

SUR: M-34-23s-29e, 400/S & 400/W  
BHL: D-34-23s-29e, 631/N & 625/W  
API # 30-015-38366

## OCCIDENTAL PERMIAN LTD.

Undesignated Delaware  
Eddy County, NM  
Cypress 34 Federal #6H  
VH - Job #32K0311236

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NMOCD ARTESIA

Survey: Actual

## SDI Standard Survey Report

18 April, 2011

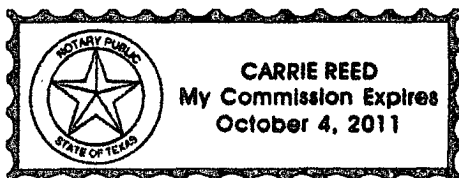
This survey is correct to the best of my knowledge and is supported by actual field data.

Lehman

Notarized this date 19th of April, 2011.

Carrie Reed

Notary Signature  
County of Midland  
State of Texas



Scientific Drilling  
Directional Drilling Operations

# Scientific Drilling International, Inc.

SDI Standard Survey Report



|                  |                        |                                     |                                     |
|------------------|------------------------|-------------------------------------|-------------------------------------|
| <b>Company:</b>  | OCCIDENTAL PERMIAN LTD | <b>Local Co-ordinate Reference:</b> | Well Cypress 34 Federal #6H         |
| <b>Project:</b>  | Undesignated Delaware  | <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>     | Cypress 34 Federal #6H | <b>North Reference:</b>             | Grid                                |
| <b>Wellbore:</b> | VH - Job #32K0311236   | <b>Survey Calculation Method:</b>   | Minimum Curvature                   |
| <b>Design:</b>   | VH - Job #32K0311236   | <b>Database:</b>                    | EDM-Regulatory                      |

|                    |                                      |                      |                |
|--------------------|--------------------------------------|----------------------|----------------|
| <b>Project:</b>    | Undesignated Delaware                |                      |                |
| <b>Map System:</b> | US State Plane 1927 (Exact solution) | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | NAD 1927 (NADCON CONUS)              |                      |                |
| <b>Map Zone:</b>   | New Mexico East 3001                 |                      |                |

|                       |          |                 |                 |                   |                  |
|-----------------------|----------|-----------------|-----------------|-------------------|------------------|
| Site                  |          | Eddy County, NM |                 |                   |                  |
| Site Position:        |          | Northing:       | 461,988 00 usft | Latitude:         | 32° 16' 8 400 N  |
| From:                 | Lat/Long | Easting:        | 664,537 94 usft | Longitude:        | 103° 48' 3 600 W |
| Position Uncertainty: | 0.0 usft | Slot Radius:    | 13-3/16"        | Grid Convergence: | 0 28 °           |

|                             |                                                    |          |                            |                 |                      |                   |
|-----------------------------|----------------------------------------------------|----------|----------------------------|-----------------|----------------------|-------------------|
| <b>Well</b>                 | Cypress 34 Federal #6H, Directional (Baker hughes) |          |                            |                 |                      |                   |
| <b>Well Position</b>        | <b>+N-S</b>                                        | 0 0 usft | <b>Northing:</b>           | 456,671 07 usft | <b>Latitude:</b>     | 32° 15' 18 034 N  |
|                             | <b>+E-W</b>                                        | 0 0 usft | <b>Easting:</b>            | 609,472 96 usft | <b>Longitude:</b>    | 103° 58' 45 142 W |
| <b>Position Uncertainty</b> |                                                    | 0 0 usft | <b>Wellhead Elevation:</b> | usft            | <b>Ground Level:</b> | 0 0 usft          |

|           |  |            |  |             |  |                      |  |           |  |                |  |
|-----------|--|------------|--|-------------|--|----------------------|--|-----------|--|----------------|--|
| Wellbore  |  |            |  |             |  | VH - Job #32K0311236 |  |           |  |                |  |
| Magnetics |  | Model Name |  | Sample Date |  | Declination          |  | Dip Angle |  | Field Strength |  |
|           |  |            |  |             |  | (°)                  |  | (°)       |  | (nT)           |  |
|           |  | IGRF2010   |  | 3/12/2011   |  | 7 81                 |  | 60 15     |  | 48,641         |  |

|                   |  |                      |               |        |           |
|-------------------|--|----------------------|---------------|--------|-----------|
| Design            |  | VH - Job #32K0311236 |               |        |           |
| 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    | 4 60      |

|                |              |                               |           |                        |  |
|----------------|--------------|-------------------------------|-----------|------------------------|--|
| Survey Program |              | Date                          | 4/18/2011 |                        |  |
| From<br>(usft) | To<br>(usft) | Survey (Wellbore)             | Tool Name | Description            |  |
| 100 0          | 6,511 6      | Actual (VH - Job #32K0311236) | Keeper    | Keeper Surface Readout |  |

|                       |                    |                |                      |                    |                  |                        |                         |  |  |
|-----------------------|--------------------|----------------|----------------------|--------------------|------------------|------------------------|-------------------------|--|--|
| <b>Survey</b>         |                    |                |                      |                    |                  |                        |                         |  |  |
| <b>Measured Depth</b> | <b>Inclination</b> | <b>Azimuth</b> | <b>True Vertical</b> | <b>North/South</b> | <b>East/West</b> | <b>Closure Azimuth</b> | <b>Closure Distance</b> |  |  |
| (usft)                | (°)                | (°)            | Depth                | (usft)             | (usft)           | (°)                    | (usft)                  |  |  |
| 0 0                   | 0 00               | 0 00           | 0 0                  | 0 0                | 0 0              | 0 00                   | 0 0                     |  |  |
| 100 0                 | 0 68               | 145 30         | 100 0                | -0 5               | 0 3              | 145 30                 | 0 6                     |  |  |
| 200 0                 | 0 08               | 63 44          | 200 0                | -0 9               | 0 7              | 141 99                 | 1 2                     |  |  |
| 300 0                 | 0 98               | 11 62          | 300 0                | -0 1               | 1 0              | 94 45                  | 1 0                     |  |  |
| 400 0                 | 1 02               | 12 14          | 400 0                | 1 6                | 1 3              | 39 22                  | 2 1                     |  |  |
| 500 0                 | 0 89               | 25 87          | 500 0                | 3 2                | 1 9              | 30 14                  | 3 7                     |  |  |
| 600 0                 | 0 81               | 28 24          | 600 0                | 4 5                | 2 5              | 29 24                  | 5 2                     |  |  |
| 700 0                 | 0 78               | 51 98          | 699 9                | 5 6                | 3 4              | 31 44                  | 6 5                     |  |  |
| 800 0                 | 0 67               | 61 97          | 799 9                | 6 3                | 4 5              | 35 44                  | 7 7                     |  |  |
| 900 0                 | 0 62               | 69 89          | 899 9                | 6 7                | 5 5              | 39 19                  | 8 7                     |  |  |
| 1,000 0               | 0 63               | 64 30          | 999 9                | 7 1                | 6 5              | 42 22                  | 9 6                     |  |  |
| 1,100 0               | 0 73               | 82 44          | 1,099 9              | 7 5                | 7 6              | 45 54                  | 10 7                    |  |  |

# Scientific Drilling International, Inc.

## SDI Standard Survey Report



|           |                        |                              |                                     |
|-----------|------------------------|------------------------------|-------------------------------------|
| Company:  | OCCIDENTAL PERMIAN LTD | Local Co-ordinate Reference: | Well Cypress 34 Federal #6H         |
| Project:  | Undesignated Delaware  | TVD Reference:               | WELL @ 0 0usft (Original Well Elev) |
| Site:     | Eddy County, NM        | MD Reference:                | WELL @ 0 0usft (Original Well Elev) |
| Well:     | Cypress 34 Federal #6H | North Reference:             | Grid                                |
| Wellbore: | VH - Job #32K0311236   | Survey Calculation Method:   | Minimum Curvature                   |
| Design:   | VH - Job #32K0311236   | Database:                    | 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                  | 0.57               | 129.10         | 1,199.9                | 7.2                   | 8.6                 | 50.01                  | 11.3                       |
| 1,300.0                  | 1.04               | 179.71         | 1,299.9                | 6.0                   | 9.0                 | 56.29                  | 10.8                       |
| 1,400.0                  | 1.27               | 180.32         | 1,399.9                | 4.0                   | 9.0                 | 66.08                  | 9.9                        |
| 1,500.0                  | 1.29               | 176.56         | 1,499.9                | 1.8                   | 9.1                 | 78.98                  | 9.2                        |
| 1,600.0                  | 1.19               | 178.81         | 1,599.8                | -0.4                  | 9.2                 | 92.46                  | 9.2                        |
| 1,700.0                  | 0.83               | 167.32         | 1,699.8                | -2.1                  | 9.3                 | 102.89                 | 9.6                        |
| 1,800.0                  | 0.69               | 159.28         | 1,799.8                | -3.4                  | 9.7                 | 109.33                 | 10.3                       |
| 1,900.0                  | 0.65               | 140.68         | 1,899.8                | -4.4                  | 10.3                | 113.20                 | 11.2                       |
| 2,000.0                  | 0.40               | 135.98         | 1,999.8                | -5.1                  | 10.9                | 115.09                 | 12.0                       |
| 2,100.0                  | 0.24               | 140.70         | 2,099.8                | -5.5                  | 11.3                | 116.07                 | 12.5                       |
| 2,200.0                  | 0.18               | 147.10         | 2,199.8                | -5.8                  | 11.5                | 116.82                 | 12.9                       |
| 2,300.0                  | 0.24               | 108.76         | 2,299.8                | -6.0                  | 11.8                | 117.04                 | 13.2                       |
| 2,400.0                  | 0.83               | 141.20         | 2,399.8                | -6.6                  | 12.4                | 118.12                 | 14.1                       |
| 2,500.0                  | 2.11               | 139.39         | 2,499.8                | -8.6                  | 14.1                | 121.43                 | 16.5                       |
| 2,600.0                  | 2.28               | 138.79         | 2,599.7                | -11.5                 | 16.6                | 124.73                 | 20.2                       |
| 2,700.0                  | 3.65               | 158.72         | 2,699.5                | -16.0                 | 19.0                | 129.95                 | 24.8                       |
| 2,800.0                  | 4.91               | 164.07         | 2,799.3                | -23.0                 | 21.4                | 137.14                 | 31.4                       |
| 2,900.0                  | 4.58               | 162.02         | 2,898.9                | -31.0                 | 23.8                | 142.46                 | 39.0                       |
| 3,000.0                  | 3.78               | 164.84         | 2,998.7                | -37.9                 | 25.9                | 145.69                 | 45.9                       |
| 3,100.0                  | 3.05               | 166.63         | 3,098.5                | -43.7                 | 27.4                | 147.95                 | 51.6                       |
| 3,200.0                  | 2.20               | 165.79         | 3,198.4                | -48.2                 | 28.4                | 149.43                 | 55.9                       |
| 3,300.0                  | 2.36               | 141.70         | 3,298.3                | -51.6                 | 30.2                | 149.68                 | 59.8                       |
| 3,400.0                  | 2.05               | 111.57         | 3,398.2                | -53.9                 | 33.1                | 148.42                 | 63.3                       |
| 3,500.0                  | 1.19               | 91.64          | 3,498.2                | -54.6                 | 35.8                | 146.72                 | 65.3                       |
| 3,600.0                  | 0.95               | 89.55          | 3,598.2                | -54.6                 | 37.7                | 145.38                 | 66.4                       |
| 3,700.0                  | 0.83               | 78.64          | 3,698.2                | -54.5                 | 39.2                | 144.23                 | 67.1                       |
| 3,800.0                  | 0.81               | 102.67         | 3,798.1                | -54.5                 | 40.6                | 143.28                 | 68.0                       |
| 3,900.0                  | 1.94               | 34.50          | 3,898.1                | -53.2                 | 42.3                | 141.54                 | 68.0                       |
| 4,000.0                  | 1.92               | 29.96          | 3,998.1                | -50.4                 | 44.1                | 138.82                 | 66.9                       |
| 4,100.0                  | 1.73               | 20.26          | 4,098.0                | -47.5                 | 45.4                | 136.28                 | 65.7                       |
| 4,200.0                  | 1.37               | 353.16         | 4,198.0                | -44.9                 | 45.8                | 134.43                 | 64.2                       |
| 4,300.0                  | 1.38               | 1.03           | 4,297.9                | -42.5                 | 45.7                | 132.94                 | 62.4                       |
| 4,400.0                  | 1.43               | 348.00         | 4,397.9                | -40.1                 | 45.5                | 131.41                 | 60.6                       |
| 4,500.0                  | 1.20               | 354.27         | 4,497.9                | -37.8                 | 45.1                | 130.00                 | 58.9                       |
| 4,600.0                  | 1.19               | 334.89         | 4,597.9                | -35.9                 | 44.6                | 128.83                 | 57.2                       |
| 4,700.0                  | 1.16               | 336.92         | 4,697.8                | -34.0                 | 43.7                | 127.86                 | 55.4                       |
| 4,800.0                  | 1.12               | 358.85         | 4,797.8                | -32.1                 | 43.3                | 126.53                 | 53.9                       |
| 4,900.0                  | 1.23               | 347.42         | 4,897.8                | -30.1                 | 43.0                | 124.92                 | 52.5                       |
| 5,000.0                  | 1.19               | 3.01           | 4,997.8                | -28.0                 | 42.9                | 123.12                 | 51.2                       |
| 5,100.0                  | 1.65               | 357.43         | 5,097.8                | -25.5                 | 42.9                | 120.75                 | 49.9                       |
| 5,200.0                  | 1.30               | 341.37         | 5,197.7                | -23.0                 | 42.4                | 118.44                 | 48.3                       |
| 5,300.0                  | 1.33               | 337.58         | 5,297.7                | -20.8                 | 41.6                | 116.59                 | 46.5                       |
| 5,400.0                  | 1.39               | 312.28         | 5,397.7                | -18.9                 | 40.3                | 115.18                 | 44.5                       |
| 5,500.0                  | 1.70               | 323.93         | 5,497.6                | -16.9                 | 38.5                | 113.73                 | 42.1                       |

# Scientific Drilling International, Inc.

## SDI Standard Survey Report



|                  |                        |                                     |                                     |
|------------------|------------------------|-------------------------------------|-------------------------------------|
| <b>Company:</b>  | OCCIDENTAL PERMIAN LTD | <b>Local Co-ordinate Reference:</b> | Well Cypress 34 Federal #6H         |
| <b>Project:</b>  | Undesignated Delaware  | <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>     | Cypress 34 Federal #6H | <b>North Reference:</b>             | Grid                                |
| <b>Wellbore:</b> | VH - Job #32K0311236   | <b>Survey Calculation Method:</b>   | Minimum Curvature                   |
| <b>Design:</b>   | VH - Job #32K0311236   | <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) |  |
| 5,600 0                  | 8 46               | 3 41           | 5,597 2                | -8 4                  | 38 1                | 102 40                 | 39 0                       |  |
| 5,700 0                  | 15 71              | 4 01           | 5,694 9                | 12 5                  | 39 5                | 72 42                  | 41 4                       |  |
| 5,800 0                  | 19 53              | 5 22           | 5,790 2                | 42 7                  | 41 9                | 44 50                  | 59 8                       |  |
| 5,900 0                  | 24 08              | 3 53           | 5,883 0                | 79 7                  | 44 7                | 29 29                  | 91 4                       |  |
| 6,000 0                  | 28 50              | 2 15           | 5,972 7                | 123 9                 | 46 9                | 20 72                  | 132 5                      |  |
| 6,100 0                  | 31 75              | 3 64           | 6,059 1                | 174 0                 | 49 4                | 15 86                  | 180 9                      |  |
| 6,200 0                  | 35 64              | 5 22           | 6,142 3                | 229 3                 | 53 8                | 13 19                  | 235 5                      |  |
| 6,300 0                  | 44 24              | 2 78           | 6,218 9                | 293 3                 | 58 1                | 11 21                  | 299 0                      |  |
| 6,400 0                  | 46 51              | 2 96           | 6,289 2                | 364 4                 | 61 7                | 9 61                   | 369 6                      |  |
| 6,500 0                  | 48 12              | 2 58           | 6,357 0                | 437 8                 | 65 2                | 8 47                   | 442 6                      |  |
| 6,511 6                  | 48 14              | 2 36           | 6,364 7                | 446 5                 | 65 6                | 8 36                   | 451 2                      |  |



**Scientific Drilling**  
Directional Drilling Operations

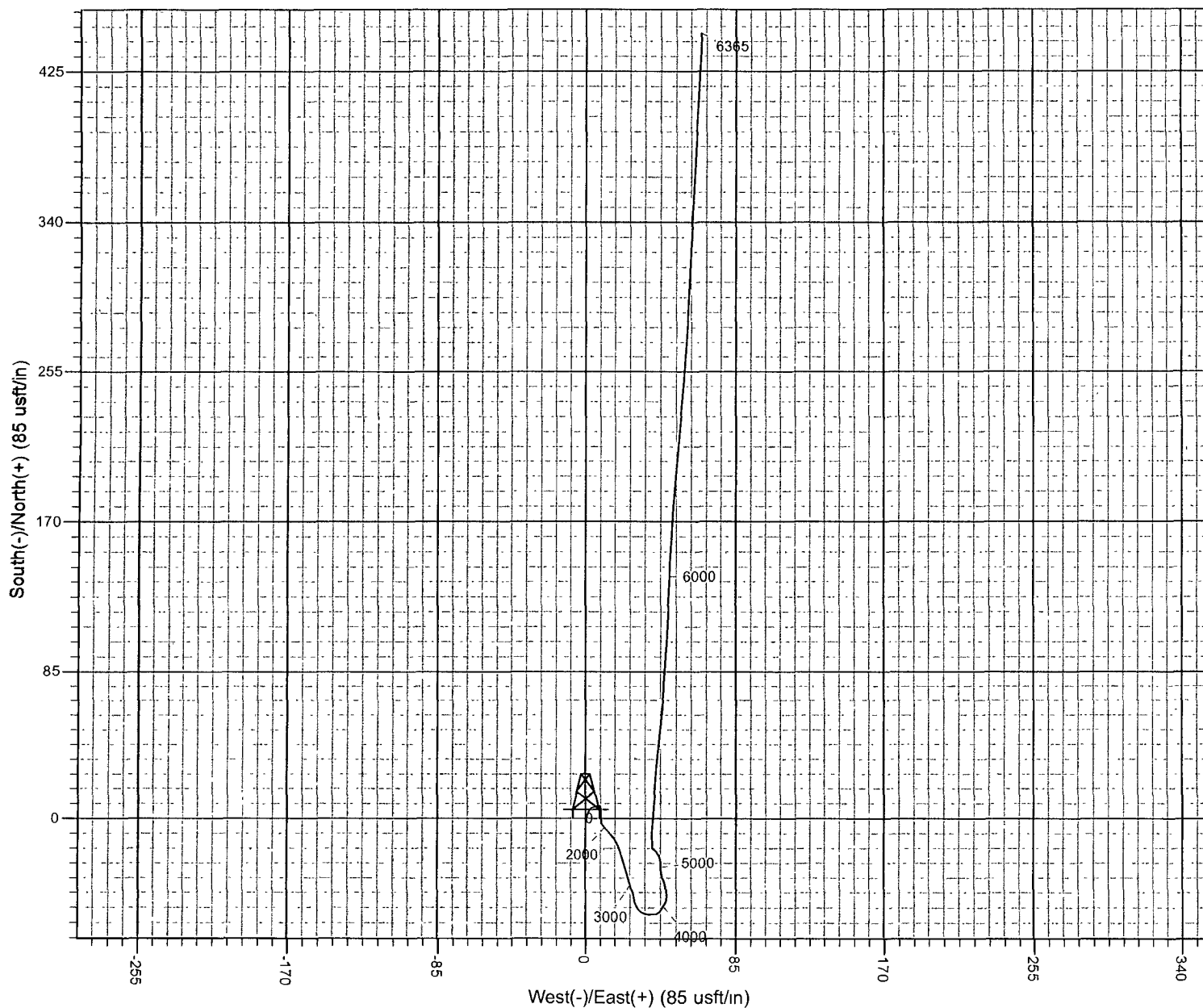
Project: Undesignated Delaware  
Eddy County, NM  
Well: Cypress 34 Federal #6H  
Wellbore: VH - Job #32K0311236  
Design: VH - Job #32K0311236



Azimuths to Grid North  
True North -0 19°  
Magnetic North 7 62°  
Magnetic Field  
Strength, 48641 1snT  
Dip Angle 60 15°  
Date 3/12/2011  
Model IGRF2010

WELL DETAILS: Cypress 34 Federal #6H  
WELL @ 0.0usft (Original Well Elev)  
Ground Level: 0.0

| +N/-S | +E/-W | Northing  | Easting   | Latitude         | Longitude         | Slot |
|-------|-------|-----------|-----------|------------------|-------------------|------|
| 0.0   | 0.0   | 456671.07 | 609472.96 | 32° 15' 18.034 N | 103° 58' 45.142 W |      |



PROJECT DETAILS: Undesignated Delaware  
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° 16' 8 400 N  
Longitude: 103° 48' 3.600 W  
Positional Uncertainty: 0.0  
Convergence: 0.28  
Local North: Grid