

## Results of Directional Survey

|             |                     |           |                                    |
|-------------|---------------------|-----------|------------------------------------|
| API number: | <b>30-025-41072</b> |           |                                    |
| OGRID:      |                     | Operator: | <b>MURCHISON OIL &amp; GAS INC</b> |
|             |                     | Property: | <b>JACKSON UNIT #14H</b>           |

|         |        |          |           |                |                |
|---------|--------|----------|-----------|----------------|----------------|
| surface | ULSTR: | <b>D</b> | <b>15</b> | <b>T 24S</b>   | <b>R 33E</b>   |
|         |        |          |           | <b>200 FNL</b> | <b>515 FWL</b> |

|              |           |                |            |                 |                |
|--------------|-----------|----------------|------------|-----------------|----------------|
| BH Loc       | ULSTR:    | <b>M</b>       | <b>15</b>  | <b>T 24S</b>    | <b>R 33E</b>   |
| <b>15805</b> | <b>MD</b> | <b>11187.0</b> | <b>TVD</b> | <b>288 FSL</b>  | <b>398 FWL</b> |
|              |           |                |            | <b>4992 FNL</b> |                |

|              |           |                |            |                |                |
|--------------|-----------|----------------|------------|----------------|----------------|
| Top Perf/OH  | ULSTR:    | <b>D</b>       | <b>15</b>  | <b>T 24S</b>   | <b>R 33E</b>   |
| <b>11370</b> | <b>MD</b> | <b>11244.4</b> | <b>TVD</b> | <b>532 FNL</b> | <b>405 FWL</b> |

|              |           |                |            |                 |                |
|--------------|-----------|----------------|------------|-----------------|----------------|
| Bot Perf/OH  | ULSTR:    | <b>M</b>       | <b>15</b>  | <b>T 24S</b>    | <b>R 33E</b>   |
| <b>15710</b> | <b>MD</b> | <b>11187.6</b> | <b>TVD</b> | <b>383 FSL</b>  | <b>400 FWL</b> |
|              |           |                |            | <b>4897 FNL</b> |                |

|              |              |          |         |          |
|--------------|--------------|----------|---------|----------|
|              | MD           | N/S      | E/W     | VD       |
|              | 11114        | -154.70  | -47.50  | 11070.1  |
| TOP PERFS/OH | <b>11370</b> | -332.25  | -110.26 | 11244.35 |
|              | 11145        | -176.20  | -55.10  | 11091.20 |
|              | 15623        | -4610.00 | -112.80 | 11188.40 |
| BOT PERFS/OH | <b>15710</b> | -4697.00 | -114.84 | 11187.57 |
|              | 15717        | -4704.00 | -115.00 | 11187.50 |

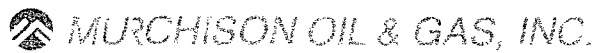
|              |              |          |         |          |
|--------------|--------------|----------|---------|----------|
| NEXT TO LAST | 15782        | -4769.00 | -116.30 | 11187.10 |
| LAST READING | 15805        | -4792.00 | -116.80 | 11187.00 |
| TD           | <b>15805</b> | -4792.00 | -116.80 | 11187.00 |

|                  |      |    |     |    |
|------------------|------|----|-----|----|
| Surface Location | 200  | FN | 515 | FW |
| Projected BHL    | 4992 | FN | 398 | FW |
| Location of      |      |    |     |    |
| Top Perfs/OH     | 532  | FN | 405 | FW |
| Bottom Perfs/OH  | 4897 | FN | 400 | FW |

### SUMMARY of Subsurface Locations

|                  |              |      |    |     |    |             |
|------------------|--------------|------|----|-----|----|-------------|
| Surface Location | D-15-24S-33E | 200  | FN | 515 | FW | Vert. Depth |
| Top Perfs/OH     | D-15-24S-33E | 532  | FN | 405 | FW | 11244.35    |
| Bottom Perfs/OH  | M-15-24S-33E | 4897 | FN | 400 | FW | 11187.57    |
| Projected TD     | M-15-24S-33E | 4992 | FN | 398 | FW | 11187.00    |

FEB 19 2014



## Murchison Oil and Gas

Jackson Unit Section 15

Jackson Unit 14H

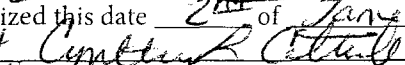
Survey: Jackson Unit 14H

## MOJO Standard Survey

06 December, 2013

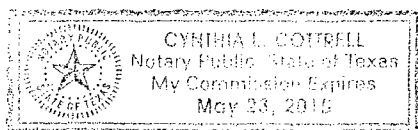
This survey is correct to the best of my knowledge and is supported  
by actual field  
data.

 (Signature)

Notarized this date 2nd of January,  
2014  Notary  
Signature County of Collin State of Texas



**MOJO**  
DIRECTIONAL CORPORATION



|                  |                         |                                     |                                        |
|------------------|-------------------------|-------------------------------------|----------------------------------------|
| <b>Company:</b>  | Murchison Oil and Gas   | <b>Local Co-ordinate Reference:</b> | Well Jackson Unit 14H                  |
| <b>Project:</b>  | Jackson Unit Section 15 | <b>TVD Reference:</b>               | WELL @ 3638.0usft (Original Well Elev) |
| <b>Site:</b>     | Jackson Unit 14H        | <b>MD Reference:</b>                | WELL @ 3638.0usft (Original Well Elev) |
| <b>Well:</b>     | Jackson Unit 14H        | <b>North Reference:</b>             | Grid                                   |
| <b>Wellbore:</b> | Jackson Unit 14H        | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Design:</b>   | Jackson Unit 14H        | <b>Database:</b>                    | EDM 5000.1 Single User Db              |

|                    |                           |                      |                             |
|--------------------|---------------------------|----------------------|-----------------------------|
| <b>Project:</b>    | Jackson Unit Section 15   |                      |                             |
| <b>Map System:</b> | US State Plane 1983       | <b>System Datum:</b> | Mean Sea Level              |
| <b>Geo Datum:</b>  | North American Datum 1983 |                      |                             |
| <b>Map Zone:</b>   | New Mexico Eastern Zone   |                      | Using geodetic scale factor |

|                              |                  |                     |                 |                          |                  |
|------------------------------|------------------|---------------------|-----------------|--------------------------|------------------|
| <b>Site:</b>                 | Jackson Unit 14H |                     |                 |                          |                  |
| <b>Site Position:</b>        |                  | <b>Northing:</b>    | 446,189.05 usft | <b>Latitude:</b>         | 32° 13' 27.578 N |
| <b>From:</b>                 | Lat/Long         | <b>Easting:</b>     | 778,299.61 usft | <b>Longitude:</b>        | 103° 34' 1.374 W |
| <b>Position Uncertainty:</b> | 0.0 usft         | <b>Slot Radius:</b> | 13-3/16 "       | <b>Grid Convergence:</b> | 0.41 °           |

|                             |                  |                            |                 |                      |                  |
|-----------------------------|------------------|----------------------------|-----------------|----------------------|------------------|
| <b>Well:</b>                | Jackson Unit 14H |                            |                 |                      |                  |
| <b>Well Position</b>        | +N-S 0.0 usft    | <b>Northing:</b>           | 446,189.05 usft | <b>Latitude:</b>     | 32° 13' 27.578 N |
|                             | +E-W 0.0 usft    | <b>Easting:</b>            | 778,299.61 usft | <b>Longitude:</b>    | 103° 34' 1.374 W |
| <b>Position Uncertainty</b> | 0.0 usft         | <b>Wellhead Elevation:</b> | usft            | <b>Ground Level:</b> | 3,616.0 usft     |

|                  |                  |
|------------------|------------------|
| <b>Wellbore:</b> | Jackson Unit 14H |
|------------------|------------------|

|                  |                   |                    |                    |                  |                       |
|------------------|-------------------|--------------------|--------------------|------------------|-----------------------|
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination</b> | <b>Dip Angle</b> | <b>Field Strength</b> |
|                  | IGRF2010          | 09/04/2013         | (°) 7.36           | (°) 60.14        | (nT) 48,434           |

|                     |                  |               |        |                      |     |
|---------------------|------------------|---------------|--------|----------------------|-----|
| <b>Design:</b>      | Jackson Unit 14H |               |        |                      |     |
| <b>Audit Notes:</b> |                  |               |        |                      |     |
| <b>Version:</b>     | 1.0              | <b>Phase:</b> | ACTUAL | <b>Tie On Depth:</b> | 0.0 |

|                          |                         |             |             |                  |
|--------------------------|-------------------------|-------------|-------------|------------------|
| <b>Vertical Section:</b> | <b>Depth From (TVD)</b> | <b>+N-S</b> | <b>+E-W</b> | <b>Direction</b> |
|                          | (usft)                  | (usft)      | (usft)      | (°)              |
|                          | 0.0                     | 0.0         | 0.0         | 181.33           |

|                       |             |                                     |                  |                    |
|-----------------------|-------------|-------------------------------------|------------------|--------------------|
| <b>Survey Program</b> | <b>Date</b> | 06/12/2013                          |                  |                    |
| <b>From</b>           | <b>To</b>   | <b>Survey (Wellbore)</b>            | <b>Tool Name</b> | <b>Description</b> |
| (usft)                | (usft)      |                                     |                  |                    |
| 100.0                 | 15,805.0    | Jackson Unit 14H (Jackson Unit 14H) | MWD              | MWD - Standard     |

|              |                         |                      |               |                 |               |                             |                  |                                        |                    |                   |  |  |
|--------------|-------------------------|----------------------|---------------|-----------------|---------------|-----------------------------|------------------|----------------------------------------|--------------------|-------------------|--|--|
| Company      | Murchison Oil and Gas   |                      |               |                 |               | Local Co-ordinate Reference |                  | Well Jackson Unit 14H                  |                    |                   |  |  |
| Project      | Jackson Unit Section 15 |                      |               |                 |               | TVD Reference               |                  | WELL @ 3638.0usft (Original Well Elev) |                    |                   |  |  |
| Site         | Jackson Unit 14H        |                      |               |                 |               | MD Reference                |                  | WELL @ 3638.0usft (Original Well Elev) |                    |                   |  |  |
| Well         | Jackson Unit 14H        |                      |               |                 |               | North Reference             |                  | Grid                                   |                    |                   |  |  |
| Wellbore     | Jackson Unit 14H        |                      |               |                 |               | Survey Calculation Method   |                  | Minimum Curvature                      |                    |                   |  |  |
| Design       | Jackson Unit 14H        |                      |               |                 |               | Database                    |                  | EDM 5000.1 Single User Db              |                    |                   |  |  |
| Survey       |                         |                      |               |                 |               |                             |                  |                                        |                    |                   |  |  |
| MD<br>(usft) | Inc<br>(°)              | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft)               | V. Sec<br>(usft) | DLeg<br>(°/100usft)                    | Northing<br>(usft) | Easting<br>(usft) |  |  |
| 0.0          | 0.00                    | 0.00                 | 0.0           | -3,638.0        | 0.0           | 0.0                         | 0.0              | 0.00                                   | 446,189.05         | 778,299.61        |  |  |
| 100.0        | 0.41                    | 320.50               | 100.0         | -3,538.0        | 0.3           | -0.2                        | -0.3             | 0.41                                   | 446,189.32         | 778,299.39        |  |  |
| 200.0        | 0.29                    | 234.47               | 200.0         | -3,438.0        | 0.4           | -0.7                        | -0.4             | 0.49                                   | 446,189.45         | 778,298.95        |  |  |
| 300.0        | 0.28                    | 222.61               | 300.0         | -3,338.0        | 0.1           | -1.0                        | -0.1             | 0.06                                   | 446,189.13         | 778,298.58        |  |  |
| 400.0        | 0.47                    | 229.39               | 400.0         | -3,238.0        | -0.4          | -1.5                        | 0.4              | 0.19                                   | 446,188.68         | 778,298.11        |  |  |
| 500.0        | 0.29                    | 233.42               | 500.0         | -3,138.0        | -0.8          | -2.0                        | 0.8              | 0.18                                   | 446,188.26         | 778,297.59        |  |  |
| 600.0        | 0.49                    | 259.78               | 600.0         | -3,038.0        | -1.0          | -2.6                        | 1.1              | 0.26                                   | 446,188.03         | 778,296.97        |  |  |
| 700.0        | 0.58                    | 288.84               | 700.0         | -2,938.0        | -0.9          | -3.5                        | 1.0              | 0.28                                   | 446,188.12         | 778,296.07        |  |  |
| 800.0        | 0.60                    | 292.72               | 800.0         | -2,838.0        | -0.6          | -4.5                        | 0.7              | 0.04                                   | 446,188.49         | 778,295.11        |  |  |
| 900.0        | 0.81                    | 296.31               | 900.0         | -2,738.0        | 0.0           | -5.6                        | 0.2              | 0.21                                   | 446,189.00         | 778,293.99        |  |  |
| 1,000.0      | 1.00                    | 295.34               | 1,000.0       | -2,638.0        | 0.6           | -7.0                        | -0.5             | 0.19                                   | 446,189.69         | 778,292.57        |  |  |
| 1,100.0      | 0.92                    | 271.70               | 1,099.9       | -2,538.1        | 1.0           | -8.6                        | -0.8             | 0.40                                   | 446,190.09         | 778,290.98        |  |  |
| 1,200.0      | 0.84                    | 261.48               | 1,199.9       | -2,438.1        | 1.0           | -10.2                       | -0.7             | 0.18                                   | 446,190.00         | 778,289.45        |  |  |
| 1,278.0      | 0.68                    | 274.99               | 1,277.9       | -2,360.1        | 0.9           | -11.2                       | -0.7             | 0.30                                   | 446,189.96         | 778,288.42        |  |  |
| Rustler      |                         |                      |               |                 |               |                             |                  |                                        |                    |                   |  |  |
| 1,300.0      | 0.65                    | 279.88               | 1,299.9       | -2,338.1        | 0.9           | -11.5                       | -0.7             | 0.30                                   | 446,189.99         | 778,288.16        |  |  |
| 1,302.0      | 0.65                    | 279.96               | 1,301.9       | -2,336.1        | 0.9           | -11.5                       | -0.7             | 0.17                                   | 446,190.00         | 778,288.14        |  |  |
| 13 3/8"      |                         |                      |               |                 |               |                             |                  |                                        |                    |                   |  |  |
| 1,400.0      | 0.49                    | 285.38               | 1,399.9       | -2,238.1        | 1.2           | -12.4                       | -0.9             | 0.17                                   | 446,190.20         | 778,287.19        |  |  |
| 1,500.0      | 0.75                    | 327.05               | 1,499.9       | -2,138.1        | 1.8           | -13.2                       | -1.5             | 0.50                                   | 446,190.86         | 778,286.43        |  |  |
| 1,600.0      | 0.68                    | 326.69               | 1,599.9       | -2,038.1        | 2.9           | -13.9                       | -2.5             | 0.07                                   | 446,191.91         | 778,285.74        |  |  |
| 1,700.0      | 0.59                    | 319.55               | 1,699.9       | -1,938.1        | 3.7           | -14.5                       | -3.4             | 0.12                                   | 446,192.80         | 778,285.08        |  |  |
| 1,800.0      | 0.58                    | 326.12               | 1,799.9       | -1,838.1        | 4.6           | -15.1                       | -4.2             | 0.07                                   | 446,193.61         | 778,284.47        |  |  |
| 1,900.0      | 0.60                    | 326.43               | 1,899.9       | -1,738.1        | 5.4           | -15.7                       | -5.1             | 0.02                                   | 446,194.47         | 778,283.90        |  |  |
| 2,000.0      | 0.53                    | 324.57               | 1,999.9       | -1,638.1        | 6.2           | -16.3                       | -5.9             | 0.07                                   | 446,195.28         | 778,283.34        |  |  |
| 2,100.0      | 0.58                    | 332.46               | 2,099.9       | -1,538.1        | 7.1           | -16.8                       | -6.7             | 0.09                                   | 446,196.10         | 778,282.84        |  |  |
| 2,200.0      | 0.79                    | 337.35               | 2,199.9       | -1,438.1        | 8.1           | -17.3                       | -7.7             | 0.22                                   | 446,197.19         | 778,282.34        |  |  |

|              |                         |                      |               |                 |               |               |                             |                   |                                        |                   |  |  |
|--------------|-------------------------|----------------------|---------------|-----------------|---------------|---------------|-----------------------------|-------------------|----------------------------------------|-------------------|--|--|
| Company      | Murchison Oil and Gas   |                      |               |                 |               |               | Local Co-ordinate Reference |                   | Well Jackson Unit 14H                  |                   |  |  |
| Project      | Jackson Unit Section 15 |                      |               |                 |               |               | TVD Reference               |                   | WELL @ 3638.0usft (Original Well Elev) |                   |  |  |
| Site         | Jackson Unit 14H        |                      |               |                 |               |               | MD Reference                |                   | WELL @ 3638.0usft (Original Well Elev) |                   |  |  |
| Well         | Jackson Unit 14H        |                      |               |                 |               |               | North Reference             |                   | Grid                                   |                   |  |  |
| Wellbore     | Jackson Unit 14H        |                      |               |                 |               |               | Survey Calculation Method   |                   | Minimum Curvature                      |                   |  |  |
| Design       | Jackson Unit 14H        |                      |               |                 |               |               | Database                    |                   | EDM 5000.1 Single User Db              |                   |  |  |
| Survey       |                         |                      |               |                 |               |               |                             |                   |                                        |                   |  |  |
| MD<br>(usft) | Inc<br>(°)              | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft)            | DLeg<br>(100usft) | Northing<br>(usft)                     | Easting<br>(usft) |  |  |
| 2,300.0      | 0.80                    | 333.58               | 2,299.9       | -1,338.1        | 9.4           | -17.9         | -9.0                        | 0.05              | 446,198.45                             | 778,281.76        |  |  |
| 2,400.0      | 0.73                    | 341.44               | 2,399.9       | -1,238.1        | 10.6          | -18.4         | -10.2                       | 0.13              | 446,199.68                             | 778,281.25        |  |  |
| 2,500.0      | 0.68                    | 344.63               | 2,499.8       | -1,138.2        | 11.8          | -18.7         | -11.4                       | 0.06              | 446,200.86                             | 778,280.89        |  |  |
| 2,600.0      | 0.73                    | 348.74               | 2,599.8       | -1,038.2        | 13.0          | -19.0         | -12.6                       | 0.07              | 446,202.05                             | 778,280.61        |  |  |
| 2,700.0      | 0.83                    | 352.96               | 2,699.8       | -938.2          | 14.3          | -19.2         | -13.9                       | 0.12              | 446,203.40                             | 778,280.39        |  |  |
| 2,800.0      | 0.83                    | 355.73               | 2,799.8       | -838.2          | 15.8          | -19.4         | -15.3                       | 0.04              | 446,204.84                             | 778,280.25        |  |  |
| 2,900.0      | 0.81                    | 357.16               | 2,899.8       | -738.2          | 17.2          | -19.5         | -16.8                       | 0.03              | 446,206.27                             | 778,280.16        |  |  |
| 3,000.0      | 0.89                    | 2.70                 | 2,999.8       | -638.2          | 18.7          | -19.5         | -18.2                       | 0.11              | 446,207.75                             | 778,280.16        |  |  |
| 3,100.0      | 0.89                    | 12.83                | 3,099.8       | -538.2          | 20.2          | -19.2         | -19.8                       | 0.16              | 446,209.28                             | 778,280.37        |  |  |
| 3,200.0      | 1.00                    | 20.40                | 3,199.8       | -438.2          | 21.8          | -18.8         | -21.4                       | 0.17              | 446,210.86                             | 778,280.85        |  |  |
| 3,300.0      | 1.18                    | 34.00                | 3,299.8       | -338.2          | 23.5          | -17.9         | -23.1                       | 0.31              | 446,212.53                             | 778,281.73        |  |  |
| 3,400.0      | 1.20                    | 40.37                | 3,399.7       | -238.3          | 25.1          | -16.6         | -24.7                       | 0.13              | 446,214.18                             | 778,282.98        |  |  |
| 3,500.0      | 1.39                    | 42.19                | 3,499.7       | -138.3          | 26.8          | -15.1         | -26.5                       | 0.19              | 446,215.88                             | 778,284.47        |  |  |
| 3,600.0      | 1.41                    | 46.02                | 3,599.7       | -38.3           | 28.6          | -13.4         | -28.3                       | 0.10              | 446,217.63                             | 778,286.17        |  |  |
| 3,700.0      | 1.11                    | 44.61                | 3,699.7       | 61.7            | 30.1          | -11.9         | -29.8                       | 0.30              | 446,219.17                             | 778,287.74        |  |  |
| 3,800.0      | 0.46                    | 24.13                | 3,799.6       | 161.6           | 31.2          | -11.0         | -30.9                       | 0.70              | 446,220.23                             | 778,288.58        |  |  |
| 3,900.0      | 0.20                    | 287.69               | 3,899.6       | 261.6           | 31.6          | -11.0         | -31.3                       | 0.52              | 446,220.65                             | 778,288.58        |  |  |
| 4,000.0      | 0.39                    | 286.67               | 3,999.6       | 361.6           | 31.8          | -11.5         | -31.5                       | 0.19              | 446,220.80                             | 778,288.09        |  |  |
| 4,100.0      | 0.22                    | 287.42               | 4,099.6       | 461.6           | 31.9          | -12.0         | -31.6                       | 0.17              | 446,220.95                             | 778,287.58        |  |  |
| 4,200.0      | 0.21                    | 336.11               | 4,199.6       | 561.6           | 32.1          | -12.3         | -31.8                       | 0.18              | 446,221.18                             | 778,287.32        |  |  |
| 4,300.0      | 0.35                    | 3.34                 | 4,299.6       | 661.6           | 32.6          | -12.3         | -32.3                       | 0.19              | 446,221.65                             | 778,287.27        |  |  |
| 4,400.0      | 0.96                    | 77.45                | 4,399.6       | 761.6           | 33.1          | -11.5         | -32.8                       | 0.93              | 446,222.14                             | 778,288.10        |  |  |
| 4,500.0      | 2.12                    | 99.04                | 4,499.6       | 861.6           | 33.0          | -8.9          | -32.8                       | 1.28              | 446,222.03                             | 778,290.75        |  |  |
| 4,600.0      | 2.27                    | 101.58               | 4,599.5       | 961.5           | 32.3          | -5.1          | -32.2                       | 0.18              | 446,221.34                             | 778,294.51        |  |  |
| 4,700.0      | 2.67                    | 106.72               | 4,699.4       | 1,061.4         | 31.2          | -0.9          | -31.2                       | 0.46              | 446,220.27                             | 778,298.68        |  |  |
| 4,800.0      | 3.17                    | 109.43               | 4,799.3       | 1,161.3         | 29.6          | 3.9           | -29.7                       | 0.52              | 446,218.68                             | 778,303.52        |  |  |
| 4,900.0      | 3.83                    | 111.48               | 4,899.1       | 1,261.1         | 27.5          | 9.6           | -27.7                       | 0.67              | 446,216.54                             | 778,309.24        |  |  |

|                  |                         |                                     |                                        |
|------------------|-------------------------|-------------------------------------|----------------------------------------|
| <b>Company:</b>  | Murchison Oil and Gas   | <b>Local Co-ordinate Reference:</b> | Well Jackson Unit 14H                  |
| <b>Project:</b>  | Jackson Unit Section 15 | <b>TVL Reference:</b>               | WELL @ 3638.0usft (Original Well Elev) |
| <b>Site:</b>     | Jackson Unit 14H        | <b>MD Reference:</b>                | WELL @ 3638.0usft (Original Well Elev) |
| <b>Well:</b>     | Jackson Unit 14H        | <b>North Reference:</b>             | Grid                                   |
| <b>Wellbore:</b> | Jackson Unit 14H        | <b>Survey Calculation Method:</b>   | Minimum Curvature                      |
| <b>Design:</b>   | Jackson Unit 14H        | <b>Database:</b>                    | EDM 5000.1 Single User Db              |

## Survey

| MD<br>(usft)         | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | D Leg<br>(usft) | Northings<br>(usft) | Easting<br>(usft) |
|----------------------|------------|----------------------|---------------|-----------------|---------------|---------------|------------------|-----------------|---------------------|-------------------|
| 5,000.0              | 3.62       | 112.66               | 4,998.9       | 1,360.9         | 25.1          | 15.6          | -25.4            | 0.22            | 446,214.10          | 778,315.26        |
| 5,100.0              | 2.46       | 113.65               | 5,098.8       | 1,460.8         | 23.0          | 20.5          | -23.4            | 1.16            | 446,212.02          | 778,320.14        |
| 5,200.0              | 1.90       | 120.34               | 5,198.7       | 1,560.7         | 21.3          | 23.9          | -21.8            | 0.61            | 446,210.33          | 778,323.53        |
| 5,205.0              | 1.90       | 119.73               | 5,203.7       | 1,565.7         | 21.2          | 24.1          | -21.7            | 0.40            | 446,210.24          | 778,323.68        |
| 5,234.0              | 1.81       | 122.57               | 5,232.7       | 1,594.7         | 20.7          | 24.9          | -21.3            | 0.45            | 446,209.76          | 778,324.48        |
| <b>Delaware</b>      |            |                      |               |                 |               |               |                  |                 |                     |                   |
| 5,252.0              | 1.75       | 124.48               | 5,250.7       | 1,612.7         | 20.4          | 25.3          | -21.0            | 0.45            | 446,209.45          | 778,324.94        |
| <b>9 5/8"</b>        |            |                      |               |                 |               |               |                  |                 |                     |                   |
| 5,343.0              | 1.50       | 136.20               | 5,341.6       | 1,703.6         | 18.8          | 27.3          | -19.4            | 0.45            | 446,207.80          | 778,326.91        |
| 5,438.0              | 1.70       | 126.90               | 5,436.6       | 1,798.6         | 17.0          | 29.3          | -17.7            | 0.34            | 446,206.06          | 778,328.90        |
| 5,532.0              | 1.30       | 138.10               | 5,530.6       | 1,892.6         | 15.4          | 31.1          | -16.1            | 0.53            | 446,204.43          | 778,330.73        |
| 5,626.0              | 1.30       | 130.00               | 5,624.5       | 1,986.5         | 13.9          | 32.6          | -14.7            | 0.20            | 446,202.95          | 778,332.26        |
| 5,720.0              | 1.20       | 170.80               | 5,718.5       | 2,080.5         | 12.2          | 33.6          | -13.0            | 0.93            | 446,201.29          | 778,333.23        |
| 5,814.0              | 1.60       | 218.10               | 5,812.5       | 2,174.5         | 10.2          | 33.0          | -11.0            | 1.26            | 446,199.29          | 778,332.58        |
| 5,909.0              | 1.50       | 226.30               | 5,907.5       | 2,269.5         | 8.3           | 31.2          | -9.1             | 0.26            | 446,197.39          | 778,330.86        |
| 6,003.0              | 1.90       | 241.00               | 6,001.4       | 2,363.4         | 6.7           | 29.0          | -7.4             | 0.63            | 446,195.78          | 778,328.61        |
| 6,097.0              | 1.70       | 244.10               | 6,095.4       | 2,457.4         | 5.4           | 26.4          | -6.0             | 0.24            | 446,194.42          | 778,325.99        |
| 6,191.0              | 1.60       | 240.90               | 6,189.3       | 2,551.3         | 4.1           | 24.0          | -4.7             | 0.14            | 446,193.17          | 778,323.59        |
| 6,216.0              | 1.65       | 240.67               | 6,214.3       | 2,576.3         | 3.8           | 23.4          | -4.3             | 0.21            | 446,192.82          | 778,322.97        |
| <b>Cherry Canyon</b> |            |                      |               |                 |               |               |                  |                 |                     |                   |
| 6,285.0              | 1.80       | 240.10               | 6,283.3       | 2,645.3         | 2.7           | 21.6          | -3.2             | 0.21            | 446,191.80          | 778,321.17        |
| 6,379.0              | 1.70       | 248.40               | 6,377.2       | 2,739.2         | 1.5           | 19.0          | -1.9             | 0.29            | 446,190.55          | 778,318.59        |
| 6,474.0              | 1.90       | 240.80               | 6,472.2       | 2,834.2         | 0.2           | 16.3          | -0.6             | 0.33            | 446,189.26          | 778,315.90        |
| 6,569.0              | 1.90       | 249.10               | 6,567.1       | 2,929.1         | -1.1          | 13.4          | 0.8              | 0.29            | 446,187.93          | 778,313.06        |
| 6,664.0              | 1.70       | 250.40               | 6,662.1       | 3,024.1         | -2.2          | 10.6          | 1.9              | 0.21            | 446,186.90          | 778,310.26        |
| 6,758.0              | 1.90       | 248.70               | 6,756.0       | 3,118.0         | -3.2          | 7.9           | 3.0              | 0.22            | 446,185.86          | 778,307.49        |
| 6,854.0              | 1.70       | 251.60               | 6,852.0       | 3,214.0         | -4.2          | 5.0           | 4.1              | 0.23            | 446,184.83          | 778,304.66        |

|                 |                         |                                    |                                        |
|-----------------|-------------------------|------------------------------------|----------------------------------------|
| <b>Company</b>  | Murchison Oil and Gas   | <b>Local Co-ordinate Reference</b> | Well Jackson Unit 14H                  |
| <b>Project</b>  | Jackson Unit Section 15 | <b>TVD Reference</b>               | WELL @ 3638.0usft (Original Well Elev) |
| <b>Site</b>     | Jackson Unit 14H        | <b>MD Reference</b>                | WELL @ 3638.0usft (Original Well Elev) |
| <b>Well</b>     | Jackson Unit 14H        | <b>North Reference</b>             | Grid                                   |
| <b>Wellbore</b> | Jackson Unit 14H        | <b>Survey Calculation Method</b>   | Minimum Curvature                      |
| <b>Design</b>   | Jackson Unit 14H        | <b>Database</b>                    | EDM 5000.1 Single User Dh              |

| MD<br>(usft)         | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | D Leg<br>(%100usft) | Northing<br>(usft) | Easting<br>(usft) |
|----------------------|------------|----------------------|---------------|-----------------|---------------|---------------|------------------|---------------------|--------------------|-------------------|
| 6,947.0              | 0.80       | 284.20               | 6,945.0       | 3,307.0         | -4.5          | 3.1           | 4.4              | 1.20                | 446,184.56         | 778,302.72        |
| 7,042.0              | 0.60       | 266.60               | 7,040.0       | 3,402.0         | -4.4          | 2.0           | 4.3              | 0.31                | 446,184.69         | 778,301.58        |
| 7,136.0              | 0.80       | 263.30               | 7,134.0       | 3,496.0         | -4.5          | 0.8           | 4.4              | 0.22                | 446,184.59         | 778,300.44        |
| 7,229.0              | 0.60       | 277.60               | 7,227.0       | 3,589.0         | -4.5          | -0.3          | 4.5              | 0.28                | 446,184.57         | 778,299.31        |
| 7,324.0              | 0.80       | 277.40               | 7,321.9       | 3,683.9         | -4.3          | -1.5          | 4.4              | 0.21                | 446,184.73         | 778,298.16        |
| 7,418.0              | 0.90       | 276.40               | 7,415.9       | 3,777.9         | -4.2          | -2.8          | 4.2              | 0.11                | 446,184.89         | 778,296.78        |
| 7,512.0              | 0.60       | 2.60                 | 7,509.9       | 3,871.9         | -3.6          | -3.5          | 3.7              | 1.11                | 446,185.47         | 778,296.07        |
| 7,568.0              | 0.72       | 6.71                 | 7,565.9       | 3,927.9         | -2.9          | -3.5          | 3.0              | 0.23                | 446,186.11         | 778,296.12        |
| <b>Brushy Canyon</b> |            |                      |               |                 |               |               |                  |                     |                    |                   |
| 7,606.0              | 0.80       | 8.80                 | 7,603.9       | 3,965.9         | -2.4          | -3.4          | 2.5              | 0.23                | 446,186.61         | 778,296.19        |
| 7,701.0              | 0.60       | 9.10                 | 7,698.9       | 4,060.9         | -1.3          | -3.2          | 1.4              | 0.21                | 446,187.75         | 778,296.37        |
| 7,795.0              | 0.60       | 342.90               | 7,792.9       | 4,154.9         | -0.3          | -3.3          | 0.4              | 0.29                | 446,188.71         | 778,296.30        |
| 7,890.0              | 0.70       | 4.80                 | 7,887.9       | 4,249.9         | 0.7           | -3.4          | -0.6             | 0.28                | 446,189.76         | 778,296.20        |
| 7,985.0              | 0.60       | 339.30               | 7,982.9       | 4,344.9         | 1.8           | -3.5          | -1.7             | 0.32                | 446,190.81         | 778,296.08        |
| 8,079.0              | 0.40       | 355.10               | 8,076.9       | 4,438.9         | 2.5           | -3.7          | -2.5             | 0.26                | 446,191.59         | 778,295.87        |
| 8,174.0              | 0.50       | 327.50               | 8,171.9       | 4,533.9         | 3.2           | -4.0          | -3.1             | 0.25                | 446,192.27         | 778,295.62        |
| 8,269.0              | 0.70       | 333.30               | 8,266.9       | 4,628.9         | 4.1           | -4.5          | -4.0             | 0.22                | 446,193.14         | 778,295.14        |
| 8,363.0              | 0.50       | 311.90               | 8,360.9       | 4,722.9         | 4.9           | -5.0          | -4.8             | 0.32                | 446,193.93         | 778,294.58        |
| 8,458.0              | 0.40       | 316.30               | 8,455.9       | 4,817.9         | 5.4           | -5.6          | -5.3             | 0.11                | 446,194.44         | 778,294.04        |
| 8,553.0              | 0.70       | 316.70               | 8,550.9       | 4,912.9         | 6.1           | -6.2          | -5.9             | 0.32                | 446,195.11         | 778,293.41        |
| 8,647.0              | 0.50       | 312.10               | 8,644.9       | 5,006.9         | 6.8           | -6.9          | -6.6             | 0.22                | 446,195.80         | 778,292.71        |
| 8,742.0              | 0.30       | 181.50               | 8,739.9       | 5,101.9         | 6.8           | -7.2          | -6.6             | 0.77                | 446,195.83         | 778,292.40        |
| 8,837.0              | 0.20       | 218.20               | 8,834.9       | 5,196.9         | 6.4           | -7.3          | -6.2             | 0.19                | 446,195.45         | 778,292.29        |
| 8,932.0              | 0.10       | 244.30               | 8,929.9       | 5,291.9         | 6.2           | -7.5          | -6.1             | 0.12                | 446,195.28         | 778,292.11        |
| 9,027.0              | 0.30       | 237.00               | 9,024.9       | 5,386.9         | 6.1           | -7.8          | -5.9             | 0.21                | 446,195.11         | 778,291.83        |
| 9,097.0              | 0.30       | 234.17               | 9,094.9       | 5,456.9         | 5.9           | -8.1          | -5.7             | 0.02                | 446,194.91         | 778,291.53        |
| <b>Bone Spring</b>   |            |                      |               |                 |               |               |                  |                     |                    |                   |

|                      |                         |                              |               |                 |               |                                        |                  |                     |                    |                   |  |
|----------------------|-------------------------|------------------------------|---------------|-----------------|---------------|----------------------------------------|------------------|---------------------|--------------------|-------------------|--|
| Company:             | Murchison Oil and Gas   | Local Co-ordinate Reference: |               |                 |               | Well Jackson Unit 14H                  |                  |                     |                    |                   |  |
| Project:             | Jackson Unit Section 15 | TVD Reference:               |               |                 |               | WELL @ 3638.0usft (Original Well Elev) |                  |                     |                    |                   |  |
| Site:                | Jackson Unit 14H        | MD Reference:                |               |                 |               | WELL @ 3638.0usft (Original Well Elev) |                  |                     |                    |                   |  |
| Well:                | Jackson Unit 14H        | North Reference:             |               |                 |               | Grid                                   |                  |                     |                    |                   |  |
| Wellbore:            | Jackson Unit 14H        | Survey Calculation Method:   |               |                 |               | Minimum Curvature                      |                  |                     |                    |                   |  |
| Design:              | Jackson Unit 14H        | Database:                    |               |                 |               | EDM 5000.1 Single User Db              |                  |                     |                    |                   |  |
| Survey               |                         |                              |               |                 |               |                                        |                  |                     |                    |                   |  |
| MD<br>(usft)         | Inc<br>(°)              | Azi (azimuth)<br>(°)         | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft)                          | V. Sec<br>(usft) | DLeg<br>(°/100usft) | Northing<br>(usft) | Easting<br>(usft) |  |
| 9,121.0              | 0.30                    | 233.20                       | 9,118.9       | 5,480.9         | 5.8           | -8.2                                   | -5.6             | 0.02                | 446,194.83         | 778,291.43        |  |
| 9,211.0              | 0.01                    | 233.20                       | 9,208.9       | 5,570.9         | 5.6           | -8.4                                   | -5.4             | 0.32                | 446,194.68         | 778,291.23        |  |
| Avalon Shale         |                         |                              |               |                 |               |                                        |                  |                     |                    |                   |  |
| 9,215.0              | 0.00                    | 224.50                       | 9,212.9       | 5,574.9         | 5.6           | -8.4                                   | -5.4             | 0.32                | 446,194.68         | 778,291.23        |  |
| 9,310.0              | 0.00                    | 266.60                       | 9,307.9       | 5,669.9         | 5.6           | -8.4                                   | -5.4             | 0.00                | 446,194.68         | 778,291.23        |  |
| 9,405.0              | 0.30                    | 187.10                       | 9,402.9       | 5,764.9         | 5.4           | -8.4                                   | -5.2             | 0.32                | 446,194.44         | 778,291.20        |  |
| 9,500.0              | 0.30                    | 103.40                       | 9,497.9       | 5,859.9         | 5.1           | -8.2                                   | -4.9             | 0.42                | 446,194.13         | 778,291.41        |  |
| 9,595.0              | 0.60                    | 45.20                        | 9,592.9       | 5,954.9         | 5.4           | -7.6                                   | -5.2             | 0.54                | 446,194.43         | 778,292.01        |  |
| 9,690.0              | 0.40                    | 25.90                        | 9,687.9       | 6,049.9         | 6.0           | -7.1                                   | -5.9             | 0.27                | 446,195.07         | 778,292.50        |  |
| 9,784.0              | 0.40                    | 12.90                        | 9,781.9       | 6,143.9         | 6.6           | -6.9                                   | -6.5             | 0.10                | 446,195.69         | 778,292.72        |  |
| 9,878.0              | 0.00                    | 6.20                         | 9,875.9       | 6,237.9         | 7.0           | -6.8                                   | -6.8             | 0.43                | 446,196.01         | 778,292.79        |  |
| 9,973.0              | 0.30                    | 120.10                       | 9,970.9       | 6,332.9         | 6.8           | -6.6                                   | -6.7             | 0.32                | 446,195.88         | 778,293.01        |  |
| 10,068.0             | 0.60                    | 170.20                       | 10,065.9      | 6,427.9         | 6.2           | -6.3                                   | -6.1             | 0.49                | 446,195.27         | 778,293.31        |  |
| 10,164.0             | 1.00                    | 159.30                       | 10,161.8      | 6,523.8         | 4.9           | -5.9                                   | -4.8             | 0.44                | 446,193.99         | 778,293.69        |  |
| 10,185.0             | 1.06                    | 162.63                       | 10,182.8      | 6,544.8         | 4.6           | -5.8                                   | -4.4             | 0.41                | 446,193.63         | 778,293.81        |  |
| 1st Bone Spring Sand |                         |                              |               |                 |               |                                        |                  |                     |                    |                   |  |
| 10,259.0             | 1.30                    | 171.70                       | 10,256.8      | 6,618.8         | 3.1           | -5.5                                   | -3.0             | 0.41                | 446,192.15         | 778,294.14        |  |
| 10,352.0             | 1.50                    | 167.40                       | 10,349.8      | 6,711.8         | 0.9           | -5.1                                   | -0.8             | 0.24                | 446,189.92         | 778,294.56        |  |
| 10,447.0             | 1.20                    | 155.90                       | 10,444.8      | 6,806.8         | -1.3          | -4.4                                   | 1.4              | 0.42                | 446,187.80         | 778,295.23        |  |
| 10,542.0             | 1.20                    | 168.30                       | 10,539.8      | 6,901.8         | -3.1          | -3.8                                   | 3.2              | 0.27                | 446,185.91         | 778,295.84        |  |
| 10,636.0             | 2.00                    | 161.60                       | 10,633.7      | 6,995.7         | -5.7          | -3.1                                   | 5.7              | 0.87                | 446,183.39         | 778,296.56        |  |
| 10,668.0             | 3.00                    | 170.60                       | 10,665.7      | 7,027.7         | -7.0          | -2.7                                   | 7.1              | 3.35                | 446,182.04         | 778,296.87        |  |
| 10,700.0             | 4.80                    | 173.10                       | 10,697.6      | 7,059.6         | -9.2          | -2.4                                   | 9.2              | 5.65                | 446,179.88         | 778,297.17        |  |
| 10,732.0             | 6.20                    | 178.10                       | 10,729.5      | 7,091.5         | -12.2         | -2.2                                   | 12.3             | 4.62                | 446,176.83         | 778,297.39        |  |
| 10,798.0             | 6.40                    | 188.40                       | 10,795.1      | 7,157.1         | -19.4         | -2.6                                   | 19.5             | 1.74                | 446,169.62         | 778,296.97        |  |
| 10,805.0             | 7.11                    | 190.84                       | 10,802.0      | 7,164.0         | -20.2         | -2.8                                   | 20.3             | 10.89               | 446,168.81         | 778,296.83        |  |

7<sup>th</sup>

| Company              | Murchison Oil and Gas   |                      |               |                 |               | Local Co-ordinate Reference |                 |                    |                    | Well Jackson Unit 14H                  |  |  |
|----------------------|-------------------------|----------------------|---------------|-----------------|---------------|-----------------------------|-----------------|--------------------|--------------------|----------------------------------------|--|--|
| Project              | Jackson Unit Section 15 |                      |               |                 |               | TVD Reference               |                 |                    |                    | WELL @ 3638.0usft (Original Well Elev) |  |  |
| Site                 | Jackson Unit 14H        |                      |               |                 |               | MD Reference                |                 |                    |                    | WELL @ 3638.0usft (Original Well Elev) |  |  |
| Well                 | Jackson Unit 14H        |                      |               |                 |               | North Reference             |                 |                    |                    | Grid                                   |  |  |
| Wellbore             | Jackson Unit 14H        |                      |               |                 |               | Survey Calculation Method   |                 |                    |                    | Minimum Curvature                      |  |  |
| Design               | Jackson Unit 14H        |                      |               |                 |               | Database                    |                 |                    |                    | EDM 5000.1 Single User Db              |  |  |
| Survey               |                         |                      |               |                 |               |                             |                 |                    |                    |                                        |  |  |
| MD<br>(usft)         | Inc<br>(°)              | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | EW<br>(usft)                | V-Sec<br>(usft) | DLeg<br>(%100usft) | Northing<br>(usft) | Easting<br>(usft)                      |  |  |
| 10,830.0             | 9.70                    | 196.60               | 10,826.7      | 7,188.7         | -23.8         | -3.7                        | 23.9            | 10.89              | 446,165.28         | 778,295.94                             |  |  |
| 10,861.0             | 15.30                   | 198.90               | 10,857.0      | 7,219.0         | -30.2         | -5.8                        | 30.3            | 18.13              | 446,158.90         | 778,293.86                             |  |  |
| 10,893.0             | 20.00                   | 199.10               | 10,887.5      | 7,249.5         | -39.3         | -8.9                        | 39.5            | 14.69              | 446,149.73         | 778,290.70                             |  |  |
| 10,924.0             | 24.90                   | 199.40               | 10,916.1      | 7,278.1         | -50.5         | -12.8                       | 50.8            | 15.81              | 446,138.56         | 778,286.80                             |  |  |
| 10,950.0             | 28.39                   | 198.98               | 10,939.4      | 7,301.4         | -61.5         | -16.6                       | 61.9            | 13.46              | 446,127.54         | 778,282.97                             |  |  |
| 2nd Bone Spring Sand |                         |                      |               |                 |               |                             |                 |                    |                    |                                        |  |  |
| 10,956.0             | 29.20                   | 198.90               | 10,944.6      | 7,306.6         | -64.2         | -17.6                       | 64.6            | 13.46              | 446,124.81         | 778,282.03                             |  |  |
| 10,988.0             | 32.90                   | 197.60               | 10,972.0      | 7,334.0         | -79.9         | -22.7                       | 80.4            | 11.75              | 446,109.14         | 778,276.87                             |  |  |
| 11,019.0             | 36.40                   | 197.90               | 10,997.5      | 7,359.5         | -96.7         | -28.1                       | 97.3            | 11.30              | 446,092.35         | 778,271.50                             |  |  |
| 11,051.0             | 39.20                   | 197.90               | 11,022.8      | 7,384.8         | -115.4        | -34.1                       | 116.1           | 8.75               | 446,073.69         | 778,265.47                             |  |  |
| 11,083.0             | 40.80                   | 199.00               | 11,047.3      | 7,409.3         | -134.9        | -40.7                       | 135.8           | 5.47               | 446,054.18         | 778,258.96                             |  |  |
| 11,114.0             | 44.50                   | 198.80               | 11,070.1      | 7,432.1         | -154.7        | -47.5                       | 155.8           | 11.94              | 446,034.32         | 778,252.16                             |  |  |
| 11,145.0             | 49.90                   | 200.30               | 11,091.2      | 7,453.2         | -176.2        | -55.1                       | 177.4           | 17.78              | 446,012.90         | 778,244.54                             |  |  |
| 11,177.0             | 52.40                   | 200.90               | 11,111.2      | 7,473.2         | -199.5        | -63.8                       | 200.9           | 7.95               | 445,989.57         | 778,235.77                             |  |  |
| 11,208.0             | 53.50                   | 201.00               | 11,129.9      | 7,491.9         | -222.6        | -72.7                       | 224.2           | 3.56               | 445,966.47         | 778,226.92                             |  |  |
| 11,240.0             | 58.00                   | 199.70               | 11,147.9      | 7,509.9         | -247.4        | -81.9                       | 249.2           | 14.46              | 445,941.67         | 778,217.74                             |  |  |
| 11,271.0             | 62.50                   | 198.90               | 11,163.3      | 7,525.3         | -272.8        | -90.8                       | 274.8           | 14.69              | 445,916.28         | 778,208.85                             |  |  |
| 11,302.0             | 67.50                   | 197.10               | 11,176.4      | 7,538.4         | -299.5        | -99.4                       | 301.7           | 16.96              | 445,889.56         | 778,200.18                             |  |  |
| 11,334.0             | 74.60                   | 193.60               | 11,186.8      | 7,548.8         | -328.7        | -107.4                      | 331.1           | 24.48              | 445,860.40         | 778,192.19                             |  |  |
| 11,366.0             | 78.90                   | 191.70               | 11,194.1      | 7,556.1         | -359.0        | -114.2                      | 361.6           | 14.63              | 445,830.01         | 778,185.38                             |  |  |
| 11,397.0             | 79.90                   | 190.60               | 11,199.8      | 7,561.8         | -388.9        | -120.1                      | 391.6           | 4.75               | 445,800.12         | 778,179.48                             |  |  |
| 11,429.0             | 78.70                   | 187.30               | 11,205.8      | 7,567.8         | -420.0        | -125.0                      | 422.8           | 10.80              | 445,769.07         | 778,174.59                             |  |  |
| 11,460.0             | 79.30                   | 185.70               | 11,211.7      | 7,573.7         | -450.2        | -128.5                      | 453.1           | 5.42               | 445,738.83         | 778,171.15                             |  |  |
| 11,492.0             | 84.30                   | 184.30               | 11,216.3      | 7,578.3         | -481.8        | -131.2                      | 484.7           | 16.21              | 445,707.29         | 778,168.39                             |  |  |
| 11,520.0             | 87.40                   | 182.90               | 11,218.3      | 7,580.3         | -509.6        | -133.0                      | 512.6           | 12.14              | 445,679.43         | 778,166.64                             |  |  |
| 11,551.0             | 91.70                   | 181.60               | 11,218.5      | 7,580.5         | -540.6        | -134.2                      | 543.6           | 14.49              | 445,648.46         | 778,165.42                             |  |  |
| 11,646.0             | 91.10                   | 182.30               | 11,216.2      | 7,578.2         | -635.5        | -137.4                      | 638.5           | 0.97               | 445,553.55         | 778,162.19                             |  |  |

|                 |                         |                                    |                                        |
|-----------------|-------------------------|------------------------------------|----------------------------------------|
| <b>Company</b>  | Murchison Oil and Gas   | <b>Local Co-ordinate Reference</b> | Well Jackson Unit 14H                  |
| <b>Project</b>  | Jackson Unit Section 15 | <b>TVD Reference</b>               | WELL @ 3638.0usft (Original Well Elev) |
| <b>Site</b>     | Jackson Unit 14H        | <b>MD Reference</b>                | WELL @ 3638.0usft (Original Well Elev) |
| <b>Well</b>     | Jackson Unit 14H        | <b>North Reference</b>             | Grid                                   |
| <b>Wellbore</b> | Jackson Unit 14H        | <b>Survey Calculation Method</b>   | Minimum Curvature                      |
| <b>Design</b>   | Jackson Unit 14H        | <b>Database</b>                    | EDM 5000.1 Single User Db              |

| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | DLeg<br>(°/100usft) | Northing<br>(usft) | Easting<br>(usft) |
|--------------|------------|----------------------|---------------|-----------------|---------------|---------------|------------------|---------------------|--------------------|-------------------|
| 11,740.0     | 89.50      | 183.00               | 11,215.7      | 7,577.7         | -729.4        | -141.8        | 732.5            | 1.86                | 445,459.65         | 778,157.84        |
| 11,835.0     | 88.00      | 183.10               | 11,217.8      | 7,579.8         | -824.3        | -146.8        | 827.4            | 1.58                | 445,364.82         | 778,152.79        |
| 11,929.0     | 87.00      | 183.40               | 11,221.9      | 7,583.9         | -918.0        | -152.2        | 921.3            | 1.11                | 445,271.06         | 778,147.47        |
| 12,024.0     | 90.30      | 179.30               | 11,224.1      | 7,586.1         | -1,012.9      | -154.4        | 1,016.2          | 5.54                | 445,176.15         | 778,145.23        |
| 12,119.0     | 90.70      | 179.50               | 11,223.3      | 7,585.3         | -1,107.9      | -153.4        | 1,111.2          | 0.47                | 445,081.16         | 778,146.23        |
| 12,213.0     | 90.00      | 179.70               | 11,222.7      | 7,584.7         | -1,201.9      | -152.7        | 1,205.1          | 0.77                | 444,987.17         | 778,146.88        |
| 12,308.0     | 90.80      | 178.40               | 11,222.1      | 7,584.1         | -1,296.9      | -151.2        | 1,300.1          | 1.61                | 444,892.19         | 778,148.46        |
| 12,403.0     | 91.30      | 179.50               | 11,220.3      | 7,582.3         | -1,391.9      | -149.4        | 1,395.0          | 1.27                | 444,797.22         | 778,150.20        |
| 12,497.0     | 89.40      | 179.20               | 11,219.7      | 7,581.7         | -1,485.8      | -148.4        | 1,488.9          | 2.05                | 444,703.24         | 778,151.27        |
| 12,592.0     | 90.00      | 177.90               | 11,220.2      | 7,582.2         | -1,580.8      | -145.9        | 1,583.8          | 1.51                | 444,608.28         | 778,153.67        |
| 12,686.0     | 91.90      | 177.30               | 11,218.7      | 7,580.7         | -1,674.7      | -142.0        | 1,677.6          | 2.12                | 444,514.38         | 778,157.60        |
| 12,781.0     | 90.60      | 178.30               | 11,216.6      | 7,578.6         | -1,769.6      | -138.4        | 1,772.4          | 1.73                | 444,419.48         | 778,161.25        |
| 12,874.0     | 89.90      | 178.30               | 11,216.2      | 7,578.2         | -1,862.6      | -135.6        | 1,865.2          | 0.75                | 444,326.52         | 778,164.01        |
| 12,970.0     | 89.30      | 176.50               | 11,216.9      | 7,578.9         | -1,958.5      | -131.3        | 1,961.0          | 1.98                | 444,230.63         | 778,168.36        |
| 13,064.0     | 89.60      | 179.10               | 11,217.8      | 7,579.8         | -2,052.4      | -127.6        | 2,054.8          | 2.78                | 444,136.71         | 778,171.97        |
| 13,159.0     | 89.00      | 180.20               | 11,218.9      | 7,580.9         | -2,147.4      | -127.1        | 2,149.7          | 1.32                | 444,041.73         | 778,172.55        |
| 13,254.0     | 90.00      | 179.70               | 11,219.8      | 7,581.8         | -2,242.4      | -127.0        | 2,244.7          | 1.18                | 443,946.74         | 778,172.63        |
| 13,348.0     | 89.60      | 178.70               | 11,220.1      | 7,582.1         | -2,336.4      | -125.7        | 2,338.6          | 1.15                | 443,852.75         | 778,173.95        |
| 13,443.0     | 90.20      | 181.10               | 11,220.3      | 7,582.3         | -2,431.4      | -125.5        | 2,433.6          | 2.60                | 443,757.76         | 778,174.11        |
| 13,538.0     | 90.00      | 180.90               | 11,220.1      | 7,582.1         | -2,526.3      | -127.2        | 2,528.6          | 0.30                | 443,662.78         | 778,172.45        |
| 13,632.0     | 89.30      | 180.90               | 11,220.7      | 7,582.7         | -2,620.3      | -128.6        | 2,622.6          | 0.74                | 443,568.79         | 778,170.98        |
| 13,726.0     | 90.00      | 180.70               | 11,221.2      | 7,583.2         | -2,714.3      | -130.0        | 2,716.6          | 0.77                | 443,474.81         | 778,169.67        |
| 13,822.0     | 90.60      | 180.80               | 11,220.7      | 7,582.7         | -2,810.3      | -131.2        | 2,812.6          | 0.63                | 443,378.82         | 778,168.41        |
| 13,916.0     | 91.30      | 179.00               | 11,219.2      | 7,581.2         | -2,904.3      | -131.0        | 2,906.5          | 2.05                | 443,284.84         | 778,168.57        |
| 14,011.0     | 90.70      | 180.20               | 11,217.5      | 7,579.5         | -2,999.3      | -130.4        | 3,001.5          | 1.41                | 443,189.86         | 778,169.24        |
| 14,106.0     | 90.00      | 180.30               | 11,216.9      | 7,578.9         | -3,094.3      | -130.8        | 3,096.5          | 0.74                | 443,094.87         | 778,168.82        |
| 14,201.0     | 90.30      | 179.10               | 11,216.7      | 7,578.7         | -3,189.3      | -130.3        | 3,191.4          | 1.30                | 442,999.87         | 778,169.32        |

|           |                         |                              |                                        |
|-----------|-------------------------|------------------------------|----------------------------------------|
| Company:  | Murchison Oil and Gas   | Local Co-ordinate Reference: | Well Jackson Unit 14H                  |
| Project:  | Jackson Unit Section 15 | TVD Reference:               | WELL @ 3638.0usft (Original Well Elev) |
| Site:     | Jackson Unit 14H        | MD Reference:                | WELL @ 3638.0usft (Original Well Elev) |
| Well:     | Jackson Unit 14H        | North Reference:             | Grid                                   |
| Wellbore: | Jackson Unit 14H        | Survey Calculation Method:   | Minimum Curvature                      |
| Design:   | Jackson Unit 14H        | Database:                    | EDM 5000.1 Single User Db              |

| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V-Sec<br>(usft) | DLeg<br>(100usft) | Northing<br>(usft) | Easting<br>(usft) |
|--------------|------------|----------------------|---------------|-----------------|---------------|---------------|-----------------|-------------------|--------------------|-------------------|
| 14,295.0     | 90.90      | 179.80               | 11,215.7      | 7,577.7         | -3,283.2      | -129.4        | 3,285.4         | 0.98              | 442,905.89         | 778,170.22        |
| 14,390.0     | 91.70      | 178.50               | 11,213.5      | 7,575.5         | -3,378.2      | -128.0        | 3,380.3         | 1.61              | 442,810.93         | 778,171.63        |
| 14,485.0     | 91.10      | 176.90               | 11,211.2      | 7,573.2         | -3,473.1      | -124.2        | 3,475.0         | 1.80              | 442,716.04         | 778,175.44        |
| 14,579.0     | 90.80      | 176.00               | 11,209.7      | 7,571.7         | -3,566.9      | -118.4        | 3,568.7         | 1.01              | 442,622.23         | 778,181.26        |
| 14,675.0     | 90.90      | 176.00               | 11,208.2      | 7,570.2         | -3,662.7      | -111.7        | 3,664.3         | 0.10              | 442,526.48         | 778,187.96        |
| 14,769.0     | 91.50      | 178.30               | 11,206.3      | 7,568.3         | -3,756.5      | -107.0        | 3,758.0         | 2.53              | 442,432.63         | 778,192.63        |
| 14,864.0     | 91.30      | 178.20               | 11,204.0      | 7,566.0         | -3,851.4      | -104.1        | 3,852.8         | 0.24              | 442,337.70         | 778,195.53        |
| 14,959.0     | 91.10      | 178.20               | 11,202.0      | 7,564.0         | -3,946.4      | -101.1        | 3,947.7         | 0.21              | 442,242.77         | 778,198.51        |
| 15,053.0     | 91.30      | 179.70               | 11,200.0      | 7,562.0         | -4,040.3      | -99.4         | 4,041.6         | 1.61              | 442,148.81         | 778,200.23        |
| 15,148.0     | 91.10      | 181.20               | 11,198.0      | 7,560.0         | -4,135.3      | -100.1        | 4,136.5         | 1.59              | 442,053.84         | 778,199.49        |
| 15,242.0     | 91.30      | 181.50               | 11,196.0      | 7,558.0         | -4,229.3      | -102.3        | 4,230.5         | 0.38              | 441,959.89         | 778,197.27        |
| 15,338.0     | 91.40      | 181.50               | 11,193.8      | 7,555.8         | -4,325.2      | -104.9        | 4,326.5         | 0.10              | 441,863.95         | 778,194.76        |
| 15,432.0     | 91.20      | 181.80               | 11,191.6      | 7,553.6         | -4,419.1      | -107.6        | 4,420.5         | 0.38              | 441,770.02         | 778,192.06        |
| 15,528.0     | 91.00      | 181.30               | 11,189.8      | 7,551.8         | -4,515.1      | -110.2        | 4,516.4         | 0.56              | 441,674.08         | 778,189.46        |
| 15,623.0     | 90.70      | 181.90               | 11,188.4      | 7,550.4         | -4,610.0      | -112.8        | 4,611.4         | 0.71              | 441,579.13         | 778,186.81        |
| 15,717.0     | 90.40      | 180.80               | 11,187.5      | 7,549.5         | -4,704.0      | -115.0        | 4,705.4         | 1.21              | 441,485.16         | 778,184.59        |
| 15,759.0     | 90.30      | 181.30               | 11,187.2      | 7,549.2         | -4,746.0      | -115.8        | 4,747.4         | 1.21              | 441,443.17         | 778,183.82        |
| 15,782.0     | 90.30      | 181.30               | 11,187.1      | 7,549.1         | -4,769.0      | -116.3        | 4,770.4         | 0.00              | 441,420.18         | 778,183.30        |
| 4 1/2"       |            |                      |               |                 |               |               |                 |                   |                    |                   |
| 15,805.0     | 90.30      | 181.30               | 11,187.0      | 7,549.0         | -4,792.0      | -116.8        | 4,793.4         | 0.00              | 441,397.18         | 778,182.78        |

|          |                         |                             |                                        |
|----------|-------------------------|-----------------------------|----------------------------------------|
| Company  | Murchison Oil and Gas   | Local Co-ordinate Reference | Well Jackson Unit 14H                  |
| Project  | Jackson Unit Section 15 | TVD Reference               | WELL @ 3638.0usft (Original Well Elev) |
| Site     | Jackson Unit 14H        | MD Reference                | WELL @ 3638.0usft (Original Well Elev) |
| Well     | Jackson Unit 14H        | North Reference             | Grid                                   |
| Wellbore | Jackson Unit 14H        | Survey Calculation Method   | Minimum Curvature                      |
| Design   | Jackson Unit 14H        | Database                    | EDM 5000.1 Single User (lb             |

| Casing Points         |                       |         |                     |                   |  |
|-----------------------|-----------------------|---------|---------------------|-------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name    | Casing Diameter (") | Hole Diameter (") |  |
| 5,252.0               | 5,250.7               | 9 5/8"  | 9-5/8               | 12-1/4            |  |
| 10,805.0              | 10,802.0              | 7"      | 7                   | 8-1/2             |  |
| 1,302.0               | 1,301.9               | 13 3/8" | 13-3/8              | 16                |  |
| 15,782.0              | 11,187.1              | 4 1/2"  | 4-1/2               | 6-1/8             |  |

| Formations            |                       |                      |         |  |
|-----------------------|-----------------------|----------------------|---------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name                 | Dip (°) |  |
| 9,211.0               | 9,208.9               | Avalon Shale         | 0.00    |  |
| 6,216.0               | 6,214.3               | Cherry Canyon        | 0.00    |  |
| 9,097.0               | 9,094.9               | Bone Spring          | 0.00    |  |
| 1,278.0               | 1,277.9               | Rustler              | 0.00    |  |
| 10,185.0              | 10,182.8              | 1st Bone Spring Sand | 0.00    |  |
| 7,568.0               | 7,565.9               | Brushy Canyon        | 0.00    |  |
| 5,234.0               | 5,232.7               | Delaware             | 0.00    |  |
| 10,950.0              | 10,939.4              | 2nd Bone Spring Sand | 0.00    |  |

| Survey Annotations    |                       |                   |            |                                   |
|-----------------------|-----------------------|-------------------|------------|-----------------------------------|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |            | Comment                           |
|                       |                       | N-S (usft)        | E-W (usft) |                                   |
| 11,075.0              | 11,041.2              | -129.9            | -39.0      | North Hard Boundary @ 11,075ft MD |
| 11,537.0              | 11,218.7              | -526.6            | -133.7     | Landing Point @ 11,537ft MD       |
| 15,764.0              | 11,187.2              | -4,751.0          | -115.9     | South Hard Boundary @ 15,764ft MD |

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

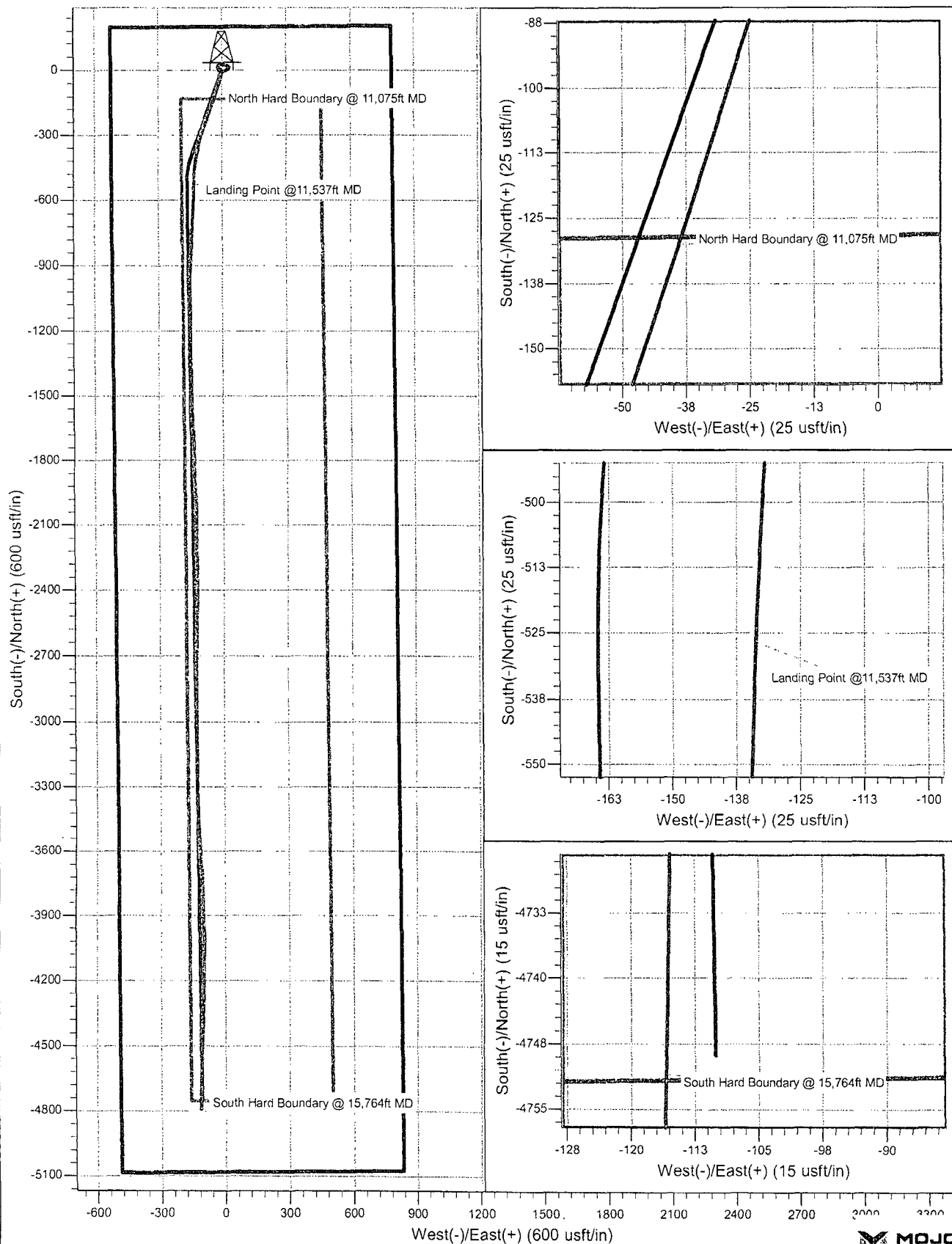
Project: Jackson Unit Section 15  
 Site: Jackson Unit 14H  
 Well: Jackson Unit 14H  
 Wellbore: Jackson Unit 14H  
 Design: Jackson Unit 14H



MURCHISON OIL & GAS, INC.



Azimuths to Grid North  
 True North: -0.41°  
 Magnetic North: 6.95°  
 Magnetic Field  
 Strength: 48433.8nT  
 Dip Angle: 60.14°  
 Date: 09/04/2013  
 Model: IGRF2010



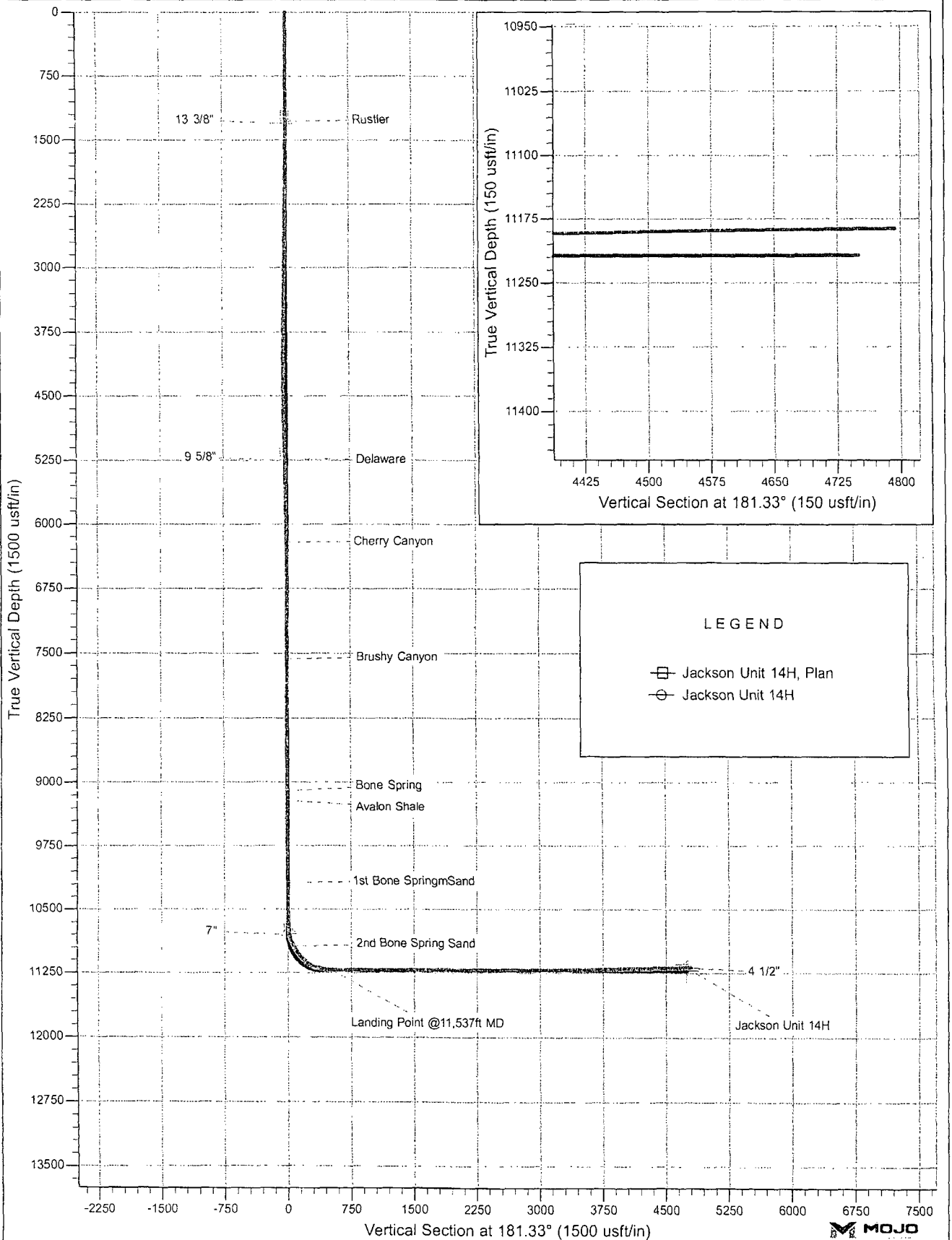
Project: Jackson Unit Section 15  
 Site: Jackson Unit 14H  
 Well: Jackson Unit 14H  
 Wellbore: Jackson Unit 14H  
 Design: Jackson Unit 14H



MURCHISON OIL & GAS, INC.



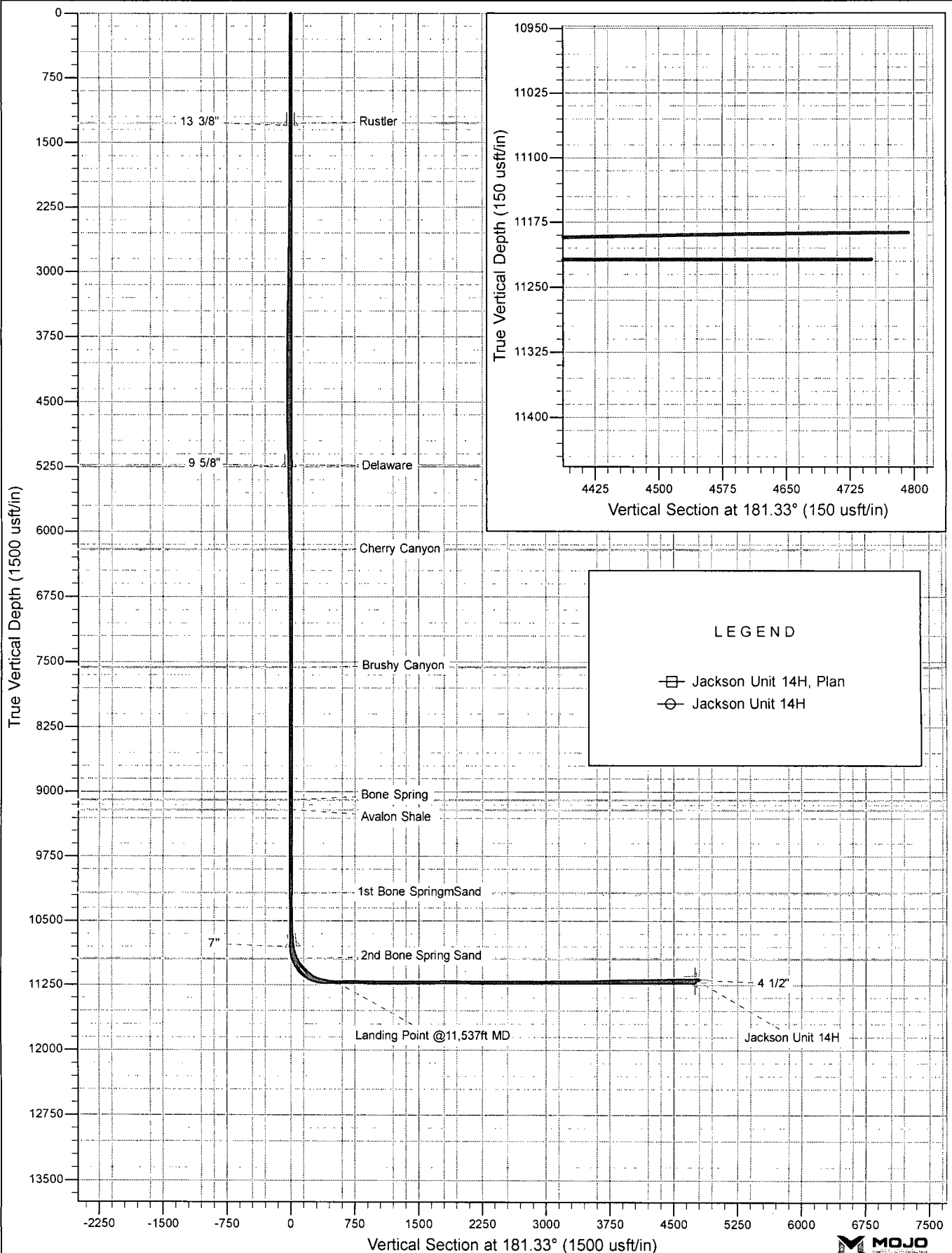
Azimuths to Grid North  
 True North: -0.41°  
 Magnetic North: 6.95°  
 Magnetic Field  
 Strength: 48433.8nT  
 Dip Angle: 60.14°  
 Date: 09/04/2013  
 Model: IGRF2010



Project: Jackson Unit Section 15  
 Site: Jackson Unit 14H  
 Well: Jackson Unit 14H  
 Wellbore: Jackson Unit 14H  
 Design: Jackson Unit 14H



Azimuths to Grid North  
 True North: -0.41°  
 Magnetic North: 6.95°  
 Magnetic Field  
 Strength: 48433.8nT  
 Dip Angle: 60.14°  
 Date: 09/04/2013  
 Model: IGRF2010



Project: Jackson Unit Section 15  
 Site: Jackson Unit 14H  
 Well: Jackson Unit 14H  
 Wellbore: Jackson Unit 14H  
 Design: Jackson Unit 14H



Azimuths to Grid North  
 True North: -0.41°  
 Magnetic North: 6.95°  
 Magnetic Field  
 Strength: 48433.8nT  
 Dip Angle: 60.14°  
 Date: 09/04/2013  
 Model: IGRF2010

