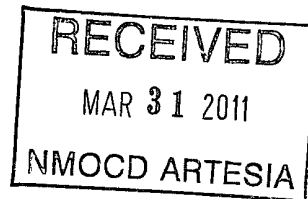


30-015-37701

## MURCHISON OIL & GAS

Black River  
Eddy County, NM  
Ogden State #9H  
VH - Job #32K12101027



Survey: Actual

## SDI Standard Survey Report

02 January, 2011

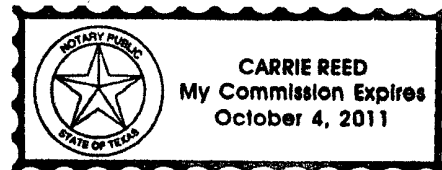
This survey is correct to the best of my knowledge and is supported by actual field data.

[Signature]

Notarized this date 17th of January, 2011.

[Signature]

Notary Signature  
County of Midland  
State of Texas



**Scientific Drilling International, Inc.**  
SDI Standard Survey Report

|                  |                       |                                     |                                     |
|------------------|-----------------------|-------------------------------------|-------------------------------------|
| <b>Company:</b>  | MURCHISON OIL & GAS   | <b>Local Co-ordinate Reference:</b> | Well Ogden State #9H                |
| <b>Project:</b>  | Black River           | <b>TVD Reference:</b>               | WELL @ 0.0usft (Original Well Elev) |
| <b>Site:</b>     | Eddy County, NM       | <b>MD Reference:</b>                | WELL @ 0.0usft (Original Well Elev) |
| <b>Well:</b>     | Ogden State #9H       | <b>North Reference:</b>             | Grid                                |
| <b>Wellbore:</b> | VH - Job #32K12101027 | <b>Survey Calculation Method:</b>   | Minimum Curvature                   |
| <b>Design:</b>   | VH - Job #32K12101027 | <b>Database:</b>                    | EDM-Regulatory                      |

|             |                                      |               |                |
|-------------|--------------------------------------|---------------|----------------|
| Project     | Black River                          |               |                |
| Map System: | US State Plane 1927 (Exact solution) | System Datum: | Mean Sea Level |
| Geo Datum:  | NAD 1927 (NADCON CONUS)              |               |                |
| Map Zone:   | New Mexico East 3001                 |               |                |

|                       |          |                 |                 |            |                   |        |
|-----------------------|----------|-----------------|-----------------|------------|-------------------|--------|
| Site                  |          | Eddy County, NM |                 |            |                   |        |
| Site Position:        |          | Northing:       | 421,054.04 usft | Latitude:  | 32° 9' 27.275 N   |        |
| From:                 | Lat/Long | Easting:        | 520,896.69 usft | Longitude: | 104° 15' 56.908 W |        |
| Position Uncertainty: |          | 0.0 usft        | Slot Radius:    | 13-3/16"   | Grid Convergence: | 0.04 ° |

|                      |                                           |          |                     |                 |               |                   |
|----------------------|-------------------------------------------|----------|---------------------|-----------------|---------------|-------------------|
| Well                 | Ogden State #9H, Directional (Pathfinder) |          |                     |                 |               |                   |
| Well Position        | +N/-S                                     | 0.0 usft | Northing:           | 421,054.04 usft | Latitude:     | 32° 9' 27.275 N   |
|                      | +E/-W                                     | 0.0 usft | Easting:            | 520,896.69 usft | Longitude:    | 104° 15' 56.908 W |
| Position Uncertainty |                                           | 0.0 usft | Wellhead Elevation: | usft            | Ground Level: | 0.0 usft          |

|           |  |  |  |  |  |                       |  |             |  |                    |  |                  |  |                        |  |
|-----------|--|--|--|--|--|-----------------------|--|-------------|--|--------------------|--|------------------|--|------------------------|--|
| Wellbore  |  |  |  |  |  | VH - Job #32K12101027 |  |             |  |                    |  |                  |  |                        |  |
| Magnetics |  |  |  |  |  | Model Name            |  | Sample Date |  | Declination<br>(°) |  | Dip Angle<br>(°) |  | Field Strength<br>(nT) |  |
|           |  |  |  |  |  | BGGM2010              |  | 12/30/2010  |  | 8.01               |  | 60.01            |  | 48,596                 |  |

|                   |  |                  |  |        |                       |        |  |               |  |     |           |  |
|-------------------|--|------------------|--|--------|-----------------------|--------|--|---------------|--|-----|-----------|--|
| Design            |  |                  |  |        | VH - Job #32K12101027 |        |  |               |  |     |           |  |
| Audit Notes:      |  |                  |  |        |                       |        |  |               |  |     |           |  |
| Version:          |  | 1.0              |  | Phase: |                       | ACTUAL |  | Tie On Depth: |  | 0.0 |           |  |
| Vertical Section: |  | Depth From (TVD) |  |        | +N/-S                 |        |  | +E/-W         |  |     | Direction |  |
|                   |  | (usft)           |  |        | (usft)                |        |  | (usft)        |  |     | (")       |  |
|                   |  | 0.0              |  |        | 0.0                   |        |  | 0.0           |  |     | 179.00    |  |

|                |              |                                |          |           |             |
|----------------|--------------|--------------------------------|----------|-----------|-------------|
| Survey Program |              | Date                           | 1/2/2011 |           |             |
| From<br>(usft) | To<br>(usft) | Survey (Wellbore)              |          | Tool Name | Description |
| 100.0          | 2,553.0      | Actual (VH - Job #32K12101027) |          | Keeper    | Keeper Gyro |

|                              |                        |                    |                            |                           |                         |                            |                                |
|------------------------------|------------------------|--------------------|----------------------------|---------------------------|-------------------------|----------------------------|--------------------------------|
| <b>Survey</b>                |                        |                    |                            |                           |                         |                            |                                |
| <b>Measured Depth (usft)</b> | <b>Inclination (°)</b> | <b>Azimuth (°)</b> | <b>True Vertical Depth</b> | <b>North/South (usft)</b> | <b>East/West (usft)</b> | <b>Closure Azimuth (°)</b> | <b>Closure Distance (usft)</b> |
| 0.0                          | 0.00                   | 0.00               | 0.0                        | 0.0                       | 0.0                     | 0.00                       | 0.0                            |
| 100.0                        | 0.36                   | 220.12             | 100.0                      | -0.2                      | -0.2                    | 220.12                     | 0.3                            |
| 200.0                        | 0.48                   | 240.76             | 200.0                      | -0.7                      | -0.8                    | 228.35                     | 1.0                            |
| 300.0                        | 0.43                   | 230.77             | 300.0                      | -1.1                      | -1.4                    | 231.69                     | 1.8                            |
| 400.0                        | 0.57                   | 250.88             | 400.0                      | -1.5                      | -2.2                    | 235.07                     | 2.7                            |
| 500.0                        | 0.61                   | 262.82             | 500.0                      | -1.8                      | -3.2                    | 241.12                     | 3.6                            |
| 600.0                        | 0.59                   | 295.19             | 600.0                      | -1.6                      | -4.2                    | 249.00                     | 4.5                            |
| 700.0                        | 0.87                   | 309.55             | 700.0                      | -0.9                      | -5.2                    | 260.22                     | 5.3                            |
| 800.0                        | 0.91                   | 322.46             | 800.0                      | 0.2                       | -6.3                    | 271.92                     | 6.3                            |
| 900.0                        | 1.25                   | 353.47             | 899.9                      | 1.9                       | -6.9                    | 285.57                     | 7.2                            |
| 1,000.0                      | 1.35                   | 341.78             | 999.9                      | 4.1                       | -7.4                    | 299.15                     | 8.5                            |
| 1,100.0                      | 1.29                   | 28.04              | 1,099.9                    | 6.2                       | -7.2                    | 310.76                     | 9.6                            |

**Scientific Drilling International, Inc.**  
SDI Standard Survey Report

|                  |                       |                                     |                                     |
|------------------|-----------------------|-------------------------------------|-------------------------------------|
| <b>Company:</b>  | MURCHISON OIL & GAS   | <b>Local Co-ordinate Reference:</b> | Well Ogden State #9H                |
| <b>Project:</b>  | Black River           | <b>TVD Reference:</b>               | WELL @ 0.0usft (Original Well Elev) |
| <b>Site:</b>     | Eddy County, NM       | <b>MD Reference:</b>                | WELL @ 0.0usft (Original Well Elev) |
| <b>Well:</b>     | Ogden State #9H       | <b>North Reference:</b>             | Grid                                |
| <b>Wellbore:</b> | VH - Job #32K12101027 | <b>Survey Calculation Method:</b>   | Minimum Curvature                   |
| <b>Design:</b>   | VH - Job #32K12101027 | <b>Database:</b>                    | EDM-Regulatory                      |

| Survey                   |                    |                |                        |                       |                     |                        |                            |
|--------------------------|--------------------|----------------|------------------------|-----------------------|---------------------|------------------------|----------------------------|
| Measured Depth<br>(usft) | Inclination<br>(°) | Azimuth<br>(°) | True Vertical<br>Depth | North/South<br>(usft) | East/West<br>(usft) | Closure Azimuth<br>(°) | Closure Distance<br>(usft) |
| 1,200.0                  | 2.17               | 83.80          | 1,199.9                | 7.4                   | -4.8                | 327.01                 | 8.9                        |
| 1,300.0                  | 2.37               | 96.30          | 1,299.8                | 7.4                   | -0.9                | 353.15                 | 7.5                        |
| 1,400.0                  | 2.65               | 93.42          | 1,399.7                | 7.1                   | 3.5                 | 26.22                  | 7.9                        |
| 1,500.0                  | 3.35               | 90.84          | 1,499.5                | 6.9                   | 8.7                 | 51.71                  | 11.1                       |
| 1,600.0                  | 3.30               | 100.76         | 1,599.4                | 6.3                   | 14.5                | 66.48                  | 15.8                       |
| 1,700.0                  | 3.45               | 104.80         | 1,699.2                | 5.0                   | 20.2                | 76.13                  | 20.8                       |
| 1,800.0                  | 2.35               | 111.14         | 1,799.1                | 3.5                   | 25.0                | 82.09                  | 25.2                       |
| 1,900.0                  | 1.60               | 121.10         | 1,899.0                | 2.0                   | 28.1                | 85.90                  | 28.2                       |
| 2,000.0                  | 1.09               | 129.72         | 1,999.0                | 0.7                   | 30.0                | 88.69                  | 30.1                       |
| 2,100.0                  | 0.82               | 134.38         | 2,099.0                | -0.4                  | 31.3                | 90.77                  | 31.3                       |
| 2,200.0                  | 0.65               | 142.32         | 2,199.0                | -1.4                  | 32.1                | 92.44                  | 32.2                       |
| 2,300.0                  | 0.44               | 161.72         | 2,299.0                | -2.2                  | 32.6                | 93.83                  | 32.7                       |
| 2,400.0                  | 0.29               | 174.69         | 2,399.0                | -2.8                  | 32.8                | 94.89                  | 32.9                       |
| 2,500.0                  | 0.54               | 194.87         | 2,499.0                | -3.5                  | 32.7                | 96.13                  | 32.8                       |
| 2,553.0                  | 0.50               | 192.98         | 2,551.9                | -4.0                  | 32.5                | 96.97                  | 32.8                       |



**Scientific Drilling**  
Directional Drilling Operations

Project: Black River  
Eddy County, NM  
Well: Ogden State #9H  
Wellbore: VH - Job #32K12101027  
Design: VH - Job #32K12101027



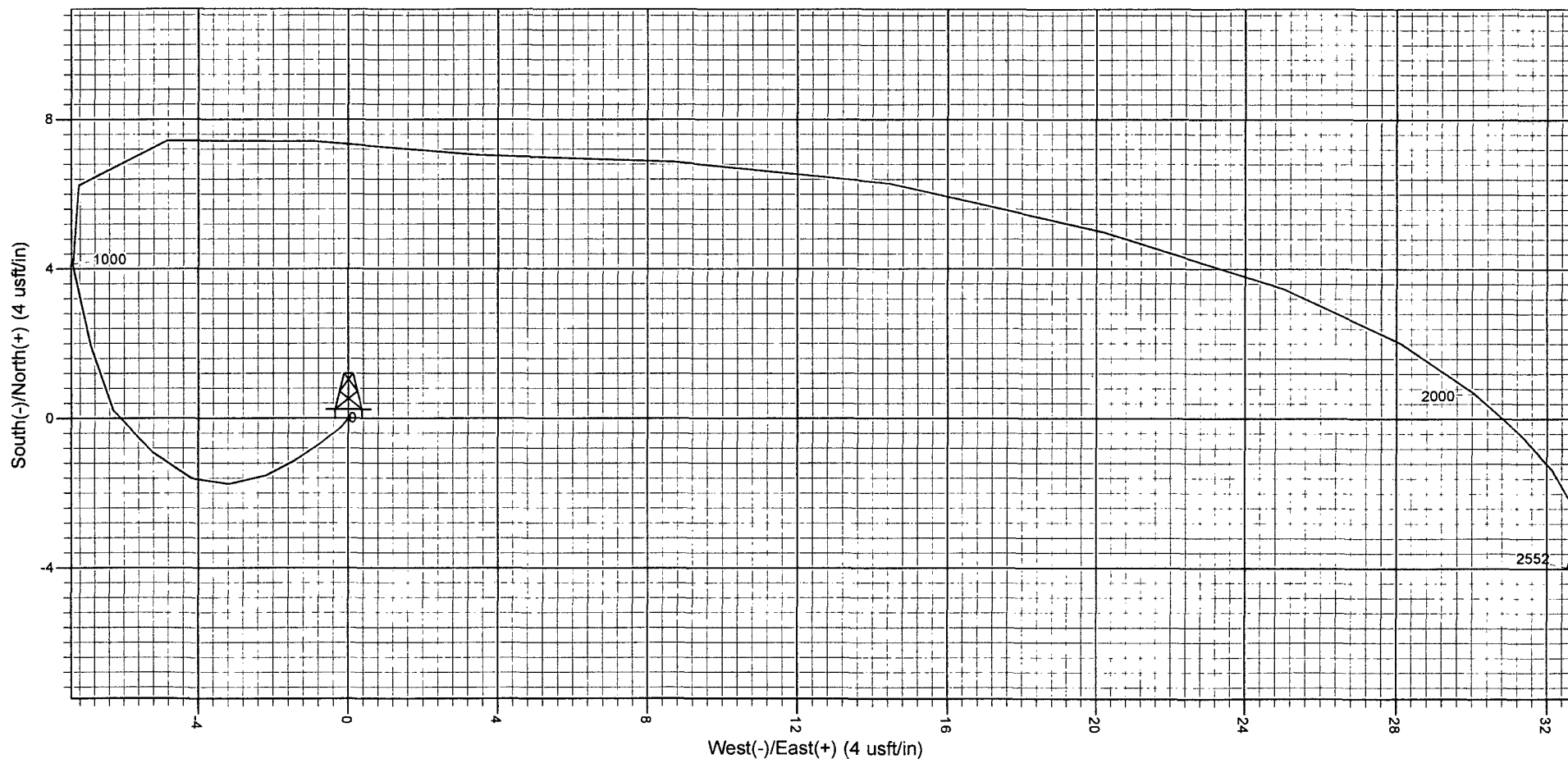
Azimuths to Grid North  
True North: -0.04°  
Magnetic North: 7.98°

Magnetic Field  
Strength: 48596.2snT  
Dip Angle: 60.01°  
Date: 12/30/2010  
Model: BGGM2010

WELL DETAILS: Ogden State #9H  
WELL @ 0.0usft (Original Well Elev)

Ground Level: 0.0

| +N/-S | +E/-W | Northing  | Easting   | Latitude        | Longitude         | Slot |
|-------|-------|-----------|-----------|-----------------|-------------------|------|
| 0.0   | 0.0   | 421054.04 | 530806.60 | 32° 0' 27.275 N | 104° 15' 56.908 W |      |



PROJECT DETAILS: Black River  
Geodetic System: US State Plane 1927 (Exact solution)  
Datum: NAD 1927 (NADCON CONUS)  
Ellipsoid: Clarke 1866  
Zone: New Mexico East 3001  
System Datum: Mean Sea Level

SITE DETAILS: Eddy County, NM  
Site Centre Latitude: 32° 9' 27.275 N  
Longitude: 104° 15' 56.908 W  
Positional Uncertainty: 0.0  
Convergence: 0.04  
Local North: Grid