



30.015-44325

I Andrew Meadville certify that I am employed by VES Survey International. That I did on the day(s) of 03/13/18 through 03/13/18 conduct or supervise the taking of a Rate Gyro survey from a depth of 0.00 feet to a depth of 2,291.88 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Vaughn Energy Services, that I am authorized and qualified to make this report; that this survey was conducted at the request of Matador Resources for the SST 6 State AH Well # 123 API # 30-015-44325 in Eddy County / Parish New Mexico; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by VES Survey International.

A handwritten signature in dark ink, appearing to read "A R M", is written over a horizontal line.

Andrew Meadville  
Service Technician  
VES Survey International



Company: MATADOR RESOURCES

Well: SST 6 STATE AH/123

Rig Name: PATTERSON 809

State/County: NEW MEXICO/EDDY

VS-Azi: 270.46 Degrees

Latitude: 32.68753, Longitude: -104.10577

Grid North = True North -0.12 degs (NAD 27)

Grid Correction Applied = -0.12 degs



Depth Reference : RKB 28.5 FEET

DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: msgyro\_run01-01-de\_01.ut

Minimum Curvature Method

Report Date/Time: 3/14/2018 / 14:53

VES Survey International

Midland, TX

432-563-5444

Surveyor: Andrew Meadville

SST 6 State AH 123 / API 30-015-44325

| Measured<br>Depth<br>FT | Incl<br>Angle<br>Deg | Drift<br>Direction<br>Deg | TVD<br>FT | +N/-S<br>FT | +E/-W<br>FT | Vertical<br>Section<br>FT | Closure<br>Distance<br>FT | Closure<br>Direction<br>Deg | Dogleg<br>Severity<br>Deg/100 |
|-------------------------|----------------------|---------------------------|-----------|-------------|-------------|---------------------------|---------------------------|-----------------------------|-------------------------------|
| 0.00                    | 0.00                 | 0.00                      | 0.00      | 0.00        | 0.00        | 0.00                      | 0.00                      | 0.00                        | ****                          |
| 91.56                   | 0.29                 | 133.51                    | 91.56     | -0.16       | 0.17        | -0.17                     | 0.23                      | 133.51                      | 0.32                          |
| 183.24                  | 0.43                 | 122.24                    | 183.24    | -0.50       | 0.62        | -0.63                     | 0.80                      | 128.71                      | 0.17                          |
| 274.92                  | 0.51                 | 143.34                    | 274.91    | -1.01       | 1.16        | -1.17                     | 1.54                      | 131.14                      | 0.21                          |
| 366.60                  | 0.55                 | 166.92                    | 366.59    | -1.77       | 1.51        | -1.52                     | 2.33                      | 139.65                      | 0.24                          |
| 458.28                  | 0.95                 | 197.86                    | 458.26    | -2.92       | 1.37        | -1.40                     | 3.23                      | 154.85                      | 0.60                          |
| 549.96                  | 2.47                 | 159.85                    | 549.90    | -5.50       | 1.82        | -1.86                     | 5.80                      | 161.69                      | 1.99                          |
| 641.64                  | 2.92                 | 126.71                    | 641.49    | -8.76       | 4.38        | -4.45                     | 9.79                      | 153.45                      | 1.74                          |
| 733.32                  | 2.74                 | 120.03                    | 733.05    | -11.25      | 8.15        | -8.24                     | 13.89                     | 144.09                      | 0.41                          |
| 825.00                  | 1.96                 | 125.66                    | 824.66    | -13.26      | 11.32       | -11.43                    | 17.44                     | 139.52                      | 0.89                          |
| 916.68                  | 1.50                 | 128.61                    | 916.29    | -14.93      | 13.53       | -13.65                    | 20.15                     | 137.80                      | 0.51                          |
| 1008.36                 | 1.26                 | 133.71                    | 1007.95   | -16.37      | 15.20       | -15.33                    | 22.34                     | 137.13                      | 0.29                          |
| 1100.04                 | 1.49                 | 97.77                     | 1099.60   | -17.23      | 17.11       | -17.25                    | 24.29                     | 135.20                      | 0.96                          |
| 1191.72                 | 2.20                 | 79.52                     | 1191.24   | -17.07      | 20.03       | -20.16                    | 26.32                     | 130.45                      | 0.99                          |
| 1283.40                 | 2.07                 | 67.25                     | 1282.85   | -16.11      | 23.29       | -23.41                    | 28.32                     | 124.68                      | 0.52                          |
| 1375.08                 | 1.41                 | 64.47                     | 1374.49   | -14.98      | 25.83       | -25.95                    | 29.87                     | 120.11                      | 0.73                          |
| 1466.76                 | 1.41                 | 60.45                     | 1466.14   | -13.94      | 27.83       | -27.95                    | 31.13                     | 116.60                      | 0.11                          |
| 1558.44                 | 1.25                 | 58.39                     | 1557.80   | -12.86      | 29.67       | -29.77                    | 32.33                     | 113.44                      | 0.18                          |
| 1650.12                 | 0.84                 | 59.73                     | 1649.46   | -12.00      | 31.10       | -31.20                    | 33.34                     | 111.09                      | 0.44                          |

| Measured<br>Depth<br>FT | Incl<br>Angle<br>Deg | Drift<br>Direction<br>Deg | TVD<br>FT | +N/-S<br>FT | +E/-W<br>FT | Vertical<br>Section<br>FT | Closure<br>Distance<br>FT | Closure<br>Direction<br>Deg | Dogleg<br>Severity<br>Deg/100 |
|-------------------------|----------------------|---------------------------|-----------|-------------|-------------|---------------------------|---------------------------|-----------------------------|-------------------------------|
| 1741.80                 | 0.79                 | 50.49                     | 1741.13   | -11.25      | 32.18       | -32.26                    | 34.09                     | 109.27                      | 0.15                          |
| 1833.48                 | 0.71                 | 46.55                     | 1832.80   | -10.46      | 33.08       | -33.16                    | 34.69                     | 107.54                      | 0.10                          |
| 1925.16                 | 0.64                 | 59.32                     | 1924.48   | -9.81       | 33.93       | -34.01                    | 35.32                     | 106.12                      | 0.18                          |
| 2016.84                 | 0.66                 | 46.19                     | 2016.15   | -9.18       | 34.75       | -34.82                    | 35.94                     | 104.80                      | 0.16                          |
| 2108.52                 | 0.67                 | 42.25                     | 2107.83   | -8.42       | 35.49       | -35.55                    | 36.47                     | 103.35                      | 0.05                          |
| 2200.20                 | 0.85                 | 29.03                     | 2199.50   | -7.42       | 36.18       | -36.24                    | 36.93                     | 101.59                      | 0.27                          |
| 2291.88                 | 0.57                 | 32.85                     | 2291.17   | -6.45       | 36.76       | -36.81                    | 37.32                     | 99.95                       | 0.32                          |

