           | 614342.20          | 11249.51             | 185.35         |                        |
| 18897.00                                                                     | 90.84      | 178.86    | 8503.69        | 11293.01      | -11296.35           | -1046.80            | 586232.55           | 614345.20          | 11344.75             | 185.29         |                        |
| 18991.00                                                                     | 90.07      | 178.34    | 8502.95        | 11386.98      | -11390.32           | -1044.50            | 586138.58           | 614347.50          | 11438.11             | 185.24         |                        |
| 19085.00                                                                     | 90.35      | 177.83    | 8502.60        | 11480.94      | -11484.27           | -1041.36            | 586044.63           | 614350.64          | 11531.38             | 185.18         |                        |
| 19179.00                                                                     | 90.63      | 177.21    | 8501.80        | 11574.86      | -11578.17           | -1037.29            | 585950.73           | 614354.71          | 11624.55             | 185.12         |                        |
| 19229.00                                                                     | 90.56      | 176.64    | 8501.28        | 11624.79      | -11628.10           | -1034.61            | 585900.80           | 614357.39          | 11674.04             | 185.08         |                        |
| 19282.00                                                                     | 90.56      | 176.64    | 8500.76        | 11677.71      | -11681.01           | -1031.51            | 585847.89           | 614360.49          | 11726.46             | 185.05         | Last WFT<br>SVY<br>PTB |

| Formation Points: (Relative to Slot centre)(TVD relative to Well TVD Reference) |            |           |                |                     |                     |                      |                     |                    |                                   |         |
|---------------------------------------------------------------------------------|------------|-----------|----------------|---------------------|---------------------|----------------------|---------------------|--------------------|-----------------------------------|---------|
| MD<br>(US ft)                                                                   | Inc<br>(°) | Az<br>(°) | TVD<br>(US ft) | N.Offset<br>(US ft) | E.Offset<br>(US ft) | TVD (MSL)<br>(US ft) | Northing<br>(US ft) | Easting<br>(US ft) | Name                              | Comment |
| N/A                                                                             | N/A        | N/A       | N/A            | N/A                 | N/A                 | N/A                  | N/A                 | N/A                | Second Bone<br>Spring 'B'<br>Sand |         |
| 237.54                                                                          | 1.66       | 214.32    | 237.50         | -3.52               | -0.65               | -3090.00             | 597525.38           | 615391.35          | Rustler                           |         |

## Survey Report

| Formation Points: (Relative to Slot centre)(TVD relative to Well TVD Reference) |            |           |                |                     |                     |                      |                     |                    |                                    |         |
|---------------------------------------------------------------------------------|------------|-----------|----------------|---------------------|---------------------|----------------------|---------------------|--------------------|------------------------------------|---------|
| HD<br>(US ft)                                                                   | Inc<br>(°) | Az<br>(°) | TVD<br>(US ft) | N.Offset<br>(US ft) | E.Offset<br>(US ft) | TVD (MSL)<br>(US ft) | Northing<br>(US ft) | Easting<br>(US ft) | Name                               | Comment |
| 492.73                                                                          | 2.52       | 216.98    | 492.50         | -10.41              | -6.99               | -2835.00             | 597518.49           | 615385.01          | Top Salt                           |         |
| 1493.48                                                                         | 2.24       | 111.36    | 1492.50        | -39.29              | -5.61               | -1835.00             | 597489.61           | 615386.39          | Base Salt                          |         |
| 1678.61                                                                         | 1.65       | 110.78    | 1677.50        | -41.58              | 0.79                | -1650.00             | 597487.32           | 615392.79          | Yates                              |         |
| 2309.44                                                                         | 3.30       | 278.38    | 2307.50        | -35.13              | -22.61              | -1020.00             | 597493.77           | 615369.39          | Capitan                            |         |
| 4005.54                                                                         | 1.90       | 306.24    | 4002.50        | 1.33                | -16.88              | 675.00               | 597530.23           | 615375.12          | Delaware                           |         |
| 4605.69                                                                         | 0.57       | 149.92    | 4602.50        | 5.39                | -24.55              | 1275.00              | 597534.29           | 615367.45          | Brushy<br>Canyon                   |         |
| 6115.82                                                                         | 1.27       | 228.84    | 6112.50        | 1.23                | -21.37              | 2785.00              | 597530.13           | 615370.63          | Bone Spring                        |         |
| 6224.84                                                                         | 1.25       | 221.61    | 6221.50        | -0.44               | -22.92              | 2894.00              | 597528.46           | 615369.08          | Avalon Sand                        |         |
| 7741.40                                                                         | 67.40      | 197.55    | 7580.50        | -374.65             | -128.81             | 4253.00              | 597154.25           | 615263.19          | First Bone<br>Spring Sand          |         |
| 8461.89                                                                         | 78.26      | 194.70    | 7745.50        | -1050.13            | -314.35             | 4418.00              | 596478.77           | 615077.65          | Second Bone<br>Spring<br>Limestone |         |
| 11574.88                                                                        | 79.22      | 188.31    | 8404.50        | -3994.54            | -1076.28            | 5077.00              | 593534.36           | 614315.72          | Second Bone<br>Spring Sand         |         |