

Job# 904055059  
Precision 554

## One Energy Partners

Lea County, NM (NAD 83) Parade BWY State Com

API# 30-025-43108

### Parade BWY State Com 1H

199' FNL & 2200' FEL of Sec. 2

Wellbore #1

Design: Actual

## Sperry Drilling Services

### Combo Report

15 September, 2017

Well Coordinates: 32° 09' 58.24" N  
103° 20' 12.82" W

North American Datum 1983  
New Mexico Eastern Zone  
425,617.90 N  
849,670.40 E

Ground Level: 3,252.00 usft

Local Coordinate Origin:

Viewing Datum:

TVDs to System:

**North Reference:**

Unit System:

Centered on Well Parade BWY State Com 1H

GL: 3252+25ft @ 3277.00usft (Precision 554)

N

**Grid**

API US Survey Feet

Version: 5000.1 Build: 81D

Report Version: Midcon Combo v1.11

**HALLIBURTON**

## Design Report for Parade BWY State Com 1H - Actual

| Measured Depth (usft) | Inclination (°) | Grid Azimuth (°) | TVD below System (usft) | Vertical Depth (usft) | Local Coordinates |                | Map Coordinates |                | Dogleg Rate (°/100usft) | Vertical Section (usft) | Comments |
|-----------------------|-----------------|------------------|-------------------------|-----------------------|-------------------|----------------|-----------------|----------------|-------------------------|-------------------------|----------|
|                       |                 |                  |                         |                       | Northing (usft)   | Easting (usft) | Northing (usft) | Easting (usft) |                         |                         |          |
| 0.00                  | 0.00            | 0.00             | -3,277.00               | 0.00                  | 0.00 N            | 0.00 E         | 425,617.90      | 849,670.40     | 0.00                    | 0.00                    |          |
| 315.00                | 2.00            | 99.34            | -2,962.06               | 314.94                | 0.89 S            | 5.42 E         | 425,617.01      | 849,675.82     | 0.63                    | 0.82                    |          |
| 410.00                | 1.40            | 119.34           | -2,867.11               | 409.89                | 1.73 S            | 8.07 E         | 425,616.17      | 849,678.47     | 0.88                    | 1.62                    |          |
| 464.00                | 0.80            | 111.34           | -2,813.12               | 463.88                | 2.19 S            | 9.00 E         | 425,615.71      | 849,679.40     | 1.14                    | 2.07                    |          |
| 495.00                | 1.00            | 140.34           | -2,782.12               | 494.88                | 2.48 S            | 9.37 E         | 425,615.42      | 849,679.77     | 1.58                    | 2.35                    |          |
| 527.00                | 0.90            | 134.34           | -2,750.12               | 526.88                | 2.87 S            | 9.73 E         | 425,615.03      | 849,680.13     | 0.44                    | 2.74                    |          |
| 558.00                | 0.40            | 169.34           | -2,719.13               | 557.87                | 3.14 S            | 9.92 E         | 425,614.76      | 849,680.32     | 1.99                    | 3.01                    |          |
| 653.00                | 0.90            | 159.34           | -2,624.13               | 652.87                | 4.17 S            | 10.25 E        | 425,613.73      | 849,680.65     | 0.54                    | 4.03                    |          |
| 715.00                | 0.90            | 196.34           | -2,562.14               | 714.86                | 5.09 S            | 10.28 E        | 425,612.81      | 849,680.68     | 0.92                    | 4.95                    |          |
| 747.00                | 1.50            | 208.34           | -2,530.15               | 746.85                | 5.70 S            | 10.01 E        | 425,612.20      | 849,680.41     | 2.02                    | 5.57                    |          |
| 778.00                | 1.80            | 208.34           | -2,499.16               | 777.84                | 6.49 S            | 9.59 E         | 425,611.41      | 849,679.99     | 0.97                    | 6.36                    |          |
| 810.00                | 1.50            | 210.34           | -2,467.17               | 809.83                | 7.29 S            | 9.14 E         | 425,610.61      | 849,679.54     | 0.95                    | 7.17                    |          |
| 841.00                | 1.30            | 227.34           | -2,436.18               | 840.82                | 7.88 S            | 8.68 E         | 425,610.02      | 849,679.08     | 1.48                    | 7.76                    |          |
| 956.00                | 1.60            | 226.27           | -2,321.22               | 955.78                | 9.87 S            | 6.56 E         | 425,608.03      | 849,676.96     | 0.26                    | 9.78                    |          |
| 1,050.00              | 1.72            | 225.51           | -2,227.26               | 1,049.74              | 11.77 S           | 4.60 E         | 425,606.13      | 849,675.00     | 0.13                    | 11.71                   |          |
| 1,143.00              | 1.40            | 249.45           | -2,134.29               | 1,142.71              | 13.15 S           | 2.54 E         | 425,604.75      | 849,672.94     | 0.77                    | 13.11                   |          |
| 1,235.00              | 1.49            | 257.04           | -2,042.32               | 1,234.68              | 13.81 S           | 0.33 E         | 425,604.09      | 849,670.73     | 0.23                    | 13.80                   |          |
| 1,328.00              | 1.32            | 250.70           | -1,949.35               | 1,327.65              | 14.43 S           | 1.86 W         | 425,603.47      | 849,668.54     | 0.25                    | 14.46                   |          |
| 1,420.00              | 1.40            | 245.72           | -1,857.37               | 1,419.63              | 15.25 S           | 3.89 W         | 425,602.65      | 849,666.51     | 0.16                    | 15.30                   |          |
| 1,514.00              | 1.41            | 246.60           | -1,763.40               | 1,513.60              | 16.18 S           | 6.00 W         | 425,601.72      | 849,664.40     | 0.03                    | 16.26                   |          |
| 1,607.00              | 1.41            | 247.73           | -1,670.43               | 1,606.57              | 17.07 S           | 8.11 W         | 425,600.83      | 849,662.29     | 0.03                    | 17.17                   |          |
| 1,700.00              | 1.57            | 244.02           | -1,577.46               | 1,699.54              | 18.06 S           | 10.31 W        | 425,599.84      | 849,660.09     | 0.20                    | 18.19                   |          |
| 1,792.00              | 1.35            | 245.16           | -1,485.49               | 1,791.51              | 19.06 S           | 12.43 W        | 425,598.84      | 849,657.97     | 0.24                    | 19.23                   |          |
| 1,885.00              | 1.32            | 244.72           | -1,392.52               | 1,884.48              | 19.98 S           | 14.39 W        | 425,597.92      | 849,656.01     | 0.03                    | 20.17                   |          |
| 1,978.00              | 1.23            | 241.69           | -1,299.54               | 1,977.46              | 20.91 S           | 16.24 W        | 425,596.99      | 849,654.16     | 0.12                    | 21.13                   |          |
| 2,070.00              | 1.18            | 239.31           | -1,207.56               | 2,069.44              | 21.86 S           | 17.92 W        | 425,596.04      | 849,652.48     | 0.08                    | 22.10                   |          |
| 2,162.00              | 0.97            | 236.27           | -1,115.58               | 2,161.42              | 22.78 S           | 19.38 W        | 425,595.12      | 849,651.02     | 0.24                    | 23.04                   |          |
| 2,255.00              | 0.84            | 244.99           | -1,022.59               | 2,254.41              | 23.51 S           | 20.66 W        | 425,594.39      | 849,649.74     | 0.20                    | 23.78                   |          |
| 2,347.00              | 0.85            | 250.34           | -930.60                 | 2,346.40              | 24.02 S           | 21.91 W        | 425,593.88      | 849,648.49     | 0.09                    | 24.31                   |          |
| 2,439.00              | 0.75            | 262.84           | -838.61                 | 2,438.39              | 24.33 S           | 23.15 W        | 425,593.57      | 849,647.25     | 0.22                    | 24.63                   |          |
| 2,531.00              | 0.67            | 263.81           | -746.61                 | 2,530.39              | 24.46 S           | 24.28 W        | 425,593.44      | 849,646.12     | 0.09                    | 24.78                   |          |
| 2,624.00              | 0.52            | 275.81           | -653.62                 | 2,623.38              | 24.47 S           | 25.24 W        | 425,593.43      | 849,645.16     | 0.21                    | 24.81                   |          |
| 2,716.00              | 0.41            | 302.91           | -561.62                 | 2,715.38              | 24.25 S           | 25.93 W        | 425,593.65      | 849,644.47     | 0.26                    | 24.60                   |          |
| 2,810.00              | 0.39            | 337.96           | -467.62                 | 2,809.38              | 23.77 S           | 26.34 W        | 425,594.13      | 849,644.06     | 0.26                    | 24.12                   |          |
| 2,902.00              | 0.56            | 352.47           | -375.63                 | 2,901.37              | 23.04 S           | 26.51 W        | 425,594.86      | 849,643.89     | 0.22                    | 23.39                   |          |
| 2,994.00              | 0.89            | 17.00            | -283.64                 | 2,993.36              | 21.91 S           | 26.36 W        | 425,595.99      | 849,644.04     | 0.48                    | 22.26                   |          |
| 3,086.00              | 1.27            | 28.30            | -191.65                 | 3,085.35              | 20.33 S           | 25.67 W        | 425,597.57      | 849,644.73     | 0.47                    | 20.67                   |          |
| 3,178.00              | 1.55            | 33.98            | -99.68                  | 3,177.32              | 18.40 S           | 24.49 W        | 425,599.50      | 849,645.91     | 0.34                    | 18.72                   |          |
| 3,271.00              | 1.75            | 34.54            | -6.72                   | 3,270.28              | 16.19 S           | 22.98 W        | 425,601.71      | 849,647.42     | 0.22                    | 16.49                   |          |
| 3,364.00              | 2.29            | 40.04            | 86.22                   | 3,363.22              | 13.59 S           | 20.98 W        | 425,604.31      | 849,649.42     | 0.62                    | 13.87                   |          |
| 3,456.00              | 3.12            | 52.05            | 178.12                  | 3,455.12              | 10.65 S           | 17.83 W        | 425,607.25      | 849,652.57     | 1.09                    | 10.88                   |          |

## Design Report for Parade BWY State Com 1H - Actual

| Measured<br>Depth<br>(usft) | Inclination<br>(°) | Grid<br>Azimuth<br>(°) | TVD below<br>System<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates  |                   | Map Coordinates    |                   | Dogleg<br>Rate<br>(°/100usft) | Vertical<br>Section<br>(usft) | Comments |
|-----------------------------|--------------------|------------------------|-------------------------------|-----------------------------|--------------------|-------------------|--------------------|-------------------|-------------------------------|-------------------------------|----------|
|                             |                    |                        |                               |                             | Northing<br>(usft) | Easting<br>(usft) | Northing<br>(usft) | Easting<br>(usft) |                               |                               |          |
| 3,549.00                    | 2.17               | 70.24                  | 271.02                        | 3,548.02                    | 8.49 S             | 14.17 W           | 425,609.41         | 849,656.23        | 1.35                          | 8.68                          |          |
| 3,641.00                    | 1.25               | 70.95                  | 362.98                        | 3,639.98                    | 7.58 S             | 11.59 W           | 425,610.32         | 849,658.81        | 1.00                          | 7.73                          |          |
| 3,735.00                    | 1.30               | 67.04                  | 456.96                        | 3,733.96                    | 6.83 S             | 9.63 W            | 425,611.07         | 849,660.77        | 0.11                          | 6.96                          |          |
| 3,828.00                    | 1.28               | 64.48                  | 549.93                        | 3,826.93                    | 5.97 S             | 7.73 W            | 425,611.93         | 849,662.67        | 0.07                          | 6.07                          |          |
| 3,922.00                    | 1.26               | 66.54                  | 643.91                        | 3,920.91                    | 5.10 S             | 5.83 W            | 425,612.80         | 849,664.57        | 0.05                          | 5.18                          |          |
| 4,014.00                    | 1.45               | 68.88                  | 735.88                        | 4,012.88                    | 4.28 S             | 3.82 W            | 425,613.62         | 849,666.58        | 0.22                          | 4.33                          |          |
| 4,106.00                    | 1.39               | 71.48                  | 827.86                        | 4,104.86                    | 3.51 S             | 1.67 W            | 425,614.39         | 849,668.73        | 0.10                          | 3.53                          |          |
| 4,199.00                    | 1.36               | 72.20                  | 920.83                        | 4,197.83                    | 2.81 S             | 0.45 E            | 425,615.09         | 849,670.85        | 0.04                          | 2.81                          |          |
| 4,292.00                    | 1.68               | 78.07                  | 1,013.80                      | 4,290.80                    | 2.19 S             | 2.83 E            | 425,615.71         | 849,673.23        | 0.38                          | 2.16                          |          |
| 4,384.00                    | 1.79               | 82.43                  | 1,105.75                      | 4,382.75                    | 1.73 S             | 5.58 E            | 425,616.17         | 849,675.98        | 0.19                          | 1.65                          |          |
| 4,476.00                    | 1.81               | 84.68                  | 1,197.71                      | 4,474.71                    | 1.40 S             | 8.45 E            | 425,616.50         | 849,678.85        | 0.08                          | 1.29                          |          |
| 4,569.00                    | 1.20               | 88.47                  | 1,290.68                      | 4,567.68                    | 1.24 S             | 10.88 E           | 425,616.66         | 849,681.28        | 0.66                          | 1.09                          |          |
| 4,662.00                    | 1.04               | 84.09                  | 1,383.66                      | 4,660.66                    | 1.13 S             | 12.70 E           | 425,616.77         | 849,683.10        | 0.20                          | 0.96                          |          |
| 4,756.00                    | 1.26               | 83.30                  | 1,477.64                      | 4,754.64                    | 0.92 S             | 14.57 E           | 425,616.98         | 849,684.97        | 0.23                          | 0.72                          |          |
| 4,848.00                    | 1.32               | 84.97                  | 1,569.62                      | 4,846.62                    | 0.71 S             | 16.63 E           | 425,617.19         | 849,687.03        | 0.08                          | 0.49                          |          |
| 4,940.00                    | 1.39               | 88.00                  | 1,661.59                      | 4,938.59                    | 0.58 S             | 18.80 E           | 425,617.32         | 849,689.20        | 0.11                          | 0.32                          |          |
| 5,033.00                    | 1.26               | 83.68                  | 1,754.57                      | 5,031.57                    | 0.42 S             | 20.95 E           | 425,617.48         | 849,691.35        | 0.18                          | 0.14                          |          |
| 5,125.00                    | 1.15               | 84.95                  | 1,846.55                      | 5,123.55                    | 0.23 S             | 22.87 E           | 425,617.67         | 849,693.27        | 0.12                          | -0.07                         |          |
| 5,220.00                    | 1.12               | 85.71                  | 1,941.53                      | 5,218.53                    | 0.08 S             | 24.75 E           | 425,617.82         | 849,695.15        | 0.04                          | -0.25                         |          |
| 5,312.00                    | 1.02               | 84.89                  | 2,033.51                      | 5,310.51                    | 0.06 N             | 26.46 E           | 425,617.96         | 849,696.86        | 0.11                          | -0.42                         |          |
| 5,407.00                    | 1.22               | 99.65                  | 2,128.49                      | 5,405.49                    | 0.03 S             | 28.30 E           | 425,617.87         | 849,698.70        | 0.37                          | -0.35                         |          |
| 5,501.00                    | 1.24               | 98.19                  | 2,222.47                      | 5,499.47                    | 0.34 S             | 30.29 E           | 425,617.56         | 849,700.69        | 0.04                          | -0.06                         |          |
| 5,594.00                    | 1.16               | 101.54                 | 2,315.45                      | 5,592.45                    | 0.68 S             | 32.21 E           | 425,617.22         | 849,702.61        | 0.11                          | 0.25                          |          |
| 5,688.00                    | 0.99               | 98.86                  | 2,409.43                      | 5,686.43                    | 0.99 S             | 33.94 E           | 425,616.91         | 849,704.34        | 0.19                          | 0.54                          |          |
| 5,781.00                    | 1.03               | 112.85                 | 2,502.42                      | 5,779.42                    | 1.44 S             | 35.51 E           | 425,616.46         | 849,705.91        | 0.27                          | 0.97                          |          |
| 5,873.00                    | 0.97               | 111.92                 | 2,594.41                      | 5,871.41                    | 2.05 S             | 36.99 E           | 425,615.85         | 849,707.39        | 0.07                          | 1.56                          |          |
| 5,967.00                    | 0.90               | 112.09                 | 2,688.39                      | 5,965.39                    | 2.63 S             | 38.42 E           | 425,615.27         | 849,708.82        | 0.07                          | 2.11                          |          |
| 6,059.00                    | 0.88               | 110.01                 | 2,780.38                      | 6,057.38                    | 3.14 S             | 39.75 E           | 425,614.76         | 849,710.15        | 0.04                          | 2.61                          |          |
| 6,152.00                    | 0.88               | 127.49                 | 2,873.37                      | 6,150.37                    | 3.82 S             | 40.99 E           | 425,614.08         | 849,711.39        | 0.29                          | 3.27                          |          |
| 6,245.00                    | 0.61               | 356.58                 | 2,966.37                      | 6,243.37                    | 3.76 S             | 41.52 E           | 425,614.14         | 849,711.92        | 1.46                          | 3.20                          |          |
| 6,338.00                    | 0.66               | 333.35                 | 3,059.36                      | 6,336.36                    | 2.79 S             | 41.25 E           | 425,615.11         | 849,711.65        | 0.28                          | 2.24                          |          |
| 6,432.00                    | 0.69               | 334.00                 | 3,153.36                      | 6,430.36                    | 1.79 S             | 40.76 E           | 425,616.11         | 849,711.16        | 0.03                          | 1.25                          |          |
| 6,524.00                    | 0.70               | 320.63                 | 3,245.35                      | 6,522.35                    | 0.86 S             | 40.16 E           | 425,617.04         | 849,710.56        | 0.18                          | 0.32                          |          |
| 6,616.00                    | 0.77               | 343.71                 | 3,337.34                      | 6,614.34                    | 0.17 N             | 39.63 E           | 425,618.07         | 849,710.03        | 0.33                          | -0.70                         |          |
| 6,708.00                    | 0.75               | 338.76                 | 3,429.33                      | 6,706.33                    | 1.32 N             | 39.24 E           | 425,619.22         | 849,709.64        | 0.07                          | -1.85                         |          |
| 6,800.00                    | 0.83               | 330.91                 | 3,521.33                      | 6,798.33                    | 2.46 N             | 38.70 E           | 425,620.36         | 849,709.10        | 0.15                          | -2.98                         |          |
| 6,895.00                    | 0.84               | 333.18                 | 3,616.32                      | 6,893.32                    | 3.69 N             | 38.05 E           | 425,621.59         | 849,708.45        | 0.04                          | -4.20                         |          |
| 6,989.00                    | 0.80               | 324.23                 | 3,710.31                      | 6,987.31                    | 4.83 N             | 37.36 E           | 425,622.73         | 849,707.76        | 0.14                          | -5.33                         |          |
| 7,083.00                    | 0.81               | 325.75                 | 3,804.30                      | 7,081.30                    | 5.92 N             | 36.60 E           | 425,623.82         | 849,707.00        | 0.03                          | -6.40                         |          |
| 7,175.00                    | 0.75               | 318.18                 | 3,896.29                      | 7,173.29                    | 6.90 N             | 35.83 E           | 425,624.80         | 849,706.23        | 0.13                          | -7.38                         |          |
| 7,268.00                    | 0.78               | 333.83                 | 3,989.28                      | 7,266.28                    | 7.92 N             | 35.15 E           | 425,625.82         | 849,705.55        | 0.23                          | -8.39                         |          |

## Design Report for Parade BWY State Com 1H - Actual

| Measured Depth (usft) | Inclination (°) | Grid Azimuth (°) | TVD below System (usft) | Vertical Depth (usft) | Local Coordinates |                | Map Coordinates |                | Dogleg Rate (°/100usft) | Vertical Section (usft) | Comments |
|-----------------------|-----------------|------------------|-------------------------|-----------------------|-------------------|----------------|-----------------|----------------|-------------------------|-------------------------|----------|
|                       |                 |                  |                         |                       | Northing (usft)   | Easting (usft) | Northing (usft) | Easting (usft) |                         |                         |          |
| 7,360.00              | 0.63            | 320.14           | 4,081.27                | 7,358.27              | 8.87 N            | 34.55 E        | 425,626.77      | 849,704.95     | 0.24                    | -9.34                   |          |
| 7,452.00              | 0.65            | 321.17           | 4,173.27                | 7,450.27              | 9.67 N            | 33.89 E        | 425,627.57      | 849,704.29     | 0.03                    | -10.12                  |          |
| 7,546.00              | 0.72            | 321.61           | 4,267.26                | 7,544.26              | 10.55 N           | 33.19 E        | 425,628.45      | 849,703.59     | 0.07                    | -10.99                  |          |
| 7,638.00              | 1.14            | 329.47           | 4,359.25                | 7,636.25              | 11.79 N           | 32.37 E        | 425,629.69      | 849,702.77     | 0.48                    | -12.22                  |          |
| 7,730.00              | 0.62            | 337.76           | 4,451.24                | 7,728.24              | 13.04 N           | 31.72 E        | 425,630.94      | 849,702.12     | 0.58                    | -13.46                  |          |
| 7,821.00              | 0.46            | 343.89           | 4,542.23                | 7,819.23              | 13.84 N           | 31.43 E        | 425,631.74      | 849,701.83     | 0.19                    | -14.26                  |          |
| 7,914.00              | 0.43            | 350.60           | 4,635.23                | 7,912.23              | 14.55 N           | 31.27 E        | 425,632.45      | 849,701.67     | 0.06                    | -14.96                  |          |
| 8,007.00              | 0.70            | 345.29           | 4,728.23                | 8,005.23              | 15.44 N           | 31.07 E        | 425,633.34      | 849,701.47     | 0.30                    | -15.85                  |          |
| 8,099.00              | 0.58            | 341.42           | 4,820.22                | 8,097.22              | 16.43 N           | 30.78 E        | 425,634.33      | 849,701.18     | 0.14                    | -16.84                  |          |
| 8,192.00              | 0.52            | 336.67           | 4,913.22                | 8,190.22              | 17.26 N           | 30.46 E        | 425,635.16      | 849,700.86     | 0.08                    | -17.67                  |          |
| 8,284.00              | 0.36            | 346.10           | 5,005.21                | 8,282.21              | 17.92 N           | 30.22 E        | 425,635.82      | 849,700.62     | 0.19                    | -18.33                  |          |
| 8,376.00              | 0.50            | 327.48           | 5,097.21                | 8,374.21              | 18.54 N           | 29.94 E        | 425,636.44      | 849,700.34     | 0.21                    | -18.94                  |          |
| 8,468.00              | 0.37            | 302.72           | 5,189.21                | 8,466.21              | 19.04 N           | 29.47 E        | 425,636.94      | 849,699.87     | 0.25                    | -19.43                  |          |
| 8,560.00              | 0.26            | 351.61           | 5,281.21                | 8,558.21              | 19.41 N           | 29.19 E        | 425,637.31      | 849,699.59     | 0.30                    | -19.80                  |          |
| 8,653.00              | 0.20            | 29.06            | 5,374.21                | 8,651.21              | 19.76 N           | 29.24 E        | 425,637.66      | 849,699.64     | 0.17                    | -20.15                  |          |
| 8,745.00              | 0.04            | 99.67            | 5,466.21                | 8,743.21              | 19.89 N           | 29.35 E        | 425,637.79      | 849,699.75     | 0.21                    | -20.28                  |          |
| 8,838.00              | 0.22            | 148.97           | 5,559.20                | 8,836.20              | 19.74 N           | 29.47 E        | 425,637.64      | 849,699.87     | 0.21                    | -20.13                  |          |
| 8,932.00              | 0.41            | 192.58           | 5,653.20                | 8,930.20              | 19.25 N           | 29.49 E        | 425,637.15      | 849,699.89     | 0.31                    | -19.65                  |          |
| 9,025.00              | 0.93            | 206.35           | 5,746.20                | 9,023.20              | 18.25 N           | 29.09 E        | 425,636.15      | 849,699.49     | 0.58                    | -18.64                  |          |
| 9,117.00              | 1.28            | 220.46           | 5,838.18                | 9,115.18              | 16.80 N           | 28.09 E        | 425,634.70      | 849,698.49     | 0.48                    | -17.17                  |          |
| 9,209.00              | 1.17            | 208.95           | 5,930.16                | 9,207.16              | 15.20 N           | 26.97 E        | 425,633.10      | 849,697.37     | 0.29                    | -15.56                  |          |
| 9,302.00              | 1.31            | 207.71           | 6,023.14                | 9,300.14              | 13.43 N           | 26.01 E        | 425,631.33      | 849,696.41     | 0.15                    | -13.77                  |          |
| 9,395.00              | 1.25            | 187.65           | 6,116.11                | 9,393.11              | 11.48 N           | 25.38 E        | 425,629.38      | 849,695.78     | 0.48                    | -11.82                  |          |
| 9,488.00              | 1.46            | 197.15           | 6,209.09                | 9,486.09              | 9.34 N            | 24.90 E        | 425,627.24      | 849,695.30     | 0.33                    | -9.67                   |          |
| 9,580.00              | 1.32            | 212.49           | 6,301.06                | 9,578.06              | 7.33 N            | 23.98 E        | 425,625.23      | 849,694.38     | 0.43                    | -7.65                   |          |
| 9,698.00              | 0.69            | 181.02           | 6,419.04                | 9,696.04              | 5.47 N            | 23.24 E        | 425,623.37      | 849,693.64     | 0.69                    | -5.78                   |          |
| 9,791.00              | 0.72            | 160.55           | 6,512.04                | 9,789.04              | 4.36 N            | 23.43 E        | 425,622.26      | 849,693.83     | 0.27                    | -4.67                   |          |
| 9,884.00              | 1.10            | 144.65           | 6,605.03                | 9,882.03              | 3.08 N            | 24.14 E        | 425,620.98      | 849,694.54     | 0.49                    | -3.40                   |          |
| 9,977.00              | 1.01            | 100.53           | 6,698.01                | 9,975.01              | 2.20 N            | 25.46 E        | 425,620.10      | 849,695.86     | 0.86                    | -2.54                   |          |
| 10,071.00             | 1.24            | 112.09           | 6,791.99                | 10,068.99             | 1.67 N            | 27.22 E        | 425,619.57      | 849,697.62     | 0.34                    | -2.03                   |          |
| 10,163.00             | 1.05            | 125.74           | 6,883.97                | 10,160.97             | 0.80 N            | 28.82 E        | 425,618.70      | 849,699.22     | 0.36                    | -1.19                   |          |
| 10,255.00             | 1.29            | 159.30           | 6,975.96                | 10,252.96             | 0.66 S            | 29.87 E        | 425,617.24      | 849,700.27     | 0.78                    | 0.26                    |          |
| 10,347.00             | 1.63            | 174.76           | 7,067.93                | 10,344.93             | 2.93 S            | 30.36 E        | 425,614.97      | 849,700.76     | 0.56                    | 2.52                    |          |
| 10,441.00             | 1.07            | 213.82           | 7,161.90                | 10,438.90             | 4.99 S            | 29.99 E        | 425,612.91      | 849,700.39     | 1.11                    | 4.59                    |          |
| 10,533.00             | 1.14            | 235.60           | 7,253.89                | 10,530.89             | 6.22 S            | 28.76 E        | 425,611.68      | 849,699.16     | 0.46                    | 5.84                    |          |
| 10,625.00             | 1.66            | 227.17           | 7,345.86                | 10,622.86             | 7.64 S            | 27.03 E        | 425,610.26      | 849,697.43     | 0.61                    | 7.28                    |          |
| 10,718.00             | 2.68            | 234.27           | 7,438.79                | 10,715.79             | 9.83 S            | 24.27 E        | 425,608.07      | 849,694.67     | 1.13                    | 9.50                    |          |
| 10,811.00             | 2.37            | 269.17           | 7,531.70                | 10,808.70             | 11.13 S           | 20.59 E        | 425,606.77      | 849,690.99     | 1.66                    | 10.85                   |          |
| 10,903.00             | 1.40            | 307.06           | 7,623.66                | 10,900.66             | 10.48 S           | 17.79 E        | 425,607.42      | 849,688.19     | 1.66                    | 10.24                   |          |
| 10,995.00             | 1.42            | 280.42           | 7,715.63                | 10,992.63             | 9.59 S            | 15.77 E        | 425,608.31      | 849,686.17     | 0.71                    | 9.38                    |          |
| 11,087.00             | 2.15            | 281.27           | 7,807.59                | 11,084.59             | 9.05 S            | 12.96 E        | 425,608.85      | 849,683.36     | 0.79                    | 8.88                    |          |

## Design Report for Parade BWY State Com 1H - Actual

| Measured Depth (usft) | Inclination (°) | Grid Azimuth (°) | TVD below System (usft) | Vertical Depth (usft) | Local Coordinates |                | Map Coordinates |                | Dogleg Rate (°/100usft) | Vertical Section (usft) | Comments |
|-----------------------|-----------------|------------------|-------------------------|-----------------------|-------------------|----------------|-----------------|----------------|-------------------------|-------------------------|----------|
|                       |                 |                  |                         |                       | Northing (usft)   | Easting (usft) | Northing (usft) | Easting (usft) |                         |                         |          |
| 11,180.00             | 2.10            | 279.87           | 7,900.52                | 11,177.52             | 8 42 S            | 9.57 E         | 425,609.48      | 849,679.97     | 0.08                    | 8.29                    |          |
| 11,272.00             | 1.27            | 283.91           | 7,992.48                | 11,269.48             | 7.88 S            | 6.92 E         | 425,610.02      | 849,677.32     | 0.91                    | 7.79                    |          |
| 11,364.00             | 0.99            | 229.69           | 8,084.47                | 11,361.47             | 8.15 S            | 5.32 E         | 425,609.75      | 849,675.72     | 1.15                    | 8.08                    |          |
| 11,555.00             | 4.13            | 164.23           | 8,275.27                | 11,552.27             | 15.84 S           | 5.93 E         | 425,602.06      | 849,676.33     | 2.00                    | 15.76                   |          |
| 11,587.00             | 7.01            | 171.18           | 8,307.12                | 11,584.12             | 18.88 S           | 6.54 E         | 425,599.02      | 849,676.94     | 9.23                    | 18.79                   |          |
| 11,618.00             | 10.99           | 175.66           | 8,337.73                | 11,614.73             | 23.70 S           | 7.06 E         | 425,594.20      | 849,677.46     | 13.03                   | 23.60                   |          |
| 11,650.00             | 13.27           | 179.70           | 8,369.02                | 11,646.02             | 30.41 S           | 7.31 E         | 425,587.49      | 849,677.71     | 7.60                    | 30.31                   |          |
| 11,681.00             | 16.29           | 181.11           | 8,398.99                | 11,675.99             | 38.32 S           | 7.24 E         | 425,579.58      | 849,677.64     | 9.81                    | 38.22                   |          |
| 11,716.00             | 19.78           | 182.34           | 8,432.26                | 11,709.26             | 49.15 S           | 6.91 E         | 425,568.75      | 849,677.31     | 10.03                   | 49.05                   |          |
| 11,745.00             | 23.64           | 183.39           | 8,459.20                | 11,736.20             | 59.86 S           | 6.36 E         | 425,558.04      | 849,676.76     | 13.38                   | 59.77                   |          |
| 11,776.00             | 27.55           | 181.83           | 8,487.15                | 11,764.15             | 73.24 S           | 5.76 E         | 425,544.66      | 849,676.16     | 12.80                   | 73.15                   |          |
| 11,807.00             | 31.20           | 179.52           | 8,514.16                | 11,791.16             | 88.44 S           | 5.60 E         | 425,529.46      | 849,676.00     | 12.33                   | 88.35                   |          |
| 11,838.00             | 34.01           | 181.99           | 8,540.28                | 11,817.28             | 105.13 S          | 5.37 E         | 425,512.77      | 849,675.77     | 10.03                   | 105.05                  |          |
| 11,870.00             | 36.39           | 181.99           | 8,566.42                | 11,843.42             | 123.57 S          | 4.73 E         | 425,494.33      | 849,675.13     | 7.44                    | 123.49                  |          |
| 11,903.00             | 37.09           | 181.63           | 8,592.87                | 11,869.87             | 143.30 S          | 4.11 E         | 425,474.60      | 849,674.51     | 2.22                    | 143.23                  |          |
| 11,933.00             | 38.32           | 182.16           | 8,616.60                | 11,893.60             | 161.63 S          | 3.50 E         | 425,456.27      | 849,673.90     | 4.24                    | 161.57                  |          |
| 11,965.00             | 40.83           | 181.05           | 8,641.27                | 11,918.27             | 182.01 S          | 2.93 E         | 425,435.89      | 849,673.33     | 8.15                    | 181.96                  |          |
| 11,997.00             | 45.42           | 179.97           | 8,664.62                | 11,941.62             | 203.88 S          | 2.75 E         | 425,414.02      | 849,673.15     | 14.53                   | 203.82                  |          |
| 12,029.00             | 50.15           | 180.00           | 8,686.11                | 11,963.11             | 227.57 S          | 2.75 E         | 425,390.33      | 849,673.15     | 14.78                   | 227.52                  |          |
| 12,060.00             | 52.74           | 180.24           | 8,705.43                | 11,982.43             | 251.81 S          | 2.70 E         | 425,366.09      | 849,673.10     | 8.38                    | 251.75                  |          |
| 12,091.00             | 54.10           | 180.82           | 8,723.91                | 12,000.91             | 276.70 S          | 2.47 E         | 425,341.20      | 849,672.87     | 4.64                    | 276.65                  |          |
| 12,123.00             | 55.19           | 180.65           | 8,742.42                | 12,019.42             | 302.80 S          | 2.13 E         | 425,315.10      | 849,672.53     | 3.43                    | 302.74                  |          |
| 12,154.00             | 56.94           | 180.91           | 8,759.73                | 12,036.73             | 328.52 S          | 1.78 E         | 425,289.38      | 849,672.18     | 5.69                    | 328.46                  |          |
| 12,186.00             | 57.96           | 181.79           | 8,776.94                | 12,053.94             | 355.48 S          | 1.15 E         | 425,262.42      | 849,671.55     | 3.94                    | 355.43                  |          |
| 12,218.00             | 59.60           | 180.80           | 8,793.53                | 12,070.53             | 382.84 S          | 0.53 E         | 425,235.06      | 849,670.93     | 5.77                    | 382.80                  |          |
| 12,249.00             | 62.07           | 180.30           | 8,808.64                | 12,085.64             | 409.91 S          | 0.27 E         | 425,207.99      | 849,670.67     | 8.09                    | 409.87                  |          |
| 12,280.00             | 65.51           | 180.76           | 8,822.33                | 12,099.33             | 437.71 S          | 0.01 E         | 425,180.19      | 849,670.41     | 11.18                   | 437.67                  |          |
| 12,312.00             | 68.86           | 180.73           | 8,834.73                | 12,111.73             | 467.20 S          | 0.37 W         | 425,150.70      | 849,670.03     | 10.47                   | 467.17                  |          |
| 12,343.00             | 72.10           | 180.61           | 8,845.09                | 12,122.09             | 496.41 S          | 0.71 W         | 425,121.49      | 849,669.69     | 10.46                   | 496.38                  |          |
| 12,375.00             | 75.14           | 180.76           | 8,854.11                | 12,131.11             | 527.11 S          | 1.08 W         | 425,090.79      | 849,669.32     | 9.51                    | 527.08                  |          |
| 12,407.00             | 78.08           | 181.00           | 8,861.52                | 12,138.52             | 558.23 S          | 1.56 W         | 425,059.67      | 849,668.84     | 9.22                    | 558.20                  |          |
| 12,438.00             | 81.39           | 180.93           | 8,867.05                | 12,144.05             | 588.73 S          | 2.07 W         | 425,029.17      | 849,668.33     | 10.68                   | 588.70                  |          |
| 12,470.00             | 83.55           | 181.54           | 8,871.24                | 12,148.24             | 620.44 S          | 2.76 W         | 424,997.46      | 849,667.64     | 7.01                    | 620.42                  |          |
| 12,502.00             | 87.32           | 181.68           | 8,873.78                | 12,150.78             | 652.32 S          | 3.65 W         | 424,965.58      | 849,666.75     | 11.79                   | 652.31                  |          |
| 12,533.00             | 88.86           | 180.30           | 8,874.82                | 12,151.82             | 683.30 S          | 4.19 W         | 424,934.60      | 849,666.21     | 6.67                    | 683.29                  |          |
| 12,628.00             | 90.09           | 180.43           | 8,875.69                | 12,152.69             | 778.29 S          | 4.79 W         | 424,839.61      | 849,665.61     | 1.30                    | 778.29                  |          |
| 12,722.00             | 89.05           | 179.62           | 8,876.39                | 12,153.39             | 872.29 S          | 4.83 W         | 424,745.61      | 849,665.57     | 1.40                    | 872.27                  |          |
| 12,817.00             | 88.00           | 179.05           | 8,878.84                | 12,155.84             | 967.25 S          | 3.73 W         | 424,650.65      | 849,666.67     | 1.26                    | 967.21                  |          |
| 12,911.00             | 88.12           | 178.85           | 8,882.02                | 12,159.02             | 1,061.18 S        | 2.01 W         | 424,556.72      | 849,668.39     | 0.25                    | 1,061.11                |          |
| 13,005.00             | 89.41           | 181.70           | 8,884.05                | 12,161.05             | 1,155.14 S        | 2.46 W         | 424,462.76      | 849,667.94     | 3.33                    | 1,155.07                |          |
| 13,099.00             | 88.77           | 181.75           | 8,885.54                | 12,162.54             | 1,249.09 S        | 5.29 W         | 424,368.81      | 849,665.11     | 0.68                    | 1,249.05                |          |

## Design Report for Parade BWY State Com 1H - Actual

| Measured<br>Depth<br>(usft) | Inclination<br>(°) | Grid<br>Azimuth<br>(°) | TVD below<br>System<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates<br>Northing<br>(usft) | Easting<br>(usft) | Map Coordinates<br>Northing<br>(usft) | Easting<br>(usft) | Dogleg<br>Rate<br>(°/100usft) | Vertical<br>Section<br>(usft) | Comments |
|-----------------------------|--------------------|------------------------|-------------------------------|-----------------------------|-----------------------------------------|-------------------|---------------------------------------|-------------------|-------------------------------|-------------------------------|----------|
| 13,194.00                   | 90.74              | 181.27                 | 8,885.96                      | 12,162.95                   | 1,344.05 S                              | 7.79 W            | 424,273.85                            | 849,662.61        | 2.13                          | 1,344.03                      |          |
| 13,288.00                   | 91.08              | 180.34                 | 8,884.45                      | 12,161.45                   | 1,438.03 S                              | 9.11 W            | 424,179.87                            | 849,661.29        | 1.05                          | 1,438.02                      |          |
| 13,382.00                   | 88.55              | 180.71                 | 8,884.76                      | 12,161.76                   | 1,532.02 S                              | 9.97 W            | 424,085.88                            | 849,660.43        | 2.72                          | 1,532.01                      |          |
| 13,476.00                   | 88.49              | 181.13                 | 8,887.19                      | 12,164.19                   | 1,625.97 S                              | 11.48 W           | 423,991.93                            | 849,658.92        | 0.45                          | 1,625.98                      |          |
| 13,570.00                   | 86.75              | 180.23                 | 8,891.09                      | 12,168.09                   | 1,719.88 S                              | 12.60 W           | 423,898.02                            | 849,657.80        | 2.08                          | 1,719.89                      |          |
| 13,665.00                   | 86.86              | 180.24                 | 8,896.38                      | 12,173.38                   | 1,814.73 S                              | 12.99 W           | 423,803.17                            | 849,657.41        | 0.12                          | 1,814.74                      |          |
| 13,759.00                   | 87.29              | 179.99                 | 8,901.18                      | 12,178.18                   | 1,908.61 S                              | 13.18 W           | 423,709.29                            | 849,657.22        | 0.53                          | 1,908.61                      |          |
| 13,855.00                   | 91.49              | 179.88                 | 8,902.20                      | 12,179.20                   | 2,004.58 S                              | 13.07 W           | 423,613.32                            | 849,657.33        | 4.38                          | 2,004.58                      |          |
| 13,949.00                   | 88.40              | 178.36                 | 8,902.29                      | 12,179.29                   | 2,098.56 S                              | 11.62 W           | 423,519.34                            | 849,658.78        | 3.66                          | 2,098.52                      |          |
| 14,043.00                   | 88.71              | 180.51                 | 8,904.66                      | 12,181.66                   | 2,192.52 S                              | 10.70 W           | 423,425.38                            | 849,659.70        | 2.31                          | 2,192.46                      |          |
| 14,138.00                   | 89.54              | 181.13                 | 8,906.11                      | 12,183.11                   | 2,287.49 S                              | 12.06 W           | 423,330.41                            | 849,658.34        | 1.09                          | 2,287.45                      |          |
| 14,232.00                   | 89.38              | 181.21                 | 8,907.00                      | 12,184.00                   | 2,381.47 S                              | 13.98 W           | 423,236.43                            | 849,656.42        | 0.19                          | 2,381.44                      |          |
| 14,327.00                   | 89.97              | 181.59                 | 8,907.54                      | 12,184.54                   | 2,476.44 S                              | 16.30 W           | 423,141.46                            | 849,654.10        | 0.74                          | 2,476.44                      |          |
| 14,422.00                   | 90.52              | 181.04                 | 8,907.13                      | 12,184.13                   | 2,571.41 S                              | 18.48 W           | 423,046.49                            | 849,651.92        | 0.82                          | 2,571.43                      |          |
| 14,517.00                   | 89.88              | 180.22                 | 8,906.80                      | 12,183.80                   | 2,666.40 S                              | 19.52 W           | 422,951.50                            | 849,650.88        | 1.09                          | 2,666.43                      |          |
| 14,611.00                   | 89.94              | 180.00                 | 8,906.95                      | 12,183.95                   | 2,760.40 S                              | 19.70 W           | 422,857.50                            | 849,650.70        | 0.24                          | 2,760.42                      |          |
| 14,706.00                   | 89.66              | 180.39                 | 8,907.28                      | 12,184.28                   | 2,855.40 S                              | 20.03 W           | 422,762.50                            | 849,650.37        | 0.51                          | 2,855.42                      |          |
| 14,800.00                   | 88.89              | 180.38                 | 8,908.47                      | 12,185.47                   | 2,949.39 S                              | 20.66 W           | 422,668.51                            | 849,649.74        | 0.82                          | 2,949.41                      |          |
| 14,895.00                   | 88.24              | 179.67                 | 8,910.85                      | 12,187.85                   | 3,044.36 S                              | 20.70 W           | 422,573.54                            | 849,649.70        | 1.01                          | 3,044.37                      |          |
| 14,990.00                   | 88.18              | 181.83                 | 8,913.82                      | 12,190.82                   | 3,139.30 S                              | 21.94 W           | 422,478.60                            | 849,648.46        | 2.27                          | 3,139.31                      |          |
| 15,084.00                   | 88.42              | 181.27                 | 8,916.61                      | 12,193.61                   | 3,233.23 S                              | 24.48 W           | 422,384.67                            | 849,645.92        | 0.65                          | 3,233.26                      |          |
| 15,178.00                   | 89.26              | 180.40                 | 8,918.51                      | 12,195.51                   | 3,327.19 S                              | 25.85 W           | 422,290.71                            | 849,644.55        | 1.29                          | 3,327.24                      |          |
| 15,272.00                   | 89.85              | 178.72                 | 8,919.24                      | 12,196.24                   | 3,421.18 S                              | 25.13 W           | 422,196.72                            | 849,645.27        | 1.89                          | 3,421.22                      |          |
| 15,366.00                   | 89.88              | 179.57                 | 8,919.46                      | 12,196.46                   | 3,515.17 S                              | 23.73 W           | 422,102.73                            | 849,646.67        | 0.90                          | 3,515.18                      |          |
| 15,460.00                   | 90.37              | 179.37                 | 8,919.25                      | 12,196.25                   | 3,609.17 S                              | 22.86 W           | 422,008.73                            | 849,647.54        | 0.56                          | 3,609.15                      |          |
| 15,555.00                   | 91.26              | 180.70                 | 8,917.90                      | 12,194.90                   | 3,704.16 S                              | 22.92 W           | 421,913.74                            | 849,647.48        | 1.68                          | 3,704.13                      |          |
| 15,649.00                   | 88.71              | 181.14                 | 8,917.93                      | 12,194.93                   | 3,798.14 S                              | 24.43 W           | 421,819.76                            | 849,645.97        | 2.75                          | 3,798.12                      |          |
| 15,745.00                   | 89.45              | 182.68                 | 8,919.47                      | 12,196.47                   | 3,894.07 S                              | 27.62 W           | 421,723.83                            | 849,642.78        | 1.78                          | 3,894.09                      |          |
| 15,839.00                   | 89.14              | 182.16                 | 8,920.63                      | 12,197.63                   | 3,987.98 S                              | 31.59 W           | 421,629.92                            | 849,638.81        | 0.64                          | 3,988.04                      |          |
| 15,933.00                   | 88.21              | 180.94                 | 8,922.80                      | 12,199.80                   | 4,081.91 S                              | 34.14 W           | 421,535.99                            | 849,636.26        | 1.63                          | 4,082.00                      |          |
| 16,027.00                   | 87.66              | 182.09                 | 8,926.19                      | 12,203.19                   | 4,175.82 S                              | 36.62 W           | 421,442.08                            | 849,633.78        | 1.36                          | 4,175.93                      |          |
| 16,122.00                   | 87.94              | 181.83                 | 8,929.83                      | 12,206.83                   | 4,270.69 S                              | 39.87 W           | 421,347.21                            | 849,630.53        | 0.40                          | 4,270.84                      |          |
| 16,216.00                   | 87.69              | 183.35                 | 8,933.42                      | 12,210.42                   | 4,364.52 S                              | 44.11 W           | 421,253.38                            | 849,626.29        | 1.64                          | 4,364.72                      |          |
| 16,310.00                   | 87.72              | 182.45                 | 8,937.18                      | 12,214.18                   | 4,458.33 S                              | 48.86 W           | 421,159.57                            | 849,621.54        | 0.96                          | 4,458.58                      |          |
| 16,405.00                   | 87.69              | 181.36                 | 8,940.99                      | 12,217.99                   | 4,553.20 S                              | 52.02 W           | 421,064.70                            | 849,618.38        | 1.15                          | 4,553.49                      |          |
| 16,500.00                   | 87.44              | 182.85                 | 8,945.02                      | 12,222.02                   | 4,648.04 S                              | 55.50 W           | 420,969.86                            | 849,614.90        | 1.39                          | 4,648.37                      |          |
| 16,594.00                   | 87.80              | 181.46                 | 8,948.93                      | 12,225.93                   | 4,741.90 S                              | 59.03 W           | 420,876.00                            | 849,611.37        | 1.53                          | 4,742.26                      |          |
| 16,688.00                   | 87.90              | 180.84                 | 8,952.49                      | 12,229.49                   | 4,836.81 S                              | 60.94 W           | 420,781.09                            | 849,609.46        | 0.66                          | 4,837.19                      |          |
| 16,783.00                   | 89.20              | 181.09                 | 8,954.87                      | 12,231.87                   | 4,930.76 S                              | 62.52 W           | 420,687.14                            | 849,607.88        | 1.41                          | 4,931.16                      |          |
| 16,877.00                   | 89.82              | 181.11                 | 8,956.67                      | 12,232.67                   | 5,024.74 S                              | 64.33 W           | 420,593.16                            | 849,606.07        | 0.66                          | 5,025.15                      |          |
| 16,971.00                   | 91.05              | 181.04                 | 8,954.96                      | 12,231.96                   | 5,118.72 S                              | 66.09 W           | 420,499.18                            | 849,604.31        | 1.31                          | 5,119.15                      |          |

## Design Report for Parade BWY State Com 1H - Actual

| Measured Depth (usft) | Inclination (") | Grid Azimuth (") | TVD below System (usft) | Vertical Depth (usft) | Local Coordinates Northing (usft) | Easting (usft) | Map Coordinates Northing (usft) | Easting (usft) | Dogleg Rate ("/100usft) | Vertical Section (usft) | Comments                  |
|-----------------------|-----------------|------------------|-------------------------|-----------------------|-----------------------------------|----------------|---------------------------------|----------------|-------------------------|-------------------------|---------------------------|
| 17,065.00             | 91.39           | 180.56           | 8,952.96                | 12,229.96             | 5,212.69 S                        | 67.40 W        | 420,405.21                      | 849,603.00     | 0.63                    | 5,213.13                |                           |
| 17,159.00             | 90.83           | 180.73           | 8,951.14                | 12,228.14             | 5,306.67 S                        | 68.46 W        | 420,311.23                      | 849,601.94     | 0.62                    | 5,307.11                |                           |
| 17,253.00             | 90.74           | 180.53           | 8,949.85                | 12,226.85             | 5,400.65 S                        | 69.49 W        | 420,217.25                      | 849,600.91     | 0.23                    | 5,401.10                |                           |
| 17,347.00             | 91.70           | 180.95           | 8,947.85                | 12,224.85             | 5,494.62 S                        | 70.71 W        | 420,123.28                      | 849,599.69     | 1.11                    | 5,495.08                |                           |
| 17,441.00             | 89.08           | 182.15           | 8,947.21                | 12,224.21             | 5,588.57 S                        | 73.25 W        | 420,029.33                      | 849,597.15     | 3.07                    | 5,589.05                |                           |
| 17,535.00             | 86.40           | 181.11           | 8,950.91                | 12,227.91             | 5,682.45 S                        | 75.92 W        | 419,935.45                      | 849,594.48     | 3.06                    | 5,682.96                |                           |
| 17,629.00             | 86.73           | 181.35           | 8,956.55                | 12,233.55             | 5,776.26 S                        | 77.94 W        | 419,841.64                      | 849,592.46     | 0.43                    | 5,776.79                |                           |
| 17,723.00             | 88.21           | 180.24           | 8,960.70                | 12,237.70             | 5,870.16 S                        | 79.24 W        | 419,747.74                      | 849,591.16     | 1.97                    | 5,870.69                |                           |
| 17,818.00             | 88.12           | 180.94           | 8,963.74                | 12,240.74             | 5,965.10 S                        | 80.22 W        | 419,652.80                      | 849,590.18     | 0.74                    | 5,965.64                |                           |
| 17,911.00             | 86.88           | 181.59           | 8,967.79                | 12,244.79             | 6,057.99 S                        | 82.27 W        | 419,559.91                      | 849,588.13     | 1.51                    | 6,058.55                |                           |
| 18,005.00             | 87.93           | 180.97           | 8,972.05                | 12,249.05             | 6,151.87 S                        | 84.37 W        | 419,466.03                      | 849,586.03     | 1.30                    | 6,152.45                |                           |
| 18,099.00             | 88.58           | 180.63           | 8,974.91                | 12,251.91             | 6,245.82 S                        | 85.68 W        | 419,372.08                      | 849,584.72     | 0.78                    | 6,246.40                |                           |
| 18,193.00             | 88.40           | 180.69           | 8,977.39                | 12,254.39             | 6,339.78 S                        | 86.76 W        | 419,278.12                      | 849,583.64     | 0.20                    | 6,340.37                |                           |
| 18,287.00             | 88.46           | 180.50           | 8,979.97                | 12,256.97             | 6,433.74 S                        | 87.74 W        | 419,184.16                      | 849,582.66     | 0.21                    | 6,434.33                |                           |
| 18,382.00             | 89.85           | 181.16           | 8,981.37                | 12,258.37             | 6,528.71 S                        | 89.11 W        | 419,089.19                      | 849,581.29     | 1.62                    | 6,529.32                |                           |
| 18,476.00             | 90.37           | 181.50           | 8,981.19                | 12,258.19             | 6,622.69 S                        | 91.29 W        | 418,995.21                      | 849,579.11     | 0.66                    | 6,623.32                |                           |
| 18,570.00             | 90.26           | 181.63           | 8,980.67                | 12,257.67             | 6,716.65 S                        | 93.86 W        | 418,901.25                      | 849,576.54     | 0.18                    | 6,717.30                |                           |
| 18,665.00             | 89.23           | 181.03           | 8,981.09                | 12,258.09             | 6,811.62 S                        | 96.07 W        | 418,806.28                      | 849,574.33     | 1.25                    | 6,812.30                |                           |
| 18,760.00             | 88.64           | 181.37           | 8,982.86                | 12,259.86             | 6,906.58 S                        | 98.05 W        | 418,711.32                      | 849,572.35     | 0.72                    | 6,907.28                |                           |
| 18,855.00             | 89.29           | 181.53           | 8,984.57                | 12,261.57             | 7,001.54 S                        | 100.46 W       | 418,616.36                      | 849,569.94     | 0.70                    | 7,002.25                |                           |
| 18,950.00             | 89.20           | 180.96           | 8,985.83                | 12,262.83             | 7,096.51 S                        | 102.52 W       | 418,521.39                      | 849,567.88     | 0.61                    | 7,097.24                |                           |
| 19,044.00             | 89.48           | 180.59           | 8,986.91                | 12,263.91             | 7,190.49 S                        | 103.79 W       | 418,427.41                      | 849,566.61     | 0.49                    | 7,191.24                |                           |
| 19,138.00             | 90.12           | 179.89           | 8,987.24                | 12,264.24             | 7,284.49 S                        | 104.19 W       | 418,333.41                      | 849,566.21     | 1.01                    | 7,285.23                |                           |
| 19,161.00             | 89.88           | 179.54           | 8,987.24                | 12,264.24             | 7,307.49 S                        | 104.07 W       | 418,310.41                      | 849,566.33     | 1.85                    | 7,308.23                |                           |
| 19,209.00             | 89.88           | 179.54           | 8,987.34                | 12,264.34             | 7,355.49 S                        | 103.69 W       | 418,262.41                      | 849,566.71     | 0.00                    | 7,356.22                | BHL (Parade BWY State 1H) |

Vertical Section Information

| Angle Type | Target                    | Azimuth (") | Origin Type | Origin +N/-S (usft) | Origin +E/-W (usft) | Start TVD (usft) |
|------------|---------------------------|-------------|-------------|---------------------|---------------------|------------------|
| Target     | BHL (Parade BWY State 1H) | 180.77      | Slot        | 0.00                | 0.00                | 0.00             |

Survey tool program

| From (usft) | To (usft) | Survey/Plan              | Survey Tool |
|-------------|-----------|--------------------------|-------------|
| 315.00      | 841.00    | MWD (Surface)            | MWD         |
| 956.00      | 19,209.00 | MWD (Vert/Curve/Lateral) |             |

## Design Report for Parade BWY State Com 1H - Actual

Design Targets

| Target Name       | Dip   | Dip  | TVD | +N/-S | +E/-W | Northing | Easting | Latitude | Longitude |
|-------------------|-------|------|-----|-------|-------|----------|---------|----------|-----------|
| - hit/miss target | Angle | Dir. | ( ) | ( )   | ( )   | ( )      | ( )     |          |           |
| - Shape           | ( )   | ( )  |     |       |       |          |         |          |           |
| ( )               |       |      |     |       |       |          |         |          |           |

Directional Difficulty Index

|                                     |                |                               |                                      |
|-------------------------------------|----------------|-------------------------------|--------------------------------------|
| Average Dogleg over Survey:         | 1.12 °/100usft | Maximum Dogleg over Survey:   | 14.78 °/100usft at<br>12,029.00 usft |
| Net Tortousity applicable to Plans: | 0.61 °/100usft | Directional Difficulty Index: | 6.409                                |

Audit Info

**North Reference Sheet for Parade BWY State Com - Parade BWY State Com 1H - Wellbore #1**

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to Grid North Reference.  
Vertical Depths are relative to GL:3252+25ft @ 3277.00usft (Precision 554). Northing and Easting are relative to Parade BWY State Com 1H  
Coordinate System is US State Plane 1983, New Mexico Eastern Zone using datum North American Datum 1983, ellipsoid GRS 1980  
Projection method is Transverse Mercator (Gauss-Kruger)  
Central Meridian is 104° 20' 0.000 W", Longitude Origin:0° 0' 0.000 E", Latitude Origin:0° 0' 0.000 N"  
False Easting: 541,337.50usft, False Northing: 0.00usft, Scale Reduction: 1.00001798

Grid Coordinates of Well: 425,617.90 usft N, 849,670.40 usft E  
Geographical Coordinates of Well: 32° 09' 58.24" N, 103° 20' 12.82" W  
Grid Convergence at Surface is: 0.5306°

Based upon Minimum Curvature type calculations, at a Measured Depth of 19,209.00usft  
the Bottom Hole Displacement is 7,356.22usft in the Direction of 180.81° (Grid).

Magnetic Convergence at surface is: -6.3800° (29 May 2017, , BGGM2017)

