



State of New Mexico

County of Eddy

I, Larry Wright, certify that: I am employed by WellBenders Directional Services LLC; that I did on the day(s) of September 20, 2019 through November 09, 2019 conduct or supervise the taking of MWD Directional Survey from a depth of 0 feet to a depth of 12,713 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by WellBenders Directional Services LLC; that I am authorized and qualified to make this report; that this survey was conducted at the request of XTO Energy Inc. for the State of New Mexico; Well: PLU 32 Big Sinks Petirrojo MON State #1 in Eddy County; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by WellBenders Directional Services LLC.

Larry  
Wright

(Sign Name)

Digitally signed by  
Larry Wright  
Date: 2020.10.07  
13:57:32 -05'00'

Larry Wright  
MWD Manager



## **XTO Energy**

**Eddy County, NM (Nad-27 / East Zone)**

**PLU 29 Big Sinks**

**Petirrojo MON State #1**

**Wellbore #1**

**Design: OH**

## **End Of Well Report**

**07 November, 2019**



## Wellbenders

### End Of Well Report

|                  |                                      |                                     |                                            |
|------------------|--------------------------------------|-------------------------------------|--------------------------------------------|
| <b>Company:</b>  | XTO Energy                           | <b>Local Co-ordinate Reference:</b> | Well Petirrojo MON State #1                |
| <b>Project:</b>  | Eddy County, NM (Nad-27 / East Zone) | <b>TVD Reference:</b>               | RKB = 24' @ 3338.00usft (Orion Hercules 4) |
| <b>Site:</b>     | PLU 29 Big Sinks                     | <b>MD Reference:</b>                | RKB = 24' @ 3338.00usft (Orion Hercules 4) |
| <b>Well:</b>     | Petirrojo MON State #1               | <b>North Reference:</b>             | Grid                                       |
| <b>Wellbore:</b> | Wellbore #1                          | <b>Survey Calculation Method:</b>   | Minimum Curvature                          |
| <b>Design:</b>   | OH                                   | <b>Database:</b>                    | WBDS_SQL_2                                 |

|                    |                                      |                      |                |
|--------------------|--------------------------------------|----------------------|----------------|
| <b>Project</b>     | Eddy County, NM (Nad-27 / East Zone) |                      |                |
| <b>Map System:</b> | US State Plane 1927 (Exact solution) | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | NAD 1927 (NADCON CONUS)              |                      |                |
| <b>Map Zone:</b>   | New Mexico East 3001                 |                      |                |

|                              |                  |                          |                 |
|------------------------------|------------------|--------------------------|-----------------|
| <b>Site</b>                  | PLU 29 Big Sinks |                          |                 |
| <b>Site Position:</b>        |                  | <b>Northing:</b>         | 401,257.90 usft |
| <b>From:</b>                 | Map              | <b>Easting:</b>          | 663,265.10 usft |
| <b>Position Uncertainty:</b> | 0.00 usft        | <b>Slot Radius:</b>      | 13.200 in       |
|                              |                  | <b>Latitude:</b>         | 32.102077       |
|                              |                  | <b>Longitude:</b>        | -103.806081     |
|                              |                  | <b>Grid Convergence:</b> | 0.280 °         |

| Well                 |       | Petirrojo MON State #1 |                     |                 |               |               |
|----------------------|-------|------------------------|---------------------|-----------------|---------------|---------------|
| Well Position        | +N/-S | 0.00 usft              | Northing:           | 394,868.20 usft | Latitude:     | 32.084504     |
|                      | +E/-W | 0.00 usft              | Easting:            | 663,869.00 usft | Longitude:    | -103.804232   |
| Position Uncertainty |       | 0.00 usft              | Wellhead Elevation: | usft            | Ground Level: | 3,314.00 usft |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | Wellbore #1       |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | IGRF2015          | 9/12/2019          | 6.809                  | 59.869               | 47,602.05710242            |

|                          |                                |                     |                     |                      |      |
|--------------------------|--------------------------------|---------------------|---------------------|----------------------|------|
| <b>Design</b>            | OH                             |                     |                     |                      |      |
| <b>Audit Notes:</b>      |                                |                     |                     |                      |      |
| <b>Version:</b>          | 1.0                            | <b>Phase:</b>       | ACTUAL              | <b>Tie On Depth:</b> | 0.00 |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b> | <b>Direction (°)</b> |      |
|                          | 0.00                           | 0.00                | 0.00                | 90.00                |      |

|                       |                  |                          |                  |                        |  |
|-----------------------|------------------|--------------------------|------------------|------------------------|--|
| <b>Survey Program</b> | <b>Date</b>      | 11/7/2019                |                  |                        |  |
| <b>From (usft)</b>    | <b>To (usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Description</b>     |  |
| 161.00                | 12,713.00        | Survey #1 (Wellbore #1)  | WBDS_IGRF        | OWSG MWD + IGRF or WMM |  |



## Wellbenders

### End Of Well Report

|                  |                                      |                                     |                                            |
|------------------|--------------------------------------|-------------------------------------|--------------------------------------------|
| <b>Company:</b>  | XTO Energy                           | <b>Local Co-ordinate Reference:</b> | Well Petirrojo MON State #1                |
| <b>Project:</b>  | Eddy County, NM (Nad-27 / East Zone) | <b>TVD Reference:</b>               | RKB = 24' @ 3338.00usft (Orion Hercules 4) |
| <b>Site:</b>     | PLU 29 Big Sinks                     | <b>MD Reference:</b>                | RKB = 24' @ 3338.00usft (Orion Hercules 4) |
| <b>Well:</b>     | Petirrojo MON State #1               | <b>North Reference:</b>             | Grid                                       |
| <b>Wellbore:</b> | Wellbore #1                          | <b>Survey Calculation Method:</b>   | Minimum Curvature                          |
| <b>Design:</b>   | OH                                   | <b>Database:</b>                    | WBDS_SQL_2                                 |

| Survey       |            |                      |               |               |               |                  |              |               |                   |
|--------------|------------|----------------------|---------------|---------------|---------------|------------------|--------------|---------------|-------------------|
| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | CL<br>(usft) | CL Azi<br>(°) | DLeg<br>(°/100ft) |
| 0.00         | 0.00       | 0.00                 | 0.00          | 0.00          | 0.00          | 0.00             | 0.00         | 0.00          | 0.00              |
| 161.00       | 0.09       | 354.75               | 161.00        | 0.13          | -0.01         | -0.01            | 161.00       | 354.75        | 0.06              |
| 284.00       | 0.22       | 300.61               | 284.00        | 0.34          | -0.22         | -0.22            | 123.00       | 315.58        | 0.15              |
| 374.00       | 0.62       | 287.16               | 374.00        | 0.57          | -0.84         | -0.84            | 90.00        | 290.67        | 0.45              |
| 465.00       | 0.31       | 219.14               | 464.99        | 0.53          | -1.46         | -1.46            | 91.00        | 265.83        | 0.64              |
| 587.00       | 0.70       | 282.95               | 586.99        | 0.44          | -2.40         | -2.40            | 122.00       | 264.56        | 0.51              |
| 744.00       | 1.71       | 307.56               | 743.95        | 2.08          | -5.19         | -5.19            | 157.00       | 300.48        | 0.71              |
| 839.00       | 2.02       | 314.76               | 838.90        | 4.13          | -7.50         | -7.50            | 95.00        | 311.46        | 0.41              |
| 938.00       | 3.12       | 322.94               | 937.80        | 7.50          | -10.36        | -10.36           | 99.00        | 319.73        | 1.17              |
| 1,032.00     | 2.51       | 351.50               | 1,031.69      | 11.58         | -12.21        | -12.21           | 94.00        | 335.64        | 1.61              |
| 1,126.00     | 2.68       | 10.05                | 1,125.60      | 15.78         | -12.13        | -12.13           | 94.00        | 1.08          | 0.91              |
| 1,221.00     | 1.80       | 32.11                | 1,220.53      | 19.23         | -10.95        | -10.95           | 95.00        | 18.89         | 1.28              |
| 1,315.00     | 1.71       | 49.24                | 1,314.48      | 21.40         | -9.10         | -9.10            | 94.00        | 40.45         | 0.56              |
| 1,410.00     | 1.01       | 63.31                | 1,409.46      | 22.70         | -7.28         | -7.28            | 95.00        | 54.46         | 0.81              |
| 1,505.00     | 1.19       | 35.71                | 1,504.44      | 23.88         | -5.96         | -5.96            | 95.00        | 48.36         | 0.58              |
| 1,600.00     | 1.50       | 59.26                | 1,599.41      | 25.31         | -4.31         | -4.31            | 95.00        | 48.86         | 0.66              |
| 1,694.00     | 1.71       | 90.55                | 1,693.38      | 25.93         | -1.85         | -1.85            | 94.00        | 75.95         | 0.95              |
| 1,788.00     | 1.71       | 91.87                | 1,787.34      | 25.87         | 0.95          | 0.95             | 94.00        | 91.21         | 0.04              |
| 1,882.00     | 1.71       | 130.10               | 1,881.30      | 24.92         | 3.43          | 3.43             | 94.00        | 110.98        | 1.19              |
| 1,976.00     | 2.11       | 135.55               | 1,975.25      | 22.78         | 5.71          | 5.71             | 94.00        | 133.11        | 0.47              |
| 2,069.00     | 1.19       | 144.96               | 2,068.21      | 20.77         | 7.46          | 7.46             | 93.00        | 138.94        | 1.03              |
| 2,163.00     | 1.19       | 157.26               | 2,162.19      | 19.07         | 8.40          | 8.40             | 94.00        | 151.11        | 0.27              |
| 2,257.00     | 1.32       | 157.97               | 2,256.16      | 17.17         | 9.18          | 9.18             | 94.00        | 157.63        | 0.14              |
| 2,352.00     | 1.41       | 161.66               | 2,351.14      | 15.04         | 9.96          | 9.96             | 95.00        | 159.88        | 0.13              |
| 2,446.00     | 1.58       | 161.92               | 2,445.10      | 12.71         | 10.73         | 10.73            | 94.00        | 161.80        | 0.18              |
| 2,540.00     | 1.49       | 172.20               | 2,539.07      | 10.27         | 11.30         | 11.30            | 94.00        | 166.91        | 0.31              |
| 2,634.00     | 1.32       | 182.49               | 2,633.04      | 7.98          | 11.42         | 11.42            | 94.00        | 177.03        | 0.32              |



## Wellbenders

### End Of Well Report

|                  |                                      |                                     |                                            |
|------------------|--------------------------------------|-------------------------------------|--------------------------------------------|
| <b>Company:</b>  | XTO Energy                           | <b>Local Co-ordinate Reference:</b> | Well Petirrojo MON State #1                |
| <b>Project:</b>  | Eddy County, NM (Nad-27 / East Zone) | <b>TVD Reference:</b>               | RKB = 24' @ 3338.00usft (Orion Hercules 4) |
| <b>Site:</b>     | PLU 29 Big Sinks                     | <b>MD Reference:</b>                | RKB = 24' @ 3338.00usft (Orion Hercules 4) |
| <b>Well:</b>     | Petirrojo MON State #1               | <b>North Reference:</b>             | Grid                                       |
| <b>Wellbore:</b> | Wellbore #1                          | <b>Survey Calculation Method:</b>   | Minimum Curvature                          |
| <b>Design:</b>   | OH                                   | <b>Database:</b>                    | WBDS_SQL_2                                 |

| Survey       |            |                      |               |               |               |                  |              |               |                   |  |
|--------------|------------|----------------------|---------------|---------------|---------------|------------------|--------------|---------------|-------------------|--|
| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | CL<br>(usft) | CL Azi<br>(°) | DLeg<br>(°/100ft) |  |
| 2,729.00     | 1.32       | 189.34               | 2,728.02      | 5.80          | 11.19         | 11.19            | 95.00        | 185.91        | 0.17              |  |
| 2,823.00     | 1.49       | 196.55               | 2,821.99      | 3.56          | 10.67         | 10.67            | 94.00        | 193.16        | 0.26              |  |
| 2,917.00     | 1.80       | 195.14               | 2,915.95      | 0.97          | 9.93          | 9.93             | 94.00        | 195.78        | 0.33              |  |
| 3,011.00     | 1.58       | 201.12               | 3,009.91      | -1.67         | 9.08          | 9.08             | 94.00        | 197.94        | 0.30              |  |
| 3,104.00     | 1.49       | 204.02               | 3,102.88      | -3.97         | 8.13          | 8.13             | 93.00        | 202.53        | 0.13              |  |
| 3,198.00     | 1.49       | 208.85               | 3,196.85      | -6.15         | 7.04          | 7.04             | 94.00        | 206.43        | 0.13              |  |
| 3,293.00     | 1.71       | 206.22               | 3,291.81      | -8.51         | 5.82          | 5.82             | 95.00        | 207.44        | 0.24              |  |
| 3,388.00     | 1.80       | 193.91               | 3,386.76      | -11.23        | 4.83          | 4.83             | 95.00        | 199.91        | 0.41              |  |
| 3,482.00     | 1.19       | 168.51               | 3,480.73      | -13.62        | 4.67          | 4.67             | 94.00        | 183.84        | 0.94              |  |
| 3,576.00     | 1.01       | 175.72               | 3,574.71      | -15.40        | 4.93          | 4.93             | 94.00        | 171.82        | 0.24              |  |
| 3,671.00     | 1.10       | 180.55               | 3,669.70      | -17.15        | 4.98          | 4.98             | 95.00        | 178.24        | 0.13              |  |
| 3,765.00     | 1.49       | 175.90               | 3,763.67      | -19.27        | 5.06          | 5.06             | 94.00        | 177.87        | 0.43              |  |
| 3,859.00     | 1.71       | 168.60               | 3,857.64      | -21.86        | 5.42          | 5.42             | 94.00        | 172.00        | 0.32              |  |
| 3,987.00     | 1.89       | 166.84               | 3,985.57      | -25.79        | 6.28          | 6.28             | 128.00       | 167.68        | 0.15              |  |
| 4,084.00     | 2.68       | 165.17               | 4,082.50      | -29.54        | 7.23          | 7.23             | 97.00        | 165.86        | 0.82              |  |
| 4,179.00     | 2.81       | 145.31               | 4,177.39      | -33.60        | 9.12          | 9.12             | 95.00        | 155.00        | 1.01              |  |
| 4,274.00     | 1.80       | 113.23               | 4,272.32      | -36.10        | 11.82         | 11.82            | 95.00        | 132.87        | 1.69              |  |
| 4,367.00     | 1.49       | 88.53                | 4,365.28      | -36.65        | 14.37         | 14.37            | 93.00        | 102.06        | 0.82              |  |
| 4,462.00     | 1.19       | 69.11                | 4,460.25      | -36.27        | 16.53         | 16.53            | 95.00        | 79.92         | 0.57              |  |
| 4,557.00     | 0.88       | 36.41                | 4,555.24      | -35.33        | 17.88         | 17.88            | 95.00        | 55.28         | 0.69              |  |
| 4,651.00     | 0.88       | 32.11                | 4,649.23      | -34.13        | 18.69         | 18.69            | 94.00        | 34.26         | 0.07              |  |
| 4,744.00     | 0.88       | 31.32                | 4,742.22      | -32.92        | 19.44         | 19.44            | 93.00        | 31.71         | 0.01              |  |
| 4,838.00     | 0.88       | 41.69                | 4,836.20      | -31.76        | 20.30         | 20.30            | 94.00        | 36.51         | 0.17              |  |
| 4,932.00     | 0.88       | 36.15                | 4,930.19      | -30.64        | 21.20         | 21.20            | 94.00        | 38.92         | 0.09              |  |
| 5,026.00     | 0.88       | 40.54                | 5,024.18      | -29.51        | 22.10         | 22.10            | 94.00        | 38.35         | 0.07              |  |
| 5,120.00     | 0.79       | 35.36                | 5,118.17      | -28.43        | 22.94         | 22.94            | 94.00        | 38.09         | 0.12              |  |
| 5,215.00     | 0.70       | 38.35                | 5,213.16      | -27.44        | 23.68         | 23.68            | 95.00        | 36.76         | 0.10              |  |



## Wellbenders

### End Of Well Report

|                  |                                      |                                     |                                            |
|------------------|--------------------------------------|-------------------------------------|--------------------------------------------|
| <b>Company:</b>  | XTO Energy                           | <b>Local Co-ordinate Reference:</b> | Well Petirrojo MON State #1                |
| <b>Project:</b>  | Eddy County, NM (Nad-27 / East Zone) | <b>TVD Reference:</b>               | RKB = 24' @ 3338.00usft (Orion Hercules 4) |
| <b>Site:</b>     | PLU 29 Big Sinks                     | <b>MD Reference:</b>                | RKB = 24' @ 3338.00usft (Orion Hercules 4) |
| <b>Well:</b>     | Petirrojo MON State #1               | <b>North Reference:</b>             | Grid                                       |
| <b>Wellbore:</b> | Wellbore #1                          | <b>Survey Calculation Method:</b>   | Minimum Curvature                          |
| <b>Design:</b>   | OH                                   | <b>Database:</b>                    | WBDS_SQL_2                                 |

| Survey       |            |                      |               |               |               |                  |              |               |                   |  |
|--------------|------------|----------------------|---------------|---------------|---------------|------------------|--------------|---------------|-------------------|--|
| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | CL<br>(usft) | CL Azi<br>(°) | DLeg<br>(°/100ft) |  |
| 5,310.00     | 0.70       | 43.27                | 5,308.16      | -26.57        | 24.44         | 24.44            | 95.00        | 40.81         | 0.06              |  |
| 5,404.00     | 0.48       | 47.49                | 5,402.15      | -25.88        | 25.12         | 25.12            | 94.00        | 44.99         | 0.24              |  |
| 5,499.00     | 0.62       | 37.47                | 5,497.15      | -25.21        | 25.73         | 25.73            | 95.00        | 41.84         | 0.18              |  |
| 5,593.00     | 0.70       | 49.95                | 5,591.14      | -24.43        | 26.48         | 26.48            | 94.00        | 44.09         | 0.17              |  |
| 5,687.00     | 0.79       | 48.01                | 5,685.13      | -23.63        | 27.40         | 27.40            | 94.00        | 48.92         | 0.10              |  |
| 5,782.00     | 0.62       | 65.50                | 5,780.13      | -22.98        | 28.35         | 28.35            | 95.00        | 55.69         | 0.29              |  |
| 5,877.00     | 0.62       | 73.85                | 5,875.12      | -22.62        | 29.32         | 29.32            | 95.00        | 69.67         | 0.10              |  |
| 5,972.00     | 0.70       | 79.04                | 5,970.12      | -22.37        | 30.38         | 30.38            | 95.00        | 76.60         | 0.11              |  |
| 6,068.00     | 1.01       | 84.93                | 6,066.10      | -22.18        | 31.80         | 31.80            | 96.00        | 82.52         | 0.34              |  |
| 6,163.00     | 1.01       | 101.19               | 6,161.09      | -22.27        | 33.45         | 33.45            | 95.00        | 93.06         | 0.30              |  |
| 6,257.00     | 0.79       | 123.95               | 6,255.08      | -22.79        | 34.80         | 34.80            | 94.00        | 111.16        | 0.44              |  |
| 6,351.00     | 0.70       | 151.02               | 6,349.07      | -23.66        | 35.62         | 35.62            | 94.00        | 136.65        | 0.38              |  |
| 6,445.00     | 0.62       | 126.32               | 6,443.06      | -24.46        | 36.31         | 36.31            | 94.00        | 139.43        | 0.31              |  |
| 6,539.00     | 0.48       | 81.32                | 6,537.06      | -24.70        | 37.11         | 37.11            | 94.00        | 106.84        | 0.47              |  |
| 6,633.00     | 0.40       | 88.80                | 6,631.06      | -24.64        | 37.82         | 37.82            | 94.00        | 84.72         | 0.10              |  |
| 6,727.00     | 0.62       | 63.66                | 6,725.05      | -24.40        | 38.61         | 38.61            | 94.00        | 73.48         | 0.33              |  |
| 6,820.00     | 0.62       | 82.91                | 6,818.05      | -24.12        | 39.56         | 39.56            | 93.00        | 73.29         | 0.22              |  |
| 6,915.00     | 0.79       | 119.91               | 6,913.04      | -24.38        | 40.64         | 40.64            | 95.00        | 103.72        | 0.50              |  |
| 7,009.00     | 0.70       | 107.60               | 7,007.03      | -24.88        | 41.74         | 41.74            | 94.00        | 114.13        | 0.19              |  |
| 7,103.00     | 1.19       | 48.10                | 7,101.02      | -24.40        | 43.02         | 43.02            | 94.00        | 69.42         | 1.10              |  |
| 7,198.00     | 1.19       | 52.50                | 7,196.00      | -23.14        | 44.54         | 44.54            | 95.00        | 50.30         | 0.10              |  |
| 7,293.00     | 1.10       | 6.44                 | 7,290.99      | -21.63        | 45.42         | 45.42            | 95.00        | 30.43         | 0.95              |  |
| 7,387.00     | 1.01       | 356.25               | 7,384.97      | -19.91        | 45.47         | 45.47            | 94.00        | 1.56          | 0.22              |  |
| 7,482.00     | 0.88       | 30.52                | 7,479.96      | -18.45        | 45.78         | 45.78            | 95.00        | 12.17         | 0.60              |  |
| 7,576.00     | 0.48       | 14.44                | 7,573.95      | -17.44        | 46.25         | 46.25            | 94.00        | 24.86         | 0.47              |  |
| 7,670.00     | 0.22       | 50.04                | 7,667.95      | -16.95        | 46.48         | 46.48            | 94.00        | 25.44         | 0.35              |  |
| 7,764.00     | 0.48       | 69.02                | 7,761.95      | -16.69        | 46.99         | 46.99            | 94.00        | 63.08         | 0.30              |  |



## Wellbenders

### End Of Well Report

|                  |                                      |                                     |                                            |
|------------------|--------------------------------------|-------------------------------------|--------------------------------------------|
| <b>Company:</b>  | XTO Energy                           | <b>Local Co-ordinate Reference:</b> | Well Petirrojo MON State #1                |
| <b>Project:</b>  | Eddy County, NM (Nad-27 / East Zone) | <b>TVD Reference:</b>               | RKB = 24' @ 3338.00usft (Orion Hercules 4) |
| <b>Site:</b>     | PLU 29 Big Sinks                     | <b>MD Reference:</b>                | RKB = 24' @ 3338.00usft (Orion Hercules 4) |
| <b>Well:</b>     | Petirrojo MON State #1               | <b>North Reference:</b>             | Grid                                       |
| <b>Wellbore:</b> | Wellbore #1                          | <b>Survey Calculation Method:</b>   | Minimum Curvature                          |
| <b>Design:</b>   | OH                                   | <b>Database:</b>                    | WBDS_SQL_2                                 |

| Survey       |            |                      |               |               |               |                  |              |               |                   |  |
|--------------|------------|----------------------|---------------|---------------|---------------|------------------|--------------|---------------|-------------------|--|
| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | CL<br>(usft) | CL Azi<br>(°) | DLeg<br>(°/100ft) |  |
| 7,859.00     | 0.70       | 32.72                | 7,856.94      | -16.06        | 47.68         | 47.68            | 95.00        | 47.37         | 0.45              |  |
| 7,954.00     | 0.79       | 359.74               | 7,951.94      | -14.92        | 47.99         | 47.99            | 95.00        | 15.21         | 0.45              |  |
| 8,048.00     | 1.01       | 351.24               | 8,045.92      | -13.45        | 47.86         | 47.86            | 94.00        | 354.97        | 0.27              |  |
| 8,142.00     | 0.48       | 330.85               | 8,139.92      | -12.29        | 47.54         | 47.54            | 94.00        | 344.71        | 0.62              |  |
| 8,236.00     | 0.70       | 313.44               | 8,233.91      | -11.55        | 46.93         | 46.93            | 94.00        | 320.51        | 0.30              |  |
| 8,331.00     | 0.48       | 317.14               | 8,328.91      | -10.86        | 46.24         | 46.24            | 95.00        | 314.94        | 0.23              |  |
| 8,425.00     | 0.70       | 264.05               | 8,422.90      | -10.63        | 45.40         | 45.40            | 94.00        | 285.27        | 0.60              |  |
| 8,521.00     | 1.01       | 261.76               | 8,518.89      | -10.81        | 43.98         | 43.98            | 96.00        | 262.70        | 0.32              |  |
| 8,616.00     | 1.41       | 278.64               | 8,613.87      | -10.75        | 41.99         | 41.99            | 95.00        | 271.60        | 0.56              |  |
| 8,710.00     | 1.58       | 279.87               | 8,707.84      | -10.36        | 39.57         | 39.57            | 94.00        | 279.29        | 0.18              |  |
| 8,804.00     | 1.32       | 286.55               | 8,801.81      | -9.83         | 37.26         | 37.26            | 94.00        | 282.91        | 0.33              |  |
| 8,898.00     | 1.41       | 308.61               | 8,895.78      | -8.80         | 35.32         | 35.32            | 94.00        | 297.95        | 0.56              |  |
| 8,994.00     | 1.10       | 315.64               | 8,991.76      | -7.40         | 33.75         | 33.75            | 96.00        | 311.69        | 0.36              |  |
| 9,089.00     | 0.48       | 9.17                 | 9,086.75      | -6.36         | 33.18         | 33.18            | 95.00        | 331.21        | 0.95              |  |
| 9,185.00     | 0.70       | 298.06               | 9,182.75      | -5.68         | 32.72         | 32.72            | 96.00        | 326.02        | 0.74              |  |
| 9,280.00     | 0.70       | 293.67               | 9,277.74      | -5.18         | 31.68         | 31.68            | 95.00        | 295.87        | 0.06              |  |
| 9,375.00     | 1.01       | 307.29               | 9,372.73      | -4.44         | 30.48         | 30.48            | 95.00        | 301.72        | 0.39              |  |
| 9,469.00     | 1.71       | 2.49                 | 9,466.70      | -2.54         | 29.88         | 29.88            | 94.00        | 342.55        | 1.49              |  |
| 9,563.00     | 1.89       | 25.69                | 9,560.66      | 0.26          | 30.62         | 30.62            | 94.00        | 14.68         | 0.79              |  |
| 9,657.00     | 1.41       | 69.64                | 9,654.62      | 2.06          | 32.37         | 32.37            | 94.00        | 44.31         | 1.40              |  |
| 9,751.00     | 1.41       | 93.72                | 9,748.60      | 2.39          | 34.61         | 34.61            | 94.00        | 81.68         | 0.63              |  |
| 9,845.00     | 1.10       | 114.55               | 9,842.57      | 1.94          | 36.59         | 36.59            | 94.00        | 102.83        | 0.58              |  |
| 9,940.00     | 0.88       | 107.25               | 9,937.56      | 1.34          | 38.11         | 38.11            | 95.00        | 111.31        | 0.27              |  |
| 10,035.00    | 1.19       | 138.63               | 10,032.54     | 0.39          | 39.46         | 39.46            | 95.00        | 125.35        | 0.67              |  |
| 10,129.00    | 1.01       | 138.37               | 10,126.53     | -0.96         | 40.66         | 40.66            | 94.00        | 138.51        | 0.19              |  |
| 10,223.00    | 1.32       | 158.23               | 10,220.51     | -2.59         | 41.61         | 41.61            | 94.00        | 149.63        | 0.54              |  |
| 10,318.00    | 0.79       | 133.00               | 10,315.49     | -4.05         | 42.49         | 42.49            | 95.00        | 148.83        | 0.73              |  |



## Wellbenders

### End Of Well Report

|                  |                                      |                                     |                                            |
|------------------|--------------------------------------|-------------------------------------|--------------------------------------------|
| <b>Company:</b>  | XTO Energy                           | <b>Local Co-ordinate Reference:</b> | Well Petirrojo MON State #1                |
| <b>Project:</b>  | Eddy County, NM (Nad-27 / East Zone) | <b>TVD Reference:</b>               | RKB = 24' @ 3338.00usft (Orion Hercules 4) |
| <b>Site:</b>     | PLU 29 Big Sinks                     | <b>MD Reference:</b>                | RKB = 24' @ 3338.00usft (Orion Hercules 4) |
| <b>Well:</b>     | Petirrojo MON State #1               | <b>North Reference:</b>             | Grid                                       |
| <b>Wellbore:</b> | Wellbore #1                          | <b>Survey Calculation Method:</b>   | Minimum Curvature                          |
| <b>Design:</b>   | OH                                   | <b>Database:</b>                    | WBDS_SQL_2                                 |

| Survey       |            |                      |               |               |               |                  |              |               |                   |  |
|--------------|------------|----------------------|---------------|---------------|---------------|------------------|--------------|---------------|-------------------|--|
| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | CL<br>(usft) | CL Azi<br>(°) | DLeg<br>(°/100ft) |  |
| 10,411.00    | 1.41       | 143.82               | 10,408.47     | -5.41         | 43.64         | 43.64            | 93.00        | 139.94        | 0.70              |  |
| 10,505.00    | 1.49       | 137.22               | 10,502.44     | -7.24         | 45.15         | 45.15            | 94.00        | 140.43        | 0.20              |  |
| 10,598.00    | 2.02       | 144.34               | 10,595.40     | -9.46         | 46.93         | 46.93            | 93.00        | 141.32        | 0.62              |  |
| 10,655.00    | 2.11       | 151.20               | 10,652.36     | -11.20        | 48.02         | 48.02            | 57.00        | 147.84        | 0.46              |  |
| 10,715.00    | 2.02       | 150.14               | 10,712.32     | -13.08        | 49.08         | 49.08            | 60.00        | 150.68        | 0.16              |  |
| 10,816.00    | 1.71       | 151.37               | 10,813.27     | -15.95        | 50.69         | 50.69            | 101.00       | 150.70        | 0.31              |  |
| 10,879.00    | 1.58       | 154.54               | 10,876.24     | -17.56        | 51.51         | 51.51            | 63.00        | 152.89        | 0.25              |  |
| 10,974.00    | 1.80       | 167.11               | 10,971.20     | -20.20        | 52.40         | 52.40            | 95.00        | 161.24        | 0.45              |  |
| 11,068.00    | 2.02       | 182.75               | 11,065.15     | -23.29        | 52.65         | 52.65            | 94.00        | 175.38        | 0.60              |  |
| 11,085.00    | 1.89       | 183.19               | 11,082.14     | -23.87        | 52.62         | 52.62            | 17.00        | 182.96        | 0.77              |  |
| 11,134.00    | 1.89       | 184.33               | 11,131.12     | -25.48        | 52.52         | 52.52            | 49.00        | 183.76        | 0.08              |  |
| 11,228.00    | 2.02       | 185.65               | 11,225.06     | -28.68        | 52.24         | 52.24            | 94.00        | 185.01        | 0.15              |  |
| 11,322.00    | 1.89       | 183.10               | 11,319.01     | -31.87        | 51.99         | 51.99            | 94.00        | 184.42        | 0.17              |  |
| 11,418.00    | 2.02       | 183.63               | 11,414.95     | -35.14        | 51.80         | 51.80            | 96.00        | 183.37        | 0.14              |  |
| 11,511.00    | 2.02       | 178.80               | 11,507.89     | -38.42        | 51.73         | 51.73            | 93.00        | 181.21        | 0.18              |  |
| 11,606.00    | 2.11       | 179.08               | 11,602.83     | -41.84        | 51.79         | 51.79            | 95.00        | 178.94        | 0.10              |  |
| 11,700.00    | 2.20       | 169.83               | 11,696.76     | -45.34        | 52.14         | 52.14            | 94.00        | 174.36        | 0.38              |  |
| 11,795.00    | 2.02       | 164.85               | 11,791.70     | -48.75        | 52.90         | 52.90            | 95.00        | 167.45        | 0.27              |  |
| 11,889.00    | 1.80       | 167.46               | 11,885.65     | -51.80        | 53.65         | 53.65            | 94.00        | 166.08        | 0.25              |  |
| 11,984.00    | 1.58       | 164.56               | 11,980.61     | -54.51        | 54.32         | 54.32            | 95.00        | 166.10        | 0.25              |  |
| 12,075.00    | 1.49       | 169.39               | 12,071.57     | -56.89        | 54.88         | 54.88            | 91.00        | 166.90        | 0.17              |  |
| 12,173.00    | 1.01       | 194.62               | 12,169.55     | -58.97        | 54.89         | 54.89            | 98.00        | 179.54        | 0.73              |  |
| 12,267.00    | 0.70       | 191.01               | 12,263.54     | -60.34        | 54.57         | 54.57            | 94.00        | 193.14        | 0.33              |  |
| 12,361.00    | 0.40       | 190.66               | 12,357.54     | -61.23        | 54.40         | 54.40            | 94.00        | 190.88        | 0.32              |  |
| 12,455.00    | 0.48       | 190.22               | 12,451.53     | -61.94        | 54.27         | 54.27            | 94.00        | 190.42        | 0.09              |  |
| 12,549.00    | 0.48       | 181.61               | 12,545.53     | -62.72        | 54.19         | 54.19            | 94.00        | 185.92        | 0.08              |  |
| 12,648.00    | 0.40       | 172.56               | 12,644.53     | -63.47        | 54.23         | 54.23            | 99.00        | 177.50        | 0.11              |  |





## Wellbenders

### End Of Well Report

|                  |                                      |                                     |                                            |
|------------------|--------------------------------------|-------------------------------------|--------------------------------------------|
| <b>Company:</b>  | XTO Energy                           | <b>Local Co-ordinate Reference:</b> | Well Petirrojo MON State #1                |
| <b>Project:</b>  | Eddy County, NM (Nad-27 / East Zone) | <b>TVD Reference:</b>               | RKB = 24' @ 3338.00usft (Orion Hercules 4) |
| <b>Site:</b>     | PLU 29 Big Sinks                     | <b>MD Reference:</b>                | RKB = 24' @ 3338.00usft (Orion Hercules 4) |
| <b>Well:</b>     | Petirrojo MON State #1               | <b>North Reference:</b>             | Grid                                       |
| <b>Wellbore:</b> | Wellbore #1                          | <b>Survey Calculation Method:</b>   | Minimum Curvature                          |
| <b>Design:</b>   | OH                                   | <b>Database:</b>                    | WBDS_SQL_2                                 |

| Survey                                                                                                                                                                                           |            |                      |               |               |               |                  |              |               |                   |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------------|---------------|---------------|---------------|------------------|--------------|---------------|-------------------|--|
| MD<br>(usft)                                                                                                                                                                                     | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | CL<br>(usft) | CL Azi<br>(°) | DLeg<br>(°/100ft) |  |
| 12,713.00                                                                                                                                                                                        | 0.40       | 172.56               | 12,709.53     | -63.92        | 54.28         | 54.28            | 65.00        | 172.56        | 0.00              |  |
| Final Station Closure Distance= 83.86 /Direction= 139.66 - Projection to Bit: 12713.00' MD/ 12709.53' TVD - TD: Latitude = 32.084327 / Longitude = -103.804058 - TD: Y= 394804.28 / X= 663923.28 |            |                      |               |               |               |                  |              |               |                   |  |

| Design Annotations          |                             |                   |                 |                                                          |  |
|-----------------------------|-----------------------------|-------------------|-----------------|----------------------------------------------------------|--|
| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates |                 |                                                          |  |
|                             |                             | +N/-S<br>(usft)   | +E/-W<br>(usft) | Comment                                                  |  |
| 12,713.00                   | 12,709.53                   | -63.92            | 54.28           | Final Station Closure Distance= 83.86 /Direction= 139.66 |  |
| 12,713.00                   | 12,709.53                   | -63.92            | 54.28           | Projection to Bit: 12713.00' MD/ 12709.53' TVD           |  |
| 12,713.00                   | 12,709.53                   | -63.92            | 54.28           | TD: Latitude = 32.084327 / Longitude = -103.804058       |  |
| 12,713.00                   | 12,709.53                   | -63.92            | 54.28           | TD: Y= 394804.28 / X= 663923.28                          |  |

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

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS  
  
Action 15903

**CONDITIONS OF APPROVAL**

|                                                                        |  |                        |                   |                         |                       |
|------------------------------------------------------------------------|--|------------------------|-------------------|-------------------------|-----------------------|
| Operator:<br>XTO PERMIAN OPERATING LLC.<br>BUILDING 5 MIDLAND, TX79707 |  | 6401 HOLIDAY HILL ROAD | OGRID:<br>373075  | Action Number:<br>15903 | Action Type:<br>C-102 |
| OCD Reviewer<br>abustamante                                            |  |                        | Condition<br>None |                         |                       |