

30 015 36823

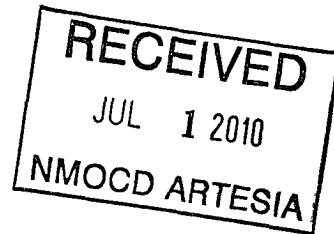
# **Cimarex Energy Co.**

Eddy County (NM83E)

Sec 3 - T17S - R30E

Poseidon 3 Fed #3

Wellbore #1



Survey: MWD Survey

## **Standard Survey Report**

24 March, 2010

*MR*

# Cimarex Energy Co.

Project Eddy County (NM83E)  
Site Sec 3 - T17S - R30E  
Well Poseidon 3 Fed #3  
Wellbore Wellbore #1  
Design Plan #3

WELL DETAILS Poseidon 3 Fed #3

+N/-S 0 0  
+E/-W 0 0  
Northing 675695 70

Ground Level 0 0  
Easting 654740 40  
Latitude 32° 51' 25 076 N

Longitude 103° 57' 50 502 W

Slot

SHL 250' FSL / 1330' FWL  
BHL 700' FSL / 1330' FWL



Azimuths to Grid North

Total Correction: 7.77°

Magnetic Field  
Strength 49152 2snT  
Dip Angle 60.76°  
Date 2010/01/15  
Model IGRF200510

## SECTION DETAILS

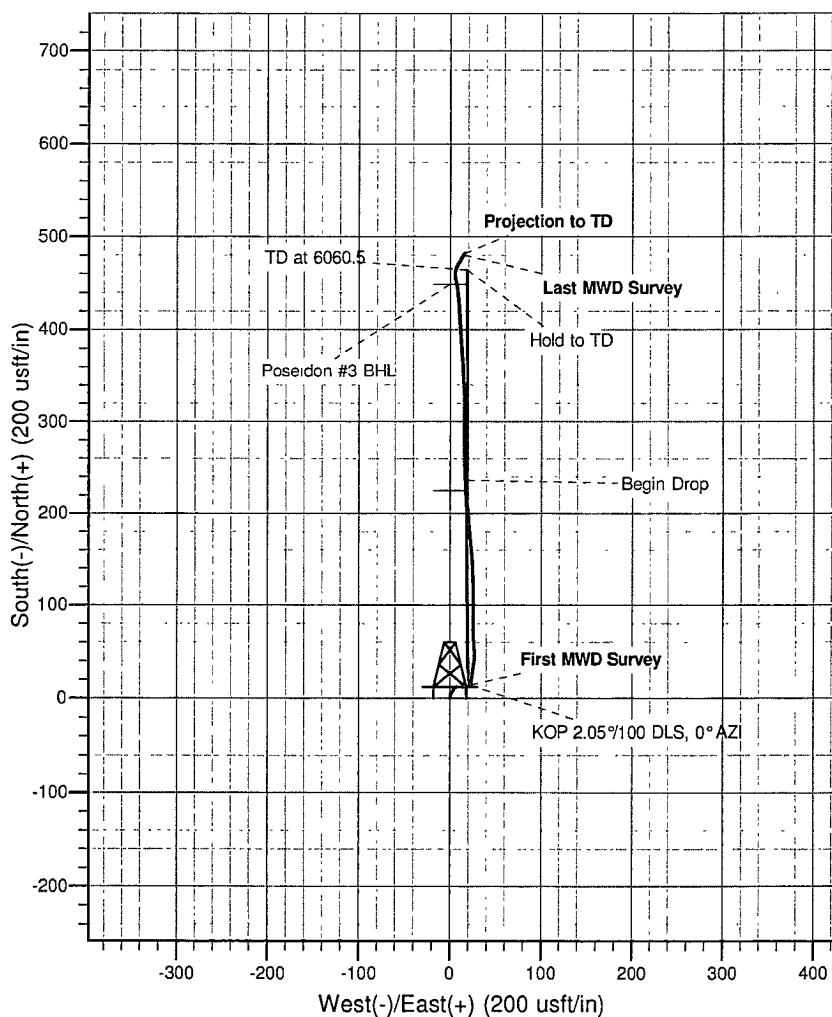
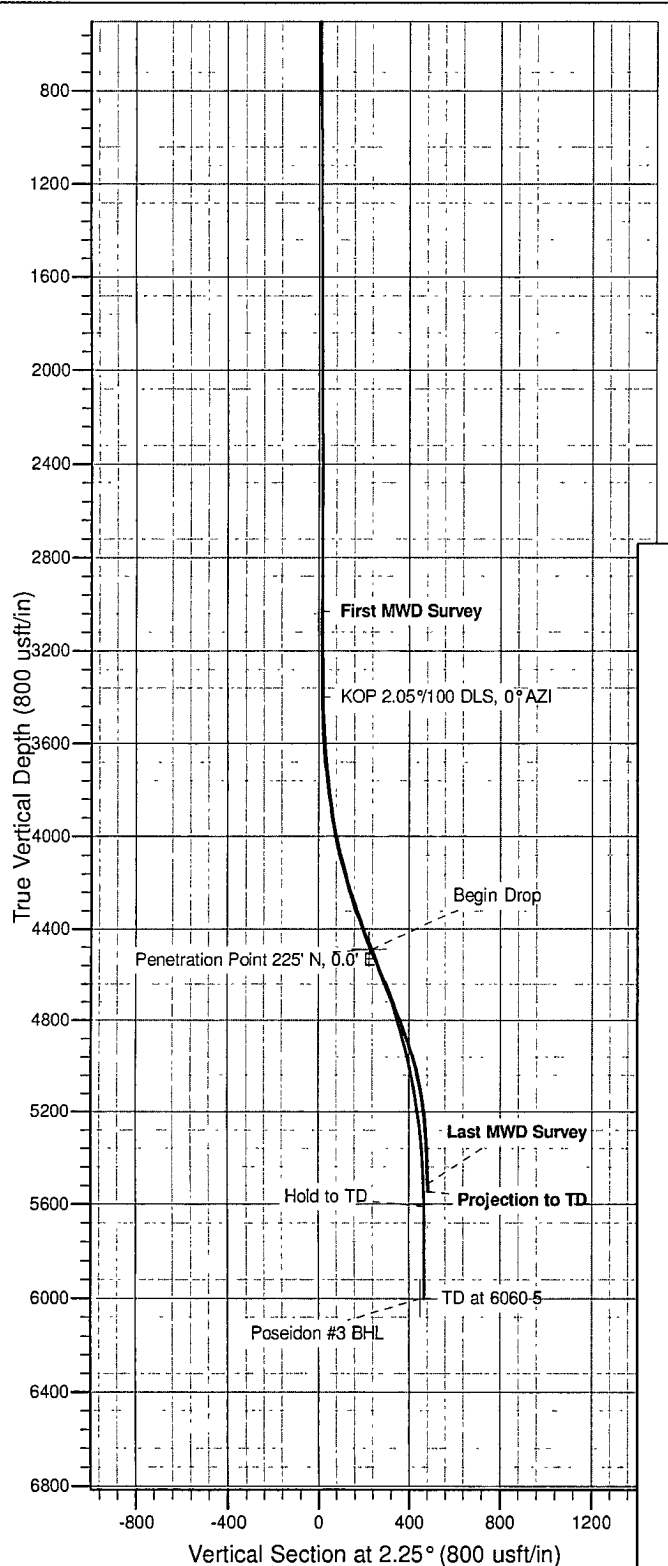
| Sec | MD     | Inc   | Azi    | TVD    | +N/-S | +E/-W | Dleg | TFace  | Vsect | Target |
|-----|--------|-------|--------|--------|-------|-------|------|--------|-------|--------|
| 1   | 3019 2 | 0 29  | 271 12 | 3019 0 | 14 8  | 23 0  | 0 00 | 0 00   | 15 7  |        |
| 2   | 3400 0 | 0 29  | 271 12 | 3399 8 | 14 8  | 21 1  | 0 00 | 0 00   | 15 6  |        |
| 3   | 4520 0 | 23 00 | 0 00   | 4489 9 | 236 7 | 18 2  | 2 05 | 89 56  | 237 2 |        |
| 4   | 5670 0 | 0 00  | 0 00   | 5609 3 | 464 4 | 18 2  | 2 00 | 180 00 | 464 8 |        |
| 5   | 6060 7 | 0 00  | 0 00   | 6000 0 | 464 4 | 18 2  | 0 00 | 0 00   | 464 8 |        |

## ANNOTATIONS

| TVD    | MD     | Inc   | Azi    | +N/-S | +E/-W | Vsect | Departure | Annotation                |
|--------|--------|-------|--------|-------|-------|-------|-----------|---------------------------|
| 3399 8 | 3400 0 | 0 29  | 271 12 | 14 8  | 21 1  | 15 6  | 1.9       | KOP 2.05°/100 DLS, 0° AZI |
| 4489 9 | 4520 0 | 23 00 | 0 00   | 236 7 | 18 2  | 237 2 | 224 1     | Begin Drop                |
| 5609 3 | 5670 0 | 0 00  | 0 00   | 464 4 | 18 2  | 464 8 | 451 8     | Hold to TD                |
| 5999 8 | 6060 5 | 0 00  | 0 00   | 464 4 | 18 2  | 464 8 | 451 8     | TD at 6060 5              |

## WELLBORE TARGET DETAILS

| Name                             | TVD    | +N/-S | +E/-W | Northing  | Easting   | Point |
|----------------------------------|--------|-------|-------|-----------|-----------|-------|
| Penetration Point 225° N, 0 0° E | 4490 0 | 225 0 | 0 0   | 675920 70 | 654740 40 | Point |
| Poseidon #3 BHL                  | 6000 0 | 449 3 | 0 0   | 676145 00 | 654740 40 | Point |



# Great White Directional Services

## Survey Report

|           |                     |                              |                                     |
|-----------|---------------------|------------------------------|-------------------------------------|
| Company:  | Cimarex Energy Co   | Local Co-ordinate Reference: | Well Poseidon 3 Fed #3              |
| Project:  | Eddy County (NM83E) | TVD Reference:               | WELL @ 0.0usft (Original Well Elev) |
| Site:     | Sec 3 - T17S - R30E | MD Reference:                | WELL @ 0.0usft (Original Well Elev) |
| Well:     | Poseidon 3 Fed #3   | North Reference:             | Grid                                |
| Wellbore: | Wellbore #1         | Survey Calculation Method:   | Minimum Curvature                   |
| Design:   | Wellbore #1         | Database:                    | EDM-5000.1 Single User Db           |

|             |                           |                     |                |
|-------------|---------------------------|---------------------|----------------|
| Project:    |                           | Eddy County (NM83E) |                |
| Map System: | US State Plane 1983       | System Datum:       | Mean Sea Level |
| Geo Datum:  | North American Datum 1983 |                     |                |
| Map Zone:   | New Mexico Eastern Zone   |                     |                |

|                       |  |           |  |                 |  |                     |  |                   |  |                   |  |
|-----------------------|--|-----------|--|-----------------|--|---------------------|--|-------------------|--|-------------------|--|
| Site                  |  |           |  |                 |  | Sec 3 - T17S - R30E |  |                   |  |                   |  |
| Site Position:        |  | Northing: |  | 675,695.70 usft |  | Latitude:           |  | 32° 51' 25.076 N  |  |                   |  |
| From:                 |  | Map       |  | Easting:        |  | 654,740.40 usft     |  | Longitude:        |  | 103° 57' 50.502 W |  |
| Position Uncertainty: |  | 0.0 usft  |  | Slot Radius:    |  | 13-3/16 "           |  | Grid Convergence: |  | 0.20 °            |  |

|                      |                   |                     |           |                 |            |                   |
|----------------------|-------------------|---------------------|-----------|-----------------|------------|-------------------|
| Well                 | Poseidon 3 Fed #3 |                     |           |                 |            |                   |
| Well Position        | +N/-S             | 0.0 usft            | Northing: | 675,695.70 usft | Latitude:  | 32° 51' 25.076 N  |
|                      | +E/-W             | 0.0 usft            | Easting:  | 654,740.40 usft | Longitude: | 103° 57' 50.502 W |
| Position Uncertainty | 0.0 usft          | Wellhead Elevation: | usft      | Ground Level:   | 0.0 usft   |                   |

|           |             |             |                    |                  |                        |
|-----------|-------------|-------------|--------------------|------------------|------------------------|
| Wellbore  | Wellbore #1 |             |                    |                  |                        |
| Magnetics | Model Name  | Sample Date | Declination<br>(°) | Dip Angle<br>(°) | Field Strength<br>(nT) |
|           | IGRF200510  | 2010/01/15  | 7.97               | 60.76            | 49,152                 |

|                   |                            |                 |                 |                  |     |
|-------------------|----------------------------|-----------------|-----------------|------------------|-----|
| Design            |                            | Wellbore #1     |                 |                  |     |
| Audit Notes:      |                            |                 |                 |                  |     |
| Version:          | 1.0                        | Phase:          | ACTUAL          | Tie On Depth:    | 0.0 |
| Vertical Section: | Depth From (TVD)<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Direction<br>(°) |     |
|                   | 0.0                        | 0.0             | 0.0             | 0.00             |     |

| Survey Program |              | Date                     | 2010/03/24 |                |
|----------------|--------------|--------------------------|------------|----------------|
| From<br>(usft) | To<br>(usft) | Survey (Wellbore)        | Tool Name  | Description    |
| 31.0           | 3,019.2      | Gyro (Wellbore #1)       | MWD        | MWD - Standard |
| 3,031.0        | 5,614.0      | MWD Survey (Wellbore #1) | MWD        | MWD - Standard |

| Measured<br>Depth<br>(usft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Vertical<br>Section<br>(usft) | Dogleg<br>Rate<br>(°/100ft) | Build<br>Rate<br>(°/100ft) | Turn<br>Rate<br>(°/100ft) |
|-----------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|-----------------------------|----------------------------|---------------------------|
| 3,019.2                     | 0.29               | 271.12         | 3,019.0                     | 14.8            | 23.0            | 14.8                          | 0.00                        | 0.00                       | 0.00                      |
| 3,031.0                     | 0.40               | 339.70         | 3,030.8                     | 14.8            | 23.0            | 14.8                          | 3.38                        | 0.93                       | 581.19                    |
| <b>First MWD Survey</b>     |                    |                |                             |                 |                 |                               |                             |                            |                           |
| 3,062.0                     | 0.40               | 315.60         | 3,061.8                     | 15.0            | 22.9            | 15.0                          | 0.54                        | 0.00                       | -77.74                    |
| 3,093.0                     | 0.50               | 323.00         | 3,092.8                     | 15.2            | 22.7            | 15.2                          | 0.37                        | 0.32                       | 23.87                     |
| 3,124.0                     | 0.20               | 335.50         | 3,123.8                     | 15.3            | 22.6            | 15.3                          | 0.99                        | -0.97                      | 40.32                     |
| 3,155.0                     | 0.50               | 334.30         | 3,154.8                     | 15.5            | 22.5            | 15.5                          | 0.97                        | 0.97                       | -3.87                     |
| 3,186.0                     | 0.40               | 302.60         | 3,185.8                     | 15.7            | 22.4            | 15.7                          | 0.85                        | -0.32                      | -102.26                   |
| 3,218.0                     | 0.40               | 317.50         | 3,217.8                     | 15.8            | 22.2            | 15.8                          | 0.32                        | 0.00                       | 46.56                     |
| 3,249.0                     | 0.20               | 41.10          | 3,248.8                     | 16.0            | 22.2            | 16.0                          | 1.38                        | -0.65                      | 269.68                    |

# Great White Directional Services

## Survey Report

|                  |                     |                                     |                                     |
|------------------|---------------------|-------------------------------------|-------------------------------------|
| <b>Company:</b>  | Cimarex Energy Co.  | <b>Local Co-ordinate Reference:</b> | Well Poseidon 3 Fed #3              |
| <b>Project:</b>  | Eddy County (NM83E) | <b>TVD Reference:</b>               | WELL @ 0.0usft (Original Well Elev) |
| <b>Site:</b>     | Sec 3 - T17S - R30E | <b>MD Reference:</b>                | WELL @ 0.0usft (Original Well Elev) |
| <b>Well:</b>     | Poseidon 3 Fed #3   | <b>North Reference:</b>             | Grid                                |
| <b>Wellbore:</b> | Wellbore #1         | <b>Survey Calculation Method:</b>   | Minimum Curvature                   |
| <b>Design:</b>   | Wellbore #1         | <b>Database:</b>                    | EDM 5000.1 Single User Db           |

| Survey                           |                 |             |                       |              |              |                         |                       |                      |                     |  |
|----------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-----------------------|----------------------|---------------------|--|
| Measured Depth (usft)            | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |  |
| 3,280.0                          | 0.20            | 319.30      | 3,279.8               | 16.0         | 22.2         | 16.0                    | 0.84                  | 0.00                 | -263.87             |  |
| 3,311.0                          | 0.10            | 87.80       | 3,310.8               | 16.1         | 22.1         | 16.1                    | 0.88                  | -0.32                | 414.52              |  |
| 3,342.0                          | 0.10            | 186.90      | 3,341.8               | 16.1         | 22.2         | 16.1                    | 0.49                  | 0.00                 | 319.68              |  |
| 3,373.0                          | 0.10            | 174.50      | 3,372.8               | 16.0         | 22.2         | 16.0                    | 0.07                  | 0.00                 | -40.00              |  |
| 3,404.0                          | 0.10            | 308.30      | 3,403.8               | 16.0         | 22.2         | 16.0                    | 0.59                  | 0.00                 | 431.61              |  |
| 3,435.0                          | 1.60            | 9.90        | 3,434.8               | 16.4         | 22.2         | 16.4                    | 5.02                  | 4.84                 | 198.71              |  |
| 3,467.0                          | 3.50            | 8.60        | 3,466.7               | 17.8         | 22.4         | 17.8                    | 5.94                  | 5.94                 | -4.06               |  |
| 3,498.0                          | 3.70            | 9.40        | 3,497.7               | 19.8         | 22.7         | 19.8                    | 0.67                  | 0.65                 | 2.58                |  |
| 3,529.0                          | 3.70            | 7.30        | 3,528.6               | 21.7         | 23.0         | 21.7                    | 0.44                  | 0.00                 | -6.77               |  |
| 3,560.0                          | 3.70            | 7.20        | 3,559.5               | 23.7         | 23.3         | 23.7                    | 0.02                  | 0.00                 | -0.32               |  |
| 3,591.0                          | 4.00            | 10.80       | 3,590.5               | 25.8         | 23.6         | 25.8                    | 1.24                  | 0.97                 | 11.61               |  |
| 3,622.0                          | 3.70            | 11.70       | 3,621.4               | 27.8         | 24.0         | 27.8                    | 0.99                  | -0.97                | 2.90                |  |
| 3,653.0                          | 4.10            | 11.40       | 3,652.3               | 29.9         | 24.4         | 29.9                    | 1.29                  | 1.29                 | -0.97               |  |
| 3,684.0                          | 4.60            | 10.10       | 3,683.2               | 32.2         | 24.9         | 32.2                    | 1.64                  | 1.61                 | -4.19               |  |
| 3,715.0                          | 6.00            | 9.00        | 3,714.1               | 35.0         | 25.3         | 35.0                    | 4.53                  | 4.52                 | -3.55               |  |
| 3,746.0                          | 6.10            | 8.40        | 3,744.9               | 38.3         | 25.8         | 38.3                    | 0.38                  | 0.32                 | -1.94               |  |
| 3,778.0                          | 6.60            | 9.30        | 3,776.7               | 41.8         | 26.4         | 41.8                    | 1.59                  | 1.56                 | 2.81                |  |
| 3,809.0                          | 7.30            | 357.50      | 3,807.5               | 45.5         | 26.6         | 45.5                    | 5.12                  | 2.26                 | -38.06              |  |
| 3,840.0                          | 8.70            | 357.30      | 3,838.2               | 49.8         | 26.4         | 49.8                    | 4.52                  | 4.52                 | -0.65               |  |
| 3,871.0                          | 8.50            | 355.70      | 3,868.9               | 54.4         | 26.1         | 54.4                    | 1.01                  | -0.65                | -5.16               |  |
| 3,902.0                          | 9.30            | 355.50      | 3,899.5               | 59.2         | 25.7         | 59.2                    | 2.58                  | 2.58                 | -0.65               |  |
| 3,933.0                          | 9.30            | 357.80      | 3,930.1               | 64.2         | 25.4         | 64.2                    | 1.20                  | 0.00                 | 7.42                |  |
| 3,964.0                          | 10.70           | 357.80      | 3,960.6               | 69.6         | 25.2         | 69.6                    | 4.52                  | 4.52                 | 0.00                |  |
| 3,995.0                          | 11.20           | 0.00        | 3,991.0               | 75.5         | 25.1         | 75.5                    | 2.10                  | 1.61                 | 7.10                |  |
| 4,026.0                          | 11.20           | 359.60      | 4,021.4               | 81.5         | 25.1         | 81.5                    | 0.25                  | 0.00                 | -1.29               |  |
| 4,058.0                          | 12.70           | 0.50        | 4,052.8               | 88.1         | 25.1         | 88.1                    | 4.72                  | 4.69                 | 2.81                |  |
| 4,088.0                          | 14.80           | 359.60      | 4,081.9               | 95.2         | 25.1         | 95.2                    | 7.04                  | 7.00                 | -3.00               |  |
| 4,119.0                          | 14.90           | 0.00        | 4,111.9               | 103.2        | 25.1         | 103.2                   | 0.46                  | 0.32                 | 1.29                |  |
| 4,150.0                          | 15.20           | 359.40      | 4,141.8               | 111.2        | 25.0         | 111.2                   | 1.09                  | 0.97                 | -1.94               |  |
| 4,181.0                          | 16.50           | 359.50      | 4,171.6               | 119.7        | 25.0         | 119.7                   | 4.19                  | 4.19                 | 0.32                |  |
| 4,212.0                          | 16.70           | 357.30      | 4,201.3               | 128.6        | 24.7         | 128.6                   | 2.13                  | 0.65                 | -7.10               |  |
| 4,243.0                          | 16.60           | 357.80      | 4,231.0               | 137.4        | 24.3         | 137.4                   | 0.56                  | -0.32                | 1.61                |  |
| 4,275.0                          | 17.40           | 355.20      | 4,261.6               | 146.8        | 23.8         | 146.8                   | 3.45                  | 2.50                 | -8.13               |  |
| 4,306.0                          | 17.70           | 353.40      | 4,291.2               | 156.1        | 22.8         | 156.1                   | 2.00                  | 0.97                 | -5.81               |  |
| 4,337.0                          | 19.10           | 354.70      | 4,320.6               | 165.8        | 21.8         | 165.8                   | 4.71                  | 4.52                 | 4.19                |  |
| 4,368.0                          | 21.20           | 355.10      | 4,349.7               | 176.4        | 20.9         | 176.4                   | 6.79                  | 6.77                 | 1.29                |  |
| 4,399.0                          | 20.90           | 354.70      | 4,378.6               | 187.5        | 19.9         | 187.5                   | 1.07                  | -0.97                | -1.29               |  |
| 4,430.0                          | 21.50           | 355.90      | 4,407.5               | 198.7        | 19.0         | 198.7                   | 2.39                  | 1.94                 | 3.87                |  |
| 4,461.0                          | 21.50           | 355.90      | 4,436.4               | 210.0        | 18.2         | 210.0                   | 0.00                  | 0.00                 | 0.00                |  |
| 4,493.0                          | 22.20           | 357.30      | 4,466.1               | 221.9        | 17.5         | 221.9                   | 2.73                  | 2.19                 | 4.38                |  |
| 4,516.6                          | 22.43           | 357.99      | 4,487.9               | 230.9        | 17.1         | 230.9                   | 1.47                  | 0.97                 | 2.91                |  |
| Penetration Point 225° N, 0.0° E |                 |             |                       |              |              |                         |                       |                      |                     |  |
| 4,524.0                          | 22.50           | 358.20      | 4,494.7               | 233.7        | 17.0         | 233.7                   | 1.47                  | 0.97                 | 2.88                |  |

# Great White Directional Services

## Survey Report

|                  |                     |                                     |                                     |
|------------------|---------------------|-------------------------------------|-------------------------------------|
| <b>Company:</b>  | Cimarex Energy Co.  | <b>Local Co-ordinate Reference:</b> | Well Poseidon 3 Fed #3              |
| <b>Project:</b>  | Eddy County (NM83E) | <b>TVD Reference:</b>               | WELL @ 0.0usft (Original Well Elev) |
| <b>Site:</b>     | Sec 3 - T17S - R30E | <b>MD Reference:</b>                | WELL @ 0.0usft (Original Well Elev) |
| <b>Well:</b>     | Poseidon 3 Fed #3   | <b>North Reference:</b>             | Grid                                |
| <b>Wellbore:</b> | Wellbore #1         | <b>Survey Calculation Method:</b>   | Minimum Curvature                   |
| <b>Design:</b>   | Wellbore #1         | <b>Database:</b>                    | EDM 5000.1 Single User Db           |

| Survey                             |                 |             |                       |              |              |                         |                       |                      |                     |
|------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-----------------------|----------------------|---------------------|
| Measured Depth (usft)              | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 4,555.0                            | 22.80           | 357.60      | 4,523.4               | 245.6        | 16.6         | 245.6                   | 1.22                  | 0.97                 | -1.94               |
| 4,586.0                            | 22.40           | 358.20      | 4,552.0               | 257.5        | 16.1         | 257.5                   | 1.49                  | -1.29                | 1.94                |
| 4,617.0                            | 22.40           | 358.50      | 4,580.6               | 269.3        | 15.8         | 269.3                   | 0.37                  | 0.00                 | 0.97                |
| 4,648.0                            | 22.70           | 358.20      | 4,609.3               | 281.2        | 15.4         | 281.2                   | 1.04                  | 0.97                 | -0.97               |
| 4,679.0                            | 21.60           | 0.90        | 4,638.0               | 292.9        | 15.3         | 292.9                   | 4.83                  | -3.55                | 8.71                |
| 4,711.0                            | 21.60           | 1.70        | 4,667.7               | 304.7        | 15.6         | 304.7                   | 0.92                  | 0.00                 | 2.50                |
| 4,742.0                            | 21.70           | 0.10        | 4,696.5               | 316.1        | 15.8         | 316.1                   | 1.93                  | 0.32                 | -5.16               |
| 4,773.0                            | 21.30           | 358.00      | 4,725.4               | 327.5        | 15.6         | 327.5                   | 2.80                  | -1.29                | -6.77               |
| 4,808.0                            | 21.50           | 356.50      | 4,758.0               | 340.2        | 15.0         | 340.2                   | 1.66                  | 0.57                 | -4.29               |
| 4,835.0                            | 21.40           | 357.20      | 4,783.1               | 350.1        | 14.4         | 350.1                   | 1.02                  | -0.37                | 2.59                |
| 4,866.0                            | 21.20           | 356.60      | 4,812.0               | 361.3        | 13.8         | 361.3                   | 0.95                  | -0.65                | -1.94               |
| 4,898.0                            | 19.70           | 355.60      | 4,842.0               | 372.5        | 13.1         | 372.5                   | 4.81                  | -4.69                | -3.13               |
| 4,929.0                            | 19.20           | 356.10      | 4,871.2               | 382.8        | 12.3         | 382.8                   | 1.70                  | -1.61                | 1.61                |
| 4,960.0                            | 19.50           | 355.80      | 4,900.4               | 393.0        | 11.6         | 393.0                   | 1.02                  | 0.97                 | -0.97               |
| 4,991.0                            | 19.10           | 356.80      | 4,929.7               | 403.2        | 10.9         | 403.2                   | 1.67                  | -1.29                | 3.23                |
| 5,022.0                            | 17.60           | 357.10      | 4,959.1               | 413.0        | 10.4         | 413.0                   | 4.85                  | -4.84                | 0.97                |
| 5,053.0                            | 15.10           | 356.20      | 4,988.9               | 421.7        | 9.9          | 421.7                   | 8.11                  | -8.06                | -2.90               |
| 5,084.0                            | 13.40           | 355.30      | 5,018.9               | 429.3        | 9.3          | 429.3                   | 5.53                  | -5.48                | -2.90               |
| 5,116.0                            | 11.90           | 352.30      | 5,050.1               | 436.3        | 8.6          | 436.3                   | 5.12                  | -4.69                | -9.38               |
| 5,147.0                            | 12.20           | 354.30      | 5,080.5               | 442.7        | 7.8          | 442.7                   | 1.66                  | 0.97                 | 6.45                |
| 5,178.0                            | 9.80            | 346.70      | 5,110.9               | 448.5        | 6.9          | 448.5                   | 9.03                  | -7.74                | -24.52              |
| 5,209.0                            | 8.50            | 345.40      | 5,141.5               | 453.3        | 5.7          | 453.3                   | 4.25                  | -4.19                | -4.19               |
| 5,240.0                            | 7.80            | 355.20      | 5,172.2               | 457.6        | 5.0          | 457.6                   | 5.01                  | -2.26                | 31.61               |
| 5,271.0                            | 6.90            | 6.50        | 5,202.9               | 461.6        | 5.0          | 461.6                   | 5.48                  | -2.90                | 36.45               |
| 5,303.0                            | 6.00            | 19.70       | 5,234.7               | 465.1        | 5.8          | 465.1                   | 5.40                  | -2.81                | 41.25               |
| 5,334.0                            | 5.80            | 35.00       | 5,265.6               | 467.9        | 7.2          | 467.9                   | 5.10                  | -0.65                | 49.35               |
| 5,365.0                            | 5.80            | 32.30       | 5,296.4               | 470.5        | 9.0          | 470.5                   | 0.88                  | 0.00                 | -8.71               |
| 5,396.0                            | 4.40            | 33.00       | 5,327.3               | 472.8        | 10.5         | 472.8                   | 4.52                  | -4.52                | 2.26                |
| 5,427.0                            | 3.20            | 25.40       | 5,358.2               | 474.6        | 11.5         | 474.6                   | 4.19                  | -3.87                | -24.52              |
| 5,458.0                            | 2.70            | 25.00       | 5,389.2               | 476.0        | 12.2         | 476.0                   | 1.61                  | -1.61                | -1.29               |
| 5,489.0                            | 2.00            | 27.00       | 5,420.1               | 477.2        | 12.7         | 477.2                   | 2.27                  | -2.26                | 6.45                |
| 5,521.0                            | 2.10            | 29.00       | 5,452.1               | 478.2        | 13.3         | 478.2                   | 0.38                  | 0.31                 | 6.25                |
| 5,552.0                            | 2.00            | 30.10       | 5,483.1               | 479.1        | 13.8         | 479.1                   | 0.35                  | -0.32                | 3.55                |
| 5,583.0                            | 3.30            | 27.60       | 5,514.1               | 480.4        | 14.5         | 480.4                   | 4.21                  | 4.19                 | -8.06               |
| Last MWD Survey                    |                 |             |                       |              |              |                         |                       |                      |                     |
| 5,614.0                            | 4.00            | 27.10       | 5,545.0               | 482.2        | 15.4         | 482.2                   | 2.26                  | 2.26                 | -1.61               |
| Projection to TD - Poseidon #3 BHL |                 |             |                       |              |              |                         |                       |                      |                     |

# Great White Directional Services

## Survey Report

|           |                     |                              |                                     |
|-----------|---------------------|------------------------------|-------------------------------------|
| Company:  | Cimarex Energy Co.  | Local Co-ordinate Reference: | Well Poseidon 3 Fed #3              |
| Project:  | Eddy County (NM83E) | TVD Reference:               | WELL @ 0.0usft (Original Well Elev) |
| Site:     | Sec 3 - T17S - R30E | MD Reference:                | WELL @ 0.0usft (Original Well Elev) |
| Well:     | Poseidon 3 Fed #3   | North Reference:             | Grid                                |
| Wellbore: | Wellbore #1         | Survey Calculation Method:   | Minimum Curvature                   |
| Design:   | Wellbore #1         | Database:                    | EDM 5000.1 Single User Db           |

| Survey Annotations    |                       |                   |              |                  |
|-----------------------|-----------------------|-------------------|--------------|------------------|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              | Comment          |
|                       |                       | +N/-S (usft)      | +E/-W (usft) |                  |
| 3,031.0               | 3,030.8               | 14.8              | 23.0         | First MWD Survey |
| 5,583.0               | 5,514.1               | 480.4             | 14.5         | Last MWD Survey  |
| 5,614.0               | 5,545.0               | 482.2             | 15.4         | Projection to TD |

|                   |                    |             |
|-------------------|--------------------|-------------|
| Checked By: _____ | Approved By: _____ | Date: _____ |
|-------------------|--------------------|-------------|