

**STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING CALLED  
BY THE OIL CONSERVATION DIVISION FOR  
THE PURPOSE OF CONSIDERING:**

**APPLICATION OF MEWBOURNE OIL COMPANY  
FOR A NON-STANDARD OIL SPACING AND  
PRORATION UNIT AND COMPULSORY POOLING,  
LEA COUNTY, NEW MEXICO.**

2014 JAN - 8 P 3: 07  
RECEIVED OGD  
Case No. 15,065

**AFFIDAVIT OF DAVID RAWLINS**

David Rawlins, being duly sworn upon his oath, deposes and states:

1. I am over the age of 18, and have personal knowledge of the matters stated herein.
2. I am a geologist for Mewbourne Oil Company ("Mewbourne"), and I am familiar with the geological matters involved in this case
3. The geological plats attached hereto as Attachment A show the following:
  - (a) Part 1 is a gross isopach of the 2nd Bone Spring Sand zone, the primary target of the well. The plat shows other Bone Spring wells in the immediate area. It also contains the line of an east-west cross section, which is Part 2 of Attachment A.
  - (b) Part 2 is a west-east cross section, showing the depths at which a completion will be made. The 2nd Bone Spring Sand is continuous across the well unit.
4. The project area is justified from a geologic standpoint.
5. Each quarter-quarter section in the project area will contribute more or less equally to production.
6. Attachment B is the horizontal survey calculation for the well. The well will have approximately 10 completion stages, and the fracture treatment will use approximately 2,800,000 pounds of sand and 2,400,000 gallons of water.
7. The producing interval in the well will be orthodox.

Oil Conservation Division  
Case No. 2 15065  
Exhibit No. 2

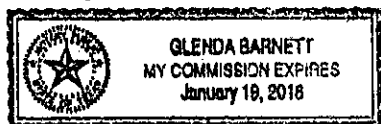
8. Other Bone Spring wells in Section 17 have laydown units, so Mewbourne requests a laydown unit for the subject well.

  
David Rawlins

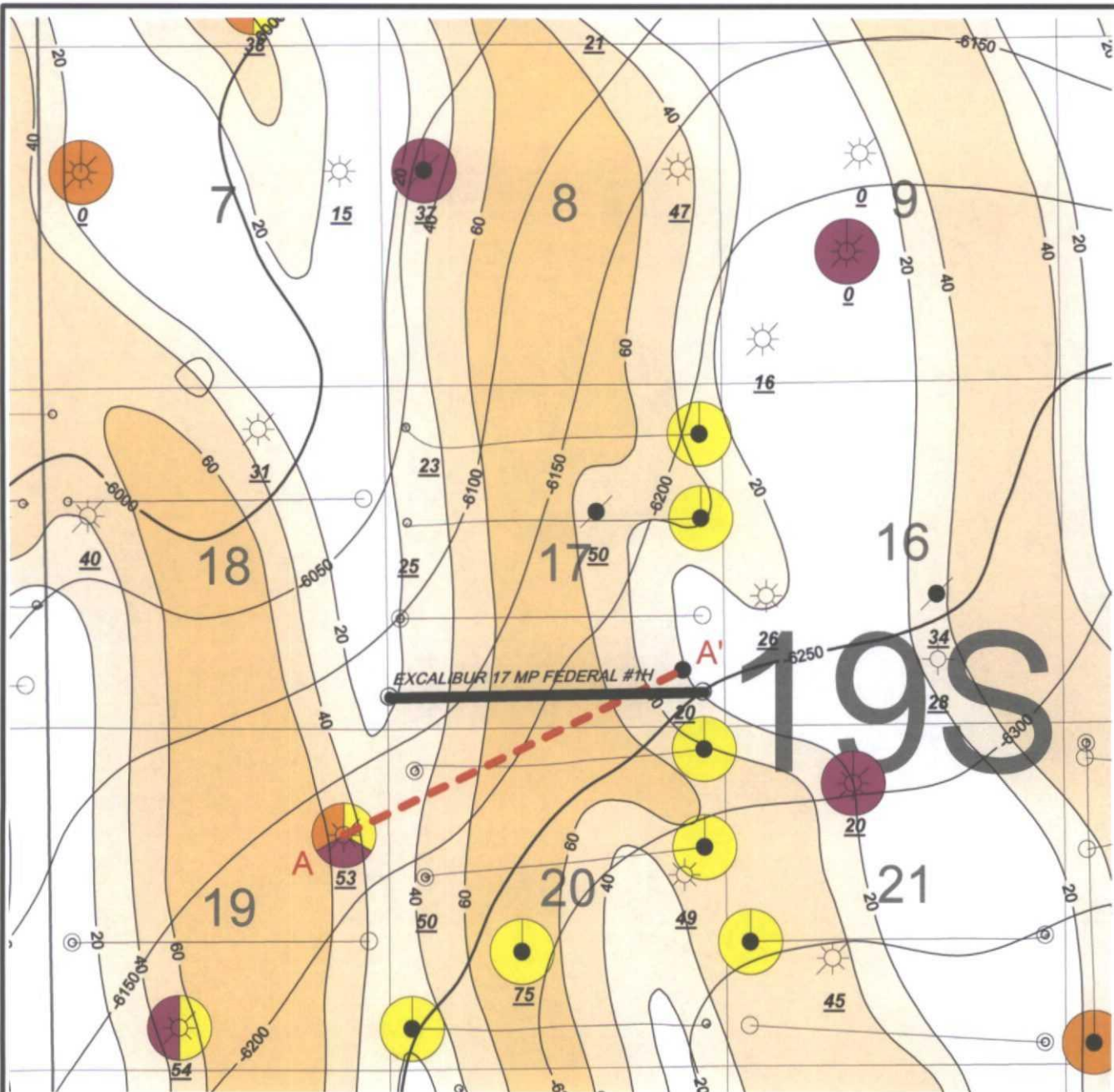
COUNTY OF MIDLAND    )  
                                  ) ss.  
STATE OF TEXAS        )

SUBSCRIBED AND SWORN TO before me this 18<sup>th</sup> day of December, 2013 by David Rawlins.

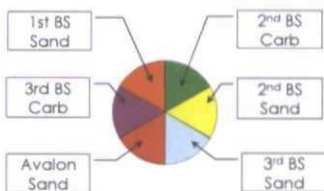
My Commission Expires: 1-18-2016



  
Notary Public



**PRODUCING ZONE COLOR CODE**



|                                                                                                                                                        |                   |                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------------|
| <b>MOC Mewbourne Oil Company</b>                                                                                                                       |                   |                            |
| <b>EXCALIBUR 17 MP FEDERAL 1H</b><br>2 <sup>ND</sup> BSPG "UPPER" SAND GROSS SD. ISOPACH<br>Structure top of 2 BSPG "UPPER" Sand<br>LEA CO, NEW MEXICO |                   |                            |
| Author:<br>DMR                                                                                                                                         | Wells > 8000 feet | Date:<br>12 December, 2013 |
| Scale:<br>1 inch = 2500 feet                                                                                                                           |                   |                            |



1" = 2500'

Attachment **A**  
Part 1



OPERATOR:  
WELL:  
LOCATION:  
JOB NUMBER:

SURVEY CALCULATION PROGRAM  
Mewbourne Oil Co.  
Excalibur 17 MP Federal Com  
Lea Co. NM  
WT-13814

| SVY   |         |       | TRUE   | COURSE |         |        |        |        | DLS/  |
|-------|---------|-------|--------|--------|---------|--------|--------|--------|-------|
| NUM   | MD      | INC   | AZM    | LENGTH | TVD     | SECT   | N-S    | E-W    | 100   |
| TIE   | 9165.00 | 0.46  | 143.93 |        | 9162.44 | -57.28 | 93.20  | -57.72 |       |
| 1.00  | 9229.00 | 1.30  | 232.00 | 64.00  | 9226.43 | -57.70 | 92.55  | -58.14 | 2.13  |
| 2.00  | 9260.00 | 0.80  | 167.40 | 31.00  | 9257.42 | -57.94 | 92.12  | -58.37 | 3.87  |
| 3.00  | 9292.00 | 3.50  | 91.40  | 32.00  | 9289.40 | -56.91 | 91.88  | -57.34 | 10.61 |
| 4.00  | 9324.00 | 6.90  | 81.90  | 32.00  | 9321.27 | -54.03 | 92.12  | -54.46 | 10.92 |
| 5.00  | 9355.00 | 9.70  | 74.00  | 31.00  | 9351.94 | -49.67 | 93.11  | -50.11 | 9.73  |
| 6.00  | 9387.00 | 12.80 | 72.40  | 32.00  | 9383.32 | -43.69 | 94.92  | -44.14 | 9.74  |
| 7.00  | 9419.00 | 15.20 | 73.70  | 32.00  | 9414.37 | -36.27 | 97.17  | -36.73 | 7.56  |
| 8.00  | 9450.00 | 18.40 | 78.80  | 31.00  | 9444.04 | -27.56 | 99.26  | -28.03 | 11.36 |
| 9.00  | 9482.00 | 20.00 | 78.90  | 32.00  | 9474.26 | -17.23 | 101.30 | -17.70 | 5.00  |
| 10.00 | 9514.00 | 21.60 | 77.50  | 32.00  | 9504.18 | -6.09  | 103.63 | -6.58  | 5.24  |
| 11.00 | 9545.00 | 24.60 | 82.30  | 31.00  | 9532.69 | 5.88   | 105.73 | 5.39   | 11.42 |
| 12.00 | 9577.00 | 27.80 | 84.60  | 32.00  | 9561.40 | 19.93  | 107.32 | 19.42  | 10.49 |
| 13.00 | 9608.00 | 32.00 | 85.40  | 31.00  | 9588.27 | 35.32  | 108.66 | 34.81  | 13.61 |
| 14.00 | 9640.00 | 34.80 | 88.80  | 32.00  | 9614.98 | 52.91  | 109.53 | 52.40  | 10.52 |
| 15.00 | 9671.00 | 38.40 | 87.70  | 31.00  | 9639.87 | 71.39  | 110.10 | 70.87  | 11.80 |
| 16.00 | 9703.00 | 42.40 | 88.60  | 32.00  | 9664.23 | 92.11  | 110.77 | 91.59  | 12.63 |
| 17.00 | 9734.00 | 46.60 | 88.60  | 31.00  | 9686.34 | 113.83 | 111.30 | 113.31 | 13.55 |
| 18.00 | 9766.00 | 51.40 | 89.30  | 32.00  | 9707.32 | 137.97 | 111.73 | 137.45 | 15.09 |
| 19.00 | 9797.00 | 55.40 | 90.00  | 31.00  | 9725.80 | 162.86 | 111.88 | 162.33 | 13.03 |
| 20.00 | 9829.00 | 58.80 | 91.40  | 32.00  | 9743.18 | 189.71 | 111.55 | 189.19 | 11.24 |
| 21.00 | 9861.00 | 62.30 | 92.50  | 32.00  | 9758.91 | 217.55 | 110.60 | 217.03 | 11.34 |
| 22.00 | 9892.00 | 65.30 | 93.50  | 31.00  | 9772.60 | 245.32 | 109.14 | 244.81 | 10.10 |
| 23.00 | 9924.00 | 68.40 | 93.50  | 32.00  | 9785.18 | 274.68 | 107.34 | 274.17 | 9.69  |
| 24.00 | 9955.00 | 71.10 | 93.70  | 31.00  | 9795.91 | 303.69 | 105.51 | 303.20 | 8.73  |
| 25.00 | 9987.00 | 73.80 | 92.80  | 32.00  | 9805.55 | 334.14 | 103.79 | 333.65 | 8.85  |

|       |          |       |       |       |         |         |        |         |       |
|-------|----------|-------|-------|-------|---------|---------|--------|---------|-------|
| 26.00 | 10018.00 | 76.80 | 91.80 | 31.00 | 9813.42 | 364.09  | 102.59 | 363.61  | 10.17 |
| 27.00 | 10050.00 | 79.00 | 91.20 | 32.00 | 9820.13 | 395.36  | 101.77 | 394.89  | 7.12  |
| 28.00 | 10081.00 | 80.80 | 91.10 | 31.00 | 9825.56 | 425.87  | 101.15 | 425.40  | 5.82  |
| 29.00 | 10113.00 | 83.60 | 90.70 | 32.00 | 9829.91 | 457.57  | 100.66 | 457.10  | 8.84  |
| 30.00 | 10139.00 | 85.50 | 91.70 | 26.00 | 9832.38 | 483.44  | 100.11 | 482.97  | 8.25  |
| 31.00 | 10170.00 | 86.30 | 91.50 | 31.00 | 9834.59 | 514.34  | 99.25  | 513.88  | 2.66  |
| 32.00 | 10202.00 | 89.40 | 91.50 | 32.00 | 9835.79 | 546.30  | 98.41  | 545.84  | 9.69  |
| 33.00 | 10234.00 | 90.30 | 92.00 | 32.00 | 9835.88 | 578.28  | 97.44  | 577.83  | 3.22  |
| 34.00 | 10265.00 | 91.00 | 91.70 | 31.00 | 9835.52 | 609.26  | 96.44  | 608.81  | 2.46  |
| 35.00 | 10329.00 | 90.80 | 91.80 | 64.00 | 9834.52 | 673.21  | 94.48  | 672.77  | 0.35  |
| 36.00 | 10392.00 | 90.20 | 91.30 | 63.00 | 9833.97 | 736.17  | 92.78  | 735.75  | 1.24  |
| 37.00 | 10456.00 | 88.90 | 90.20 | 64.00 | 9834.47 | 800.16  | 91.94  | 799.74  | 2.66  |
| 38.00 | 10519.00 | 88.00 | 90.90 | 63.00 | 9836.18 | 863.13  | 91.34  | 862.71  | 1.81  |
| 39.00 | 10582.00 | 88.50 | 91.30 | 63.00 | 9838.10 | 926.08  | 90.13  | 925.67  | 1.02  |
| 40.00 | 10645.00 | 87.70 | 91.10 | 63.00 | 9840.19 | 989.03  | 88.81  | 988.62  | 1.31  |
| 41.00 | 10709.00 | 87.70 | 91.50 | 64.00 | 9842.76 | 1052.95 | 87.36  | 1052.55 | 0.62  |
| 42.00 | 10772.00 | 88.20 | 91.70 | 63.00 | 9845.01 | 1115.88 | 85.60  | 1115.49 | 0.85  |
| 43.00 | 10836.00 | 89.20 | 91.50 | 64.00 | 9846.46 | 1179.83 | 83.81  | 1179.44 | 1.59  |
| 44.00 | 10899.00 | 89.20 | 92.00 | 63.00 | 9847.34 | 1242.78 | 81.89  | 1242.41 | 0.79  |
| 45.00 | 10962.00 | 88.20 | 91.10 | 63.00 | 9848.77 | 1305.73 | 80.19  | 1305.37 | 2.14  |
| 46.00 | 11025.00 | 88.50 | 91.30 | 63.00 | 9850.59 | 1368.68 | 78.87  | 1368.33 | 0.57  |
| 47.00 | 11089.00 | 89.30 | 90.90 | 64.00 | 9851.82 | 1432.65 | 77.64  | 1432.30 | 1.40  |
| 48.00 | 11152.00 | 88.60 | 91.70 | 63.00 | 9852.97 | 1495.62 | 76.21  | 1495.27 | 1.69  |
| 49.00 | 11215.00 | 88.70 | 91.80 | 63.00 | 9854.45 | 1558.56 | 74.29  | 1558.23 | 0.22  |
| 50.00 | 11279.00 | 89.20 | 91.80 | 64.00 | 9855.63 | 1622.51 | 72.28  | 1622.19 | 0.78  |
| 51.00 | 11342.00 | 89.60 | 91.70 | 63.00 | 9856.29 | 1685.47 | 70.35  | 1685.15 | 0.65  |
| 52.00 | 11406.00 | 89.60 | 90.60 | 64.00 | 9856.73 | 1749.44 | 69.07  | 1749.14 | 1.72  |
| 53.00 | 11470.00 | 90.40 | 90.10 | 64.00 | 9856.73 | 1813.44 | 68.68  | 1813.14 | 1.47  |
| 54.00 | 11532.00 | 89.10 | 90.20 | 62.00 | 9857.00 | 1875.44 | 68.51  | 1875.13 | 2.10  |
| 55.00 | 11595.00 | 89.30 | 90.90 | 63.00 | 9857.88 | 1938.42 | 67.91  | 1938.12 | 1.16  |
| 56.00 | 11658.00 | 90.00 | 90.80 | 63.00 | 9858.27 | 2001.41 | 66.98  | 2001.12 | 1.12  |
| 57.00 | 11721.00 | 88.40 | 90.60 | 63.00 | 9859.15 | 2064.39 | 66.21  | 2064.10 | 2.56  |
| 58.00 | 11785.00 | 88.70 | 90.60 | 64.00 | 9860.77 | 2128.36 | 65.54  | 2128.08 | 0.47  |
| 59.00 | 11848.00 | 87.60 | 90.10 | 63.00 | 9862.80 | 2191.33 | 65.15  | 2191.04 | 1.92  |

|       |          |       |       |       |         |         |       |         |      |
|-------|----------|-------|-------|-------|---------|---------|-------|---------|------|
| 60.00 | 11912.00 | 88.40 | 89.70 | 64.00 | 9865.03 | 2255.29 | 65.26 | 2255.00 | 1.40 |
| 61.00 | 11975.00 | 89.10 | 89.70 | 63.00 | 9866.41 | 2318.27 | 65.59 | 2317.99 | 1.11 |
| 62.00 | 12038.00 | 89.30 | 89.90 | 63.00 | 9867.29 | 2381.26 | 65.81 | 2380.98 | 0.45 |
| 63.00 | 12101.00 | 90.20 | 89.40 | 63.00 | 9867.56 | 2444.26 | 66.20 | 2443.98 | 1.63 |
| 64.00 | 12164.00 | 89.50 | 90.10 | 63.00 | 9867.73 | 2507.26 | 66.47 | 2506.98 | 1.57 |
| 65.00 | 12227.00 | 90.30 | 90.10 | 63.00 | 9867.84 | 2570.26 | 66.36 | 2569.98 | 1.27 |
| 66.00 | 12291.00 | 88.70 | 89.70 | 64.00 | 9868.40 | 2634.25 | 66.47 | 2633.97 | 2.58 |
| 67.00 | 12354.00 | 89.10 | 90.10 | 63.00 | 9869.61 | 2697.24 | 66.58 | 2696.96 | 0.90 |
| 68.00 | 12417.00 | 88.20 | 89.20 | 63.00 | 9871.09 | 2760.22 | 66.97 | 2759.94 | 2.02 |
| 69.00 | 12480.00 | 88.50 | 89.40 | 63.00 | 9872.90 | 2823.20 | 67.74 | 2822.91 | 0.57 |
| 70.00 | 12543.00 | 90.00 | 89.40 | 63.00 | 9873.73 | 2886.19 | 68.40 | 2885.90 | 2.38 |
| 71.00 | 12607.00 | 88.90 | 89.40 | 64.00 | 9874.34 | 2950.18 | 69.07 | 2949.89 | 1.72 |
| 72.00 | 12670.00 | 87.80 | 90.60 | 63.00 | 9876.16 | 3013.15 | 69.07 | 3012.86 | 2.58 |
| 73.00 | 12734.00 | 88.00 | 91.10 | 64.00 | 9878.50 | 3077.10 | 68.12 | 3076.81 | 0.84 |
| 74.00 | 12797.00 | 88.50 | 91.10 | 63.00 | 9880.43 | 3140.05 | 66.91 | 3139.77 | 0.79 |
| 75.00 | 12861.00 | 89.40 | 91.10 | 64.00 | 9881.60 | 3204.02 | 65.68 | 3203.75 | 1.41 |
| 76.00 | 12924.00 | 90.60 | 90.80 | 63.00 | 9881.60 | 3267.01 | 64.64 | 3266.74 | 1.96 |
| 77.00 | 12988.00 | 89.10 | 91.30 | 64.00 | 9881.77 | 3330.99 | 63.46 | 3330.72 | 2.47 |
| 78.00 | 13051.00 | 89.10 | 91.80 | 63.00 | 9882.76 | 3393.95 | 61.76 | 3393.69 | 0.79 |
| 79.00 | 13115.00 | 90.00 | 92.20 | 64.00 | 9883.26 | 3457.89 | 59.53 | 3457.65 | 1.54 |
| 80.00 | 13178.00 | 88.60 | 91.30 | 63.00 | 9884.03 | 3520.85 | 57.60 | 3520.61 | 2.64 |
| 81.00 | 13242.00 | 88.60 | 90.80 | 64.00 | 9885.59 | 3584.81 | 56.43 | 3584.58 | 0.78 |
| 82.00 | 13305.00 | 89.20 | 90.60 | 63.00 | 9886.80 | 3647.79 | 55.66 | 3647.57 | 1.00 |
| 83.00 | 13368.00 | 88.60 | 90.90 | 63.00 | 9888.01 | 3710.77 | 54.84 | 3710.55 | 1.06 |
| 84.00 | 13432.00 | 88.50 | 91.50 | 64.00 | 9889.63 | 3774.73 | 53.50 | 3774.52 | 0.95 |
| 85.00 | 13495.00 | 88.90 | 91.50 | 63.00 | 9891.06 | 3837.68 | 51.85 | 3837.48 | 0.63 |
| 86.00 | 13559.00 | 89.30 | 91.70 | 64.00 | 9892.07 | 3901.64 | 50.06 | 3901.45 | 0.70 |
| 87.00 | 13623.00 | 88.20 | 91.30 | 64.00 | 9893.46 | 3965.59 | 48.39 | 3965.41 | 1.83 |
| 88.00 | 13686.00 | 88.30 | 90.90 | 63.00 | 9895.39 | 4028.54 | 47.18 | 4028.37 | 0.65 |
| 89.00 | 13750.00 | 89.10 | 90.40 | 64.00 | 9896.84 | 4092.52 | 46.45 | 4092.34 | 1.47 |
| 90.00 | 13813.00 | 89.50 | 90.10 | 63.00 | 9897.61 | 4155.51 | 46.18 | 4155.34 | 0.79 |
| 88.00 | 13877.00 | 88.10 | 89.90 | 64.00 | 9898.95 | 4219.49 | 46.18 | 4219.32 | 2.21 |
| 88.00 | 13940.00 | 88.80 | 89.20 | 63.00 | 9900.65 | 4282.47 | 46.67 | 4282.30 | 1.57 |
| 88.00 | 14003.00 | 88.20 | 89.90 | 63.00 | 9902.30 | 4345.45 | 47.17 | 4345.27 | 1.46 |

|        |          |       |       |       |         |         |       |         |      |
|--------|----------|-------|-------|-------|---------|---------|-------|---------|------|
| 94.00  | 14067.00 | 89.00 | 89.90 | 64.00 | 9903.86 | 4409.43 | 47.28 | 4409.25 | 1.25 |
| 95.00  | 14131.00 | 89.50 | 89.70 | 64.00 | 9904.70 | 4473.42 | 47.50 | 4473.25 | 0.84 |
| 96.00  | 14194.00 | 90.50 | 89.20 | 63.00 | 9904.70 | 4536.42 | 48.11 | 4536.24 | 1.77 |
| 97.00  | 14258.00 | 88.90 | 89.50 | 64.00 | 9905.04 | 4600.42 | 48.83 | 4600.24 | 2.54 |
| 98.00  | 14322.00 | 88.90 | 89.50 | 64.00 | 9906.27 | 4664.40 | 49.39 | 4664.22 | 0.00 |
| 99.00  | 14385.00 | 89.20 | 89.40 | 63.00 | 9907.31 | 4727.39 | 50.00 | 4727.21 | 0.50 |
| 100.00 | 14425.00 | 89.10 | 89.20 | 40.00 | 9907.90 | 4767.39 | 50.48 | 4767.20 | 0.56 |
| Bit    | 14475.00 | 89.10 | 89.20 | 50.00 | 9908.70 | 4817.38 | 51.18 | 4817.19 | 0.00 |