

30-005-64316

Duncan State Com 1H, Plan 1

JUL 30 2018

|                                                                                                    |                             |                                                    |
|----------------------------------------------------------------------------------------------------|-----------------------------|----------------------------------------------------|
| <b>Operator</b> Mack Energy Corp                                                                   | <b>Units</b> feet, %100ft   | 11:30 Monday, July 30, 2018 Page 1 of 5            |
| <b>Field</b> Round Tank                                                                            | <b>County</b> Chaves        | <b>Vertical Section Azimuth</b> RECEIVED           |
| <b>Well Name</b> Duncan State Com 1H                                                               | <b>State</b> New Mexico     | <b>Survey Calculation Method</b> Minimum Curvature |
| <b>Plan 1</b>                                                                                      | <b>Country</b> USA          | <b>Database</b> Access                             |
| <b>Location</b> SL: 765 FNI & 355 FWL Sec 36-T15S-R28E BHL: 1310<br>FSL & 355 FWL Sec 24-T15S-R28E | <b>Map Zone</b> UTM         | <b>Lat Long Ref</b>                                |
| <b>Site</b>                                                                                        | <b>Surface X</b> 1918716.1  | <b>Surface Long</b>                                |
| <b>Slot Name</b>                                                                                   | <b>Surface Y</b> 11971646.4 | <b>Surface Lat</b>                                 |
| <b>Well Number</b>                                                                                 | <b>Surface Z</b> 3593.6     | <b>Global Z Ref</b> Mean Sea Level                 |
| <b>Project</b>                                                                                     | <b>Ground Level</b> 3576.1  | <b>Local North Ref</b> Grid                        |

DIRECTIONAL WELL PLAN

| MD*                                   | INC*  | AZI*  | TVD*    | N*     | E*    | DLS*  | V. S.* | MapE*      | MapN*       | SysTVD* |
|---------------------------------------|-------|-------|---------|--------|-------|-------|--------|------------|-------------|---------|
| *** TIE (at MD = 2106.00)             |       |       |         |        |       |       |        |            |             |         |
| 2106.00                               | 0.00  | 0.0   | 2106.00 | 0.00   | 0.00  |       | 0.00   | 1918716.10 | 11971646.40 | 1487.60 |
| 2150.00                               | 0.00  | 0.0   | 2150.00 | 0.00   | 0.00  | 0.00  | 0.00   | 1918716.10 | 11971646.40 | 1443.60 |
| 2200.00                               | 0.00  | 0.0   | 2200.00 | 0.00   | 0.00  | 0.00  | 0.00   | 1918716.10 | 11971646.40 | 1393.60 |
| *** KOP 8 DEGREES (at MD = 2206.00)   |       |       |         |        |       |       |        |            |             |         |
| 2206.00                               | 0.00  | 0.0   | 2206.00 | 0.00   | 0.00  | 0.00  | 0.00   | 1918716.10 | 11971646.40 | 1387.60 |
| 2250.00                               | 3.52  | 359.7 | 2249.97 | 1.35   | -0.01 | 8.00  | 1.35   | 1918716.09 | 11971647.75 | 1343.63 |
| 2300.00                               | 7.52  | 359.7 | 2299.73 | 6.16   | -0.03 | 8.00  | 6.16   | 1918716.07 | 11971652.56 | 1293.87 |
| 2350.00                               | 11.52 | 359.7 | 2349.03 | 14.43  | -0.07 | 8.00  | 14.43  | 1918716.03 | 11971660.83 | 1244.57 |
| 2400.00                               | 15.52 | 359.7 | 2397.64 | 26.11  | -0.13 | 8.00  | 26.11  | 1918715.97 | 11971672.51 | 1195.96 |
| 2450.00                               | 19.52 | 359.7 | 2445.31 | 41.16  | -0.20 | 8.00  | 41.16  | 1918715.90 | 11971687.56 | 1148.29 |
| 2500.00                               | 23.52 | 359.7 | 2491.81 | 59.50  | -0.29 | 8.00  | 59.50  | 1918715.81 | 11971705.90 | 1101.79 |
| 2550.00                               | 27.52 | 359.7 | 2536.92 | 81.04  | -0.40 | 8.00  | 81.04  | 1918715.70 | 11971727.44 | 1056.68 |
| 2600.00                               | 31.52 | 359.7 | 2580.43 | 105.67 | -0.52 | 8.00  | 105.67 | 1918715.58 | 11971752.07 | 1013.17 |
| 2650.00                               | 35.52 | 359.7 | 2622.10 | 133.27 | -0.65 | 8.00  | 133.28 | 1918715.45 | 11971779.67 | 971.50  |
| 2700.00                               | 39.52 | 359.7 | 2661.75 | 163.72 | -0.80 | 8.00  | 163.72 | 1918715.30 | 11971810.12 | 931.85  |
| 2750.00                               | 43.52 | 359.7 | 2699.18 | 196.86 | -0.96 | 8.00  | 196.86 | 1918715.14 | 11971843.26 | 894.42  |
| 2800.00                               | 47.52 | 359.7 | 2734.20 | 232.52 | -1.14 | 8.00  | 232.53 | 1918714.96 | 11971878.92 | 859.40  |
| 2850.00                               | 51.52 | 359.7 | 2766.66 | 270.55 | -1.32 | 8.00  | 270.55 | 1918714.78 | 11971916.95 | 826.94  |
| *** 55 DEGREE TANG (at MD = 2893.50)  |       |       |         |        |       |       |        |            |             |         |
| 2893.50                               | 55.00 | 359.7 | 2792.67 | 305.40 | -1.49 | 8.00  | 305.40 | 1918714.61 | 11971951.80 | 800.93  |
| 2900.00                               | 55.00 | 359.7 | 2796.40 | 310.72 | -1.52 | 0.00  | 310.73 | 1918714.58 | 11971957.12 | 797.20  |
| 2950.00                               | 55.00 | 359.7 | 2825.08 | 351.68 | -1.72 | 0.00  | 351.69 | 1918714.38 | 11971998.08 | 768.52  |
| *** 12 DEGREE BUILD (at MD = 2993.50) |       |       |         |        |       |       |        |            |             |         |
| 2993.50                               | 55.00 | 359.7 | 2850.03 | 387.31 | -1.89 | 0.00  | 387.32 | 1918714.21 | 11972033.71 | 743.57  |
| 3000.00                               | 55.78 | 359.7 | 2853.72 | 392.66 | -1.92 | 12.00 | 392.67 | 1918714.18 | 11972039.06 | 739.88  |
| 3050.00                               | 61.78 | 359.7 | 2879.63 | 435.40 | -2.13 | 12.00 | 435.41 | 1918713.97 | 11972081.80 | 713.97  |
| 3100.00                               | 67.78 | 359.7 | 2900.92 | 480.62 | -2.35 | 12.00 | 480.62 | 1918713.75 | 11972127.02 | 692.68  |
| 3150.00                               | 73.78 | 359.7 | 2917.38 | 527.81 | -2.58 | 12.00 | 527.81 | 1918713.52 | 11972174.21 | 676.22  |
| 3200.00                               | 79.78 | 359.7 | 2928.81 | 576.46 | -2.82 | 12.00 | 576.47 | 1918713.28 | 11972222.86 | 664.80  |
| 3250.00                               | 85.78 | 359.7 | 2935.09 | 626.04 | -3.06 | 12.00 | 626.05 | 1918713.04 | 11972272.44 | 658.51  |
| *** LANDING POINT (at MD = 3289.33)   |       |       |         |        |       |       |        |            |             |         |
| 3289.33                               | 90.50 | 359.7 | 2936.36 | 665.34 | -3.25 | 12.00 | 665.35 | 1918712.85 | 11972311.74 | 657.24  |
| 3300.00                               | 90.50 | 359.7 | 2936.27 | 676.01 | -3.30 | 0.00  | 676.01 | 1918712.80 | 11972322.41 | 657.33  |
| 3350.00                               | 90.50 | 359.7 | 2935.83 | 726.00 | -3.55 | 0.00  | 726.01 | 1918712.55 | 11972372.40 | 657.77  |
| 3400.00                               | 90.50 | 359.7 | 2935.40 | 776.00 | -3.79 | 0.00  | 776.01 | 1918712.31 | 11972422.40 | 658.20  |
| 3450.00                               | 90.50 | 359.7 | 2934.96 | 826.00 | -4.04 | 0.00  | 826.01 | 1918712.06 | 11972472.40 | 658.64  |
| 3500.00                               | 90.50 | 359.7 | 2934.52 | 876.00 | -4.28 | 0.00  | 876.01 | 1918711.82 | 11972522.40 | 659.08  |
| 3550.00                               | 90.50 | 359.7 | 2934.09 | 925.99 | -4.53 | 0.00  | 926.00 | 1918711.57 | 11972572.39 | 659.51  |

# Duncan State Com 1H, Plan 1

|                                      |                            |                                                    |
|--------------------------------------|----------------------------|----------------------------------------------------|
| <b>Operator</b> Mack Energy Corp     | <b>Units</b> feet, 7/100ft | 11:30 Monday, July 30, 2018 Page 2 of 5            |
| <b>Field</b> Round Tank              | <b>County</b> Chaves       | <b>Vertical Section Azimuth</b> 359.72             |
| <b>Well Name</b> Duncan State Com 1H | <b>State</b> New Mexico    | <b>Survey Calculation Method</b> Minimum Curvature |
| <b>Plan</b> 1                        | <b>Country</b> USA         | <b>Database</b> Access                             |

|                                                                                                    |                             |                                    |
|----------------------------------------------------------------------------------------------------|-----------------------------|------------------------------------|
| <b>Location</b> SL: 765 FNI & 355 FWL Sec 36-T15S-R28E BHL: 1310<br>FSL & 355 FWL Sec 24-T15S-R28E | <b>Map Zone</b> UTM         | <b>Lat Long Ref</b>                |
| <b>Site</b>                                                                                        | <b>Surface X</b> 1918716.1  | <b>Surface Long</b>                |
| <b>Slot Name</b>                                                                                   | <b>Surface Y</b> 11971646.4 | <b>Surface Lat</b>                 |
| <b>Well Number</b>                                                                                 | <b>Surface Z</b> 3593.6     | <b>Global Z Ref</b> Mean Sea Level |
| <b>Project</b>                                                                                     | <b>Ground Level</b> 3576.1  | <b>Local North Ref</b> Grid        |

## DIRECTIONAL WELL PLAN

| MD*     | INC*  | AZI*  | TVD*    | N*      | E*     | DLS*   | V. S.*  | MapE*      | MapN*       | SysTVD* |
|---------|-------|-------|---------|---------|--------|--------|---------|------------|-------------|---------|
| ft      | deg   | deg   | ft      | ft      | ft     | %100ft | ft      | ft         | ft          | ft      |
| 3600.00 | 90.50 | 359.7 | 2933.65 | 975.99  | -4.77  | 0.00   | 976.00  | 1918711.33 | 11972622.39 | 659.95  |
| 3650.00 | 90.50 | 359.7 | 2933.22 | 1025.99 | -5.01  | 0.00   | 1026.00 | 1918711.09 | 11972672.39 | 660.38  |
| 3700.00 | 90.50 | 359.7 | 2932.78 | 1075.99 | -5.26  | 0.00   | 1076.00 | 1918710.84 | 11972722.39 | 660.82  |
| 3750.00 | 90.50 | 359.7 | 2932.34 | 1125.98 | -5.50  | 0.00   | 1126.00 | 1918710.60 | 11972772.38 | 661.26  |
| 3800.00 | 90.50 | 359.7 | 2931.91 | 1175.98 | -5.75  | 0.00   | 1176.00 | 1918710.35 | 11972822.38 | 661.69  |
| 3850.00 | 90.50 | 359.7 | 2931.47 | 1225.98 | -5.99  | 0.00   | 1225.99 | 1918710.11 | 11972872.38 | 662.13  |
| 3900.00 | 90.50 | 359.7 | 2931.03 | 1275.98 | -6.24  | 0.00   | 1275.99 | 1918709.86 | 11972922.38 | 662.57  |
| 3950.00 | 90.50 | 359.7 | 2930.60 | 1325.97 | -6.48  | 0.00   | 1325.99 | 1918709.62 | 11972972.37 | 663.00  |
| 4000.00 | 90.50 | 359.7 | 2930.16 | 1375.97 | -6.72  | 0.00   | 1375.99 | 1918709.38 | 11973022.37 | 663.44  |
| 4050.00 | 90.50 | 359.7 | 2929.72 | 1425.97 | -6.97  | 0.00   | 1425.99 | 1918709.13 | 11973072.37 | 663.88  |
| 4100.00 | 90.50 | 359.7 | 2929.29 | 1475.97 | -7.21  | 0.00   | 1475.98 | 1918708.89 | 11973122.37 | 664.31  |
| 4150.00 | 90.50 | 359.7 | 2928.85 | 1525.96 | -7.46  | 0.00   | 1525.98 | 1918708.64 | 11973172.36 | 664.75  |
| 4200.00 | 90.50 | 359.7 | 2928.42 | 1575.96 | -7.70  | 0.00   | 1575.98 | 1918708.40 | 11973222.36 | 665.18  |
| 4250.00 | 90.50 | 359.7 | 2927.98 | 1625.96 | -7.95  | 0.00   | 1625.98 | 1918708.15 | 11973272.36 | 665.62  |
| 4300.00 | 90.50 | 359.7 | 2927.54 | 1675.96 | -8.19  | 0.00   | 1675.98 | 1918707.91 | 11973322.36 | 666.06  |
| 4350.00 | 90.50 | 359.7 | 2927.11 | 1725.95 | -8.43  | 0.00   | 1725.97 | 1918707.67 | 11973372.35 | 666.49  |
| 4400.00 | 90.50 | 359.7 | 2926.67 | 1775.95 | -8.68  | 0.00   | 1775.97 | 1918707.42 | 11973422.35 | 666.93  |
| 4450.00 | 90.50 | 359.7 | 2926.23 | 1825.95 | -8.92  | 0.00   | 1825.97 | 1918707.18 | 11973472.35 | 667.37  |
| 4500.00 | 90.50 | 359.7 | 2925.80 | 1875.95 | -9.17  | 0.00   | 1875.97 | 1918706.93 | 11973522.35 | 667.80  |
| 4550.00 | 90.50 | 359.7 | 2925.36 | 1925.94 | -9.41  | 0.00   | 1925.97 | 1918706.69 | 11973572.34 | 668.24  |
| 4600.00 | 90.50 | 359.7 | 2924.92 | 1975.94 | -9.66  | 0.00   | 1975.96 | 1918706.44 | 11973622.34 | 668.68  |
| 4650.00 | 90.50 | 359.7 | 2924.49 | 2025.94 | -9.90  | 0.00   | 2025.96 | 1918706.20 | 11973672.34 | 669.11  |
| 4700.00 | 90.50 | 359.7 | 2924.05 | 2075.94 | -10.15 | 0.00   | 2075.96 | 1918705.96 | 11973722.34 | 669.55  |
| 4750.00 | 90.50 | 359.7 | 2923.62 | 2125.93 | -10.39 | 0.00   | 2125.96 | 1918705.71 | 11973772.33 | 669.98  |
| 4800.00 | 90.50 | 359.7 | 2923.18 | 2175.93 | -10.63 | 0.00   | 2175.96 | 1918705.47 | 11973822.33 | 670.42  |
| 4850.00 | 90.50 | 359.7 | 2922.74 | 2225.93 | -10.88 | 0.00   | 2225.96 | 1918705.22 | 11973872.33 | 670.86  |
| 4900.00 | 90.50 | 359.7 | 2922.31 | 2275.93 | -11.12 | 0.00   | 2275.95 | 1918704.98 | 11973922.33 | 671.29  |
| 4950.00 | 90.50 | 359.7 | 2921.87 | 2325.92 | -11.37 | 0.00   | 2325.95 | 1918704.73 | 11973972.32 | 671.73  |
| 5000.00 | 90.50 | 359.7 | 2921.43 | 2375.92 | -11.61 | 0.00   | 2375.95 | 1918704.49 | 11974022.32 | 672.17  |
| 5050.00 | 90.50 | 359.7 | 2921.00 | 2425.92 | -11.86 | 0.00   | 2425.95 | 1918704.24 | 11974072.32 | 672.60  |
| 5100.00 | 90.50 | 359.7 | 2920.56 | 2475.92 | -12.10 | 0.00   | 2475.95 | 1918704.00 | 11974122.32 | 673.04  |
| 5150.00 | 90.50 | 359.7 | 2920.13 | 2525.91 | -12.34 | 0.00   | 2525.94 | 1918703.76 | 11974172.31 | 673.47  |
| 5200.00 | 90.50 | 359.7 | 2919.69 | 2575.91 | -12.59 | 0.00   | 2575.94 | 1918703.51 | 11974222.31 | 673.91  |
| 5250.00 | 90.50 | 359.7 | 2919.25 | 2625.91 | -12.83 | 0.00   | 2625.94 | 1918703.27 | 11974272.31 | 674.35  |
| 5300.00 | 90.50 | 359.7 | 2918.82 | 2675.91 | -13.08 | 0.00   | 2675.94 | 1918703.02 | 11974322.31 | 674.78  |
| 5350.00 | 90.50 | 359.7 | 2918.38 | 2725.90 | -13.32 | 0.00   | 2725.94 | 1918702.78 | 11974372.30 | 675.22  |
| 5400.00 | 90.50 | 359.7 | 2917.94 | 2775.90 | -13.57 | 0.00   | 2775.93 | 1918702.53 | 11974422.30 | 675.66  |

# Duncan State Com 1H, Plan 1

|                    |                                                                                 |                   |              |                                         |                   |
|--------------------|---------------------------------------------------------------------------------|-------------------|--------------|-----------------------------------------|-------------------|
| <b>Operator</b>    | Mack Energy Corp                                                                | <b>Units</b>      | feet, %100ft | 11:30 Monday, July 30, 2018 Page 3 of 5 |                   |
| <b>Field</b>       | Round Tank                                                                      | <b>County</b>     | Chaves       | <b>Vertical Section Azimuth</b>         | 359.72            |
| <b>Well Name</b>   | Duncan State Com 1H                                                             | <b>State</b>      | New Mexico   | <b>Survey Calculation Method</b>        | Minimum Curvature |
| <b>Plan</b>        | 1                                                                               | <b>Country</b>    | USA          | <b>Database</b>                         | Access            |
| <b>Location</b>    | SL: 765 FNI & 355 FWL Sec 36-T15S-R28E BHL: 1310 FSL & 355 FWL Sec 24-T15S-R28E |                   |              | <b>Map Zone</b>                         | UTM               |
| <b>Site</b>        |                                                                                 |                   |              | <b>Lat Long Ref</b>                     |                   |
| <b>Slot Name</b>   |                                                                                 | <b>UWI</b>        |              | <b>Surface X</b>                        | 1918716.1         |
| <b>Well Number</b> |                                                                                 | <b>API</b>        |              | <b>Surface Y</b>                        | 11971646.4        |
| <b>Project</b>     |                                                                                 | <b>MD/TVD Ref</b> | KB           | <b>Surface Z</b>                        | 3593.6            |
|                    |                                                                                 |                   |              | <b>Ground Level</b>                     | 3576.1            |
|                    |                                                                                 |                   |              | <b>Global Z Ref</b>                     | Mean Sea Level    |
|                    |                                                                                 |                   |              | <b>Local North Ref</b>                  | Grid              |

## DIRECTIONAL WELL PLAN

| MD*     | INC*  | AZI*  | TVD*    | N*      | E*     | DLS*   | V. S.*  | MapE*      | MapN*       | SysTVD* |
|---------|-------|-------|---------|---------|--------|--------|---------|------------|-------------|---------|
| ft      | deg   | deg   | ft      | ft      | ft     | %100ft | ft      | ft         | ft          | ft      |
| 5450.00 | 90.50 | 359.7 | 2917.51 | 2825.90 | -13.81 | 0.00   | 2825.93 | 1918702.29 | 11974472.30 | 676.09  |
| 5500.00 | 90.50 | 359.7 | 2917.07 | 2875.90 | -14.05 | 0.00   | 2875.93 | 1918702.05 | 11974522.30 | 676.53  |
| 5550.00 | 90.50 | 359.7 | 2916.63 | 2925.89 | -14.30 | 0.00   | 2925.93 | 1918701.80 | 11974572.29 | 676.97  |
| 5600.00 | 90.50 | 359.7 | 2916.20 | 2975.89 | -14.54 | 0.00   | 2975.93 | 1918701.56 | 11974622.29 | 677.40  |
| 5650.00 | 90.50 | 359.7 | 2915.76 | 3025.89 | -14.79 | 0.00   | 3025.92 | 1918701.31 | 11974672.29 | 677.84  |
| 5700.00 | 90.50 | 359.7 | 2915.33 | 3075.89 | -15.03 | 0.00   | 3075.92 | 1918701.07 | 11974722.29 | 678.27  |
| 5750.00 | 90.50 | 359.7 | 2914.89 | 3125.88 | -15.28 | 0.00   | 3125.92 | 1918700.82 | 11974772.28 | 678.71  |
| 5800.00 | 90.50 | 359.7 | 2914.45 | 3175.88 | -15.52 | 0.00   | 3175.92 | 1918700.58 | 11974822.28 | 679.15  |
| 5850.00 | 90.50 | 359.7 | 2914.02 | 3225.88 | -15.76 | 0.00   | 3225.92 | 1918700.34 | 11974872.28 | 679.58  |
| 5900.00 | 90.50 | 359.7 | 2913.58 | 3275.88 | -16.01 | 0.00   | 3275.92 | 1918700.09 | 11974922.28 | 680.02  |
| 5950.00 | 90.50 | 359.7 | 2913.14 | 3325.87 | -16.25 | 0.00   | 3325.91 | 1918699.85 | 11974972.27 | 680.46  |
| 6000.00 | 90.50 | 359.7 | 2912.71 | 3375.87 | -16.50 | 0.00   | 3375.91 | 1918699.60 | 11975022.27 | 680.89  |
| 6050.00 | 90.50 | 359.7 | 2912.27 | 3425.87 | -16.74 | 0.00   | 3425.91 | 1918699.36 | 11975072.27 | 681.33  |
| 6100.00 | 90.50 | 359.7 | 2911.84 | 3475.87 | -16.99 | 0.00   | 3475.91 | 1918699.11 | 11975122.27 | 681.76  |
| 6150.00 | 90.50 | 359.7 | 2911.40 | 3525.86 | -17.23 | 0.00   | 3525.91 | 1918698.87 | 11975172.26 | 682.20  |
| 6200.00 | 90.50 | 359.7 | 2910.96 | 3575.86 | -17.48 | 0.00   | 3575.90 | 1918698.62 | 11975222.26 | 682.64  |
| 6250.00 | 90.50 | 359.7 | 2910.53 | 3625.86 | -17.72 | 0.00   | 3625.90 | 1918698.38 | 11975272.26 | 683.07  |
| 6300.00 | 90.50 | 359.7 | 2910.09 | 3675.86 | -17.96 | 0.00   | 3675.90 | 1918698.14 | 11975322.26 | 683.51  |
| 6350.00 | 90.50 | 359.7 | 2909.65 | 3725.85 | -18.21 | 0.00   | 3725.90 | 1918697.89 | 11975372.25 | 683.95  |
| 6400.00 | 90.50 | 359.7 | 2909.22 | 3775.85 | -18.45 | 0.00   | 3775.90 | 1918697.65 | 11975422.25 | 684.38  |
| 6450.00 | 90.50 | 359.7 | 2908.78 | 3825.85 | -18.70 | 0.00   | 3825.89 | 1918697.40 | 11975472.25 | 684.82  |
| 6500.00 | 90.50 | 359.7 | 2908.34 | 3875.85 | -18.94 | 0.00   | 3875.89 | 1918697.16 | 11975522.25 | 685.26  |
| 6550.00 | 90.50 | 359.7 | 2907.91 | 3925.84 | -19.19 | 0.00   | 3925.89 | 1918696.91 | 11975572.24 | 685.69  |
| 6600.00 | 90.50 | 359.7 | 2907.47 | 3975.84 | -19.43 | 0.00   | 3975.89 | 1918696.67 | 11975622.24 | 686.13  |
| 6650.00 | 90.50 | 359.7 | 2907.04 | 4025.84 | -19.67 | 0.00   | 4025.89 | 1918696.43 | 11975672.24 | 686.56  |
| 6700.00 | 90.50 | 359.7 | 2906.60 | 4075.84 | -19.92 | 0.00   | 4075.88 | 1918696.18 | 11975722.24 | 687.00  |
| 6750.00 | 90.50 | 359.7 | 2906.16 | 4125.83 | -20.16 | 0.00   | 4125.88 | 1918695.94 | 11975772.23 | 687.44  |
| 6800.00 | 90.50 | 359.7 | 2905.73 | 4175.83 | -20.41 | 0.00   | 4175.88 | 1918695.69 | 11975822.23 | 687.87  |
| 6850.00 | 90.50 | 359.7 | 2905.29 | 4225.83 | -20.65 | 0.00   | 4225.88 | 1918695.45 | 11975872.23 | 688.31  |
| 6900.00 | 90.50 | 359.7 | 2904.85 | 4275.83 | -20.90 | 0.00   | 4275.88 | 1918695.20 | 11975922.23 | 688.75  |
| 6950.00 | 90.50 | 359.7 | 2904.42 | 4325.82 | -21.14 | 0.00   | 4325.88 | 1918694.96 | 11975972.22 | 689.18  |
| 7000.00 | 90.50 | 359.7 | 2903.98 | 4375.82 | -21.38 | 0.00   | 4375.87 | 1918694.72 | 11976022.22 | 689.62  |
| 7050.00 | 90.50 | 359.7 | 2903.54 | 4425.82 | -21.63 | 0.00   | 4425.87 | 1918694.47 | 11976072.22 | 690.06  |
| 7100.00 | 90.50 | 359.7 | 2903.11 | 4475.82 | -21.87 | 0.00   | 4475.87 | 1918694.23 | 11976122.22 | 690.49  |
| 7150.00 | 90.50 | 359.7 | 2902.67 | 4525.81 | -22.12 | 0.00   | 4525.87 | 1918693.98 | 11976172.21 | 690.93  |
| 7200.00 | 90.50 | 359.7 | 2902.24 | 4575.81 | -22.36 | 0.00   | 4575.87 | 1918693.74 | 11976222.21 | 691.36  |
| 7250.00 | 90.50 | 359.7 | 2901.80 | 4625.81 | -22.61 | 0.00   | 4625.86 | 1918693.49 | 11976272.21 | 691.80  |

# Duncan State Com 1H, Plan 1

|                    |                                                                                    |                   |              |                                  |                   |
|--------------------|------------------------------------------------------------------------------------|-------------------|--------------|----------------------------------|-------------------|
| <b>Operator</b>    | Mack Energy Corp                                                                   | <b>Units</b>      | feet, %100ft | 11:30 Monday, July 30, 2018      | Page 4 of 5       |
| <b>Field</b>       | Round Tank                                                                         | <b>County</b>     | Chaves       | <b>Vertical Section Azimuth</b>  | 359.72            |
| <b>Well Name</b>   | Duncan State Com 1H                                                                | <b>State</b>      | New Mexico   | <b>Survey Calculation Method</b> | Minimum Curvature |
| <b>Plan</b>        | 1                                                                                  | <b>Country</b>    | USA          | <b>Database</b>                  | Access            |
| <b>Location</b>    | SL: 765 FNI & 355 FWL Sec 36-T15S-R28E BHL: 1310<br>FSL & 355 FWL Sec 24-T15S-R28E |                   |              | <b>Map Zone</b>                  | UTM               |
| <b>Site</b>        |                                                                                    |                   |              | <b>Lat Long Ref</b>              |                   |
| <b>Slot Name</b>   |                                                                                    | <b>UWI</b>        |              | <b>Surface X</b>                 | 1918716.1         |
| <b>Well Number</b> |                                                                                    | <b>API</b>        |              | <b>Surface Y</b>                 | 11971646.4        |
| <b>Project</b>     |                                                                                    | <b>MD/TVD Ref</b> | KB           | <b>Surface Z</b>                 | 3593.6            |
|                    |                                                                                    |                   |              | <b>Ground Level</b>              | 3576.1            |
|                    |                                                                                    |                   |              | <b>Global Z Ref</b>              | Mean Sea Level    |
|                    |                                                                                    |                   |              | <b>Local North Ref</b>           | Grid              |

## DIRECTIONAL WELL PLAN

| MD*     | INC*  | AZI*  | TVD*    | N*      | E*     | DLS*   | V. S.*  | MapE*      | MapN*       | SysTVD* |
|---------|-------|-------|---------|---------|--------|--------|---------|------------|-------------|---------|
| ft      | deg   | deg   | ft      | ft      | ft     | %100ft | ft      | ft         | ft          | ft      |
| 7300.00 | 90.50 | 359.7 | 2901.36 | 4675.81 | -22.85 | 0.00   | 4675.86 | 1918693.25 | 11976322.21 | 692.24  |
| 7350.00 | 90.50 | 359.7 | 2900.93 | 4725.80 | -23.09 | 0.00   | 4725.86 | 1918693.01 | 11976372.20 | 692.67  |
|         |       |       |         |         |        |        |         |            |             |         |
| 7400.00 | 90.50 | 359.7 | 2900.49 | 4775.80 | -23.34 | 0.00   | 4775.86 | 1918692.76 | 11976422.20 | 693.11  |
| 7450.00 | 90.50 | 359.7 | 2900.05 | 4825.80 | -23.58 | 0.00   | 4825.86 | 1918692.52 | 11976472.20 | 693.55  |
| 7500.00 | 90.50 | 359.7 | 2899.62 | 4875.80 | -23.83 | 0.00   | 4875.85 | 1918692.27 | 11976522.20 | 693.98  |
| 7550.00 | 90.50 | 359.7 | 2899.18 | 4925.79 | -24.07 | 0.00   | 4925.85 | 1918692.03 | 11976572.19 | 694.42  |
| 7600.00 | 90.50 | 359.7 | 2898.75 | 4975.79 | -24.32 | 0.00   | 4975.85 | 1918691.78 | 11976622.19 | 694.85  |
|         |       |       |         |         |        |        |         |            |             |         |
| 7650.00 | 90.50 | 359.7 | 2898.31 | 5025.79 | -24.56 | 0.00   | 5025.85 | 1918691.54 | 11976672.19 | 695.29  |
| 7700.00 | 90.50 | 359.7 | 2897.87 | 5075.79 | -24.81 | 0.00   | 5075.85 | 1918691.29 | 11976722.19 | 695.73  |
| 7750.00 | 90.50 | 359.7 | 2897.44 | 5125.78 | -25.05 | 0.00   | 5125.84 | 1918691.05 | 11976772.18 | 696.16  |
| 7800.00 | 90.50 | 359.7 | 2897.00 | 5175.78 | -25.29 | 0.00   | 5175.84 | 1918690.81 | 11976822.18 | 696.60  |
| 7850.00 | 90.50 | 359.7 | 2896.56 | 5225.78 | -25.54 | 0.00   | 5225.84 | 1918690.56 | 11976872.18 | 697.04  |
|         |       |       |         |         |        |        |         |            |             |         |
| 7900.00 | 90.50 | 359.7 | 2896.13 | 5275.78 | -25.78 | 0.00   | 5275.84 | 1918690.32 | 11976922.18 | 697.47  |
| 7950.00 | 90.50 | 359.7 | 2895.69 | 5325.77 | -26.03 | 0.00   | 5325.84 | 1918690.07 | 11976972.17 | 697.91  |
| 8000.00 | 90.50 | 359.7 | 2895.25 | 5375.77 | -26.27 | 0.00   | 5375.84 | 1918689.83 | 11977022.17 | 698.35  |
| 8050.00 | 90.50 | 359.7 | 2894.82 | 5425.77 | -26.52 | 0.00   | 5425.83 | 1918689.58 | 11977072.17 | 698.78  |
| 8100.00 | 90.50 | 359.7 | 2894.38 | 5475.77 | -26.76 | 0.00   | 5475.83 | 1918689.34 | 11977122.17 | 699.22  |
|         |       |       |         |         |        |        |         |            |             |         |
| 8150.00 | 90.50 | 359.7 | 2893.95 | 5525.76 | -27.00 | 0.00   | 5525.83 | 1918689.10 | 11977172.16 | 699.65  |
| 8200.00 | 90.50 | 359.7 | 2893.51 | 5575.76 | -27.25 | 0.00   | 5575.83 | 1918688.85 | 11977222.16 | 700.09  |
| 8250.00 | 90.50 | 359.7 | 2893.07 | 5625.76 | -27.49 | 0.00   | 5625.83 | 1918688.61 | 11977272.16 | 700.53  |
| 8300.00 | 90.50 | 359.7 | 2892.64 | 5675.76 | -27.74 | 0.00   | 5675.82 | 1918688.36 | 11977322.16 | 700.96  |
| 8350.00 | 90.50 | 359.7 | 2892.20 | 5725.75 | -27.98 | 0.00   | 5725.82 | 1918688.12 | 11977372.15 | 701.40  |
|         |       |       |         |         |        |        |         |            |             |         |
| 8400.00 | 90.50 | 359.7 | 2891.76 | 5775.75 | -28.23 | 0.00   | 5775.82 | 1918687.87 | 11977422.15 | 701.84  |
| 8450.00 | 90.50 | 359.7 | 2891.33 | 5825.75 | -28.47 | 0.00   | 5825.82 | 1918687.63 | 11977472.15 | 702.27  |
| 8500.00 | 90.50 | 359.7 | 2890.89 | 5875.75 | -28.71 | 0.00   | 5875.82 | 1918687.39 | 11977522.15 | 702.71  |
| 8550.00 | 90.50 | 359.7 | 2890.46 | 5925.74 | -28.96 | 0.00   | 5925.81 | 1918687.14 | 11977572.14 | 703.15  |
| 8600.00 | 90.50 | 359.7 | 2890.02 | 5975.74 | -29.20 | 0.00   | 5975.81 | 1918686.90 | 11977622.14 | 703.58  |
|         |       |       |         |         |        |        |         |            |             |         |
| 8650.00 | 90.50 | 359.7 | 2889.58 | 6025.74 | -29.45 | 0.00   | 6025.81 | 1918686.65 | 11977672.14 | 704.02  |
| 8700.00 | 90.50 | 359.7 | 2889.15 | 6075.74 | -29.69 | 0.00   | 6075.81 | 1918686.41 | 11977722.14 | 704.45  |
| 8750.00 | 90.50 | 359.7 | 2888.71 | 6125.73 | -29.94 | 0.00   | 6125.81 | 1918686.16 | 11977772.13 | 704.89  |
| 8800.00 | 90.50 | 359.7 | 2888.27 | 6175.73 | -30.18 | 0.00   | 6175.80 | 1918685.92 | 11977822.13 | 705.33  |
| 8850.00 | 90.50 | 359.7 | 2887.84 | 6225.73 | -30.42 | 0.00   | 6225.80 | 1918685.68 | 11977872.13 | 705.76  |
|         |       |       |         |         |        |        |         |            |             |         |
| 8900.00 | 90.50 | 359.7 | 2887.40 | 6275.73 | -30.67 | 0.00   | 6275.80 | 1918685.43 | 11977922.13 | 706.20  |
| 8950.00 | 90.50 | 359.7 | 2886.96 | 6325.72 | -30.91 | 0.00   | 6325.80 | 1918685.19 | 11977972.12 | 706.64  |
| 9000.00 | 90.50 | 359.7 | 2886.53 | 6375.72 | -31.16 | 0.00   | 6375.80 | 1918684.94 | 11978022.12 | 707.07  |
| 9050.00 | 90.50 | 359.7 | 2886.09 | 6425.72 | -31.40 | 0.00   | 6425.80 | 1918684.70 | 11978072.12 | 707.51  |
| 9100.00 | 90.50 | 359.7 | 2885.66 | 6475.72 | -31.65 | 0.00   | 6475.79 | 1918684.45 | 11978122.12 | 707.94  |

# Duncan State Com 1H, Plan 1

|                                      |                           |                                                    |
|--------------------------------------|---------------------------|----------------------------------------------------|
| <b>Operator</b> Mack Energy Corp     | <b>Units</b> feet, %100ft | 11:30 Monday, July 30, 2018 Page 5 of 5            |
| <b>Field</b> Round Tank              | <b>County</b> Chaves      | <b>Vertical Section Azimuth</b> 359.72             |
| <b>Well Name</b> Duncan State Com 1H | <b>State</b> New Mexico   | <b>Survey Calculation Method</b> Minimum Curvature |
| <b>Plan</b> 1                        | <b>Country</b> USA        | <b>Database</b> Access                             |

|                                                                                                    |                             |                                    |
|----------------------------------------------------------------------------------------------------|-----------------------------|------------------------------------|
| <b>Location</b> SL: 765 FNI & 355 FWL Sec 36-T15S-R28E BHL: 1310<br>FSL & 355 FWL Sec 24-T15S-R28E | <b>Map Zone</b> UTM         | <b>Lat Long Ref</b>                |
| <b>Site</b>                                                                                        | <b>Surface X</b> 1918716.1  | <b>Surface Long</b>                |
| <b>Slot Name</b>                                                                                   | <b>Surface Y</b> 11971646.4 | <b>Surface Lat</b>                 |
| <b>Well Number</b>                                                                                 | <b>Surface Z</b> 3593.6     | <b>Global Z Ref</b> Mean Sea Level |
| <b>Project</b>                                                                                     | <b>Ground Level</b> 3576.1  | <b>Local North Ref</b> Grid        |
| <b>UWI</b>                                                                                         |                             |                                    |
| <b>API</b>                                                                                         |                             |                                    |
| <b>MD/TVD Ref</b> KB                                                                               |                             |                                    |

## DIRECTIONAL WELL PLAN

| MD*                      | INC*  | AZI*  | TVD*    | N*      | E*     | DLS*   | V. S.*  | MapE*      | MapN*       | SysTVD* |
|--------------------------|-------|-------|---------|---------|--------|--------|---------|------------|-------------|---------|
| ft                       | deg   | deg   | ft      | ft      | ft     | %100ft | ft      | ft         | ft          | ft      |
| 9150.00                  | 90.50 | 359.7 | 2885.22 | 6525.71 | -31.89 | 0.00   | 6525.79 | 1918684.21 | 11978172.11 | 708.38  |
| 9200.00                  | 90.50 | 359.7 | 2884.78 | 6575.71 | -32.14 | 0.00   | 6575.79 | 1918683.96 | 11978222.11 | 708.82  |
| 9250.00                  | 90.50 | 359.7 | 2884.35 | 6625.71 | -32.38 | 0.00   | 6625.79 | 1918683.72 | 11978272.11 | 709.25  |
| 9300.00                  | 90.50 | 359.7 | 2883.91 | 6675.71 | -32.62 | 0.00   | 6675.79 | 1918683.48 | 11978322.11 | 709.69  |
| 9350.00                  | 90.50 | 359.7 | 2883.47 | 6725.70 | -32.87 | 0.00   | 6725.78 | 1918683.23 | 11978372.10 | 710.13  |
| 9400.00                  | 90.50 | 359.7 | 2883.04 | 6775.70 | -33.11 | 0.00   | 6775.78 | 1918682.99 | 11978422.10 | 710.56  |
| 9450.00                  | 90.50 | 359.7 | 2882.60 | 6825.70 | -33.36 | 0.00   | 6825.78 | 1918682.74 | 11978472.10 | 711.00  |
| 9500.00                  | 90.50 | 359.7 | 2882.16 | 6875.70 | -33.60 | 0.00   | 6875.78 | 1918682.50 | 11978522.10 | 711.44  |
| 9550.00                  | 90.50 | 359.7 | 2881.73 | 6925.69 | -33.85 | 0.00   | 6925.78 | 1918682.25 | 11978572.09 | 711.87  |
| 9600.00                  | 90.50 | 359.7 | 2881.29 | 6975.69 | -34.09 | 0.00   | 6975.77 | 1918682.01 | 11978622.09 | 712.31  |
| 9650.00                  | 90.50 | 359.7 | 2880.86 | 7025.69 | -34.33 | 0.00   | 7025.77 | 1918681.77 | 11978672.09 | 712.74  |
| 9700.00                  | 90.50 | 359.7 | 2880.42 | 7075.69 | -34.58 | 0.00   | 7075.77 | 1918681.52 | 11978722.09 | 713.18  |
| 9750.00                  | 90.50 | 359.7 | 2879.98 | 7125.68 | -34.82 | 0.00   | 7125.77 | 1918681.28 | 11978772.08 | 713.62  |
| 9800.00                  | 90.50 | 359.7 | 2879.55 | 7175.68 | -35.07 | 0.00   | 7175.77 | 1918681.03 | 11978822.08 | 714.05  |
| 9850.00                  | 90.50 | 359.7 | 2879.11 | 7225.68 | -35.31 | 0.00   | 7225.76 | 1918680.79 | 11978872.08 | 714.49  |
| 9900.00                  | 90.50 | 359.7 | 2878.67 | 7275.68 | -35.56 | 0.00   | 7275.76 | 1918680.54 | 11978922.08 | 714.93  |
| 9950.00                  | 90.50 | 359.7 | 2878.24 | 7325.67 | -35.80 | 0.00   | 7325.76 | 1918680.30 | 11978972.07 | 715.36  |
| *** TD (at MD = 9984.33) |       |       |         |         |        |        |         |            |             |         |
| 9984.33                  | 90.50 | 359.7 | 2877.94 | 7360.01 | -35.97 | 0.00   | 7360.09 | 1918680.13 | 11979006.41 | 715.66  |