

# Mewbourne Oil Co

Eddy County, New Mexico

Sec 35, T23S, R28E

Layla 35 MD Fee #2H

Wellbore #1

Plan: Design #2

## DDC Well Planning Report

11 December, 2013

Oil Conservation Division  
Case No. \_\_\_\_\_  
Exhibit No. 11

**DDC**  
THE DIRECTIONAL DRILLING COMPANY

DDC  
Well Planning Report



|           |                           |                              |                                   |
|-----------|---------------------------|------------------------------|-----------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well Layla 35 MD Fee #2H          |
| Company:  | Mewbourne Oil Co          | TVD Reference:               | WELL @ 3038.0usft (Patterson UTI) |
| Project:  | Eddy County, New Mexico   | MD Reference:                | WELL @ 3038.0usft (Patterson UTI) |
| Site:     | Sec 35, T23S, R28E        | North Reference:             | Grid                              |
| Well:     | Layla 35 MD Fee #2H       | Survey Calculation Method:   | Minimum Curvature                 |
| Wellbore: | Wellbore #1               |                              |                                   |
| Design:   | Design #2                 |                              |                                   |

|             |                                      |               |                |
|-------------|--------------------------------------|---------------|----------------|
| Project     | Eddy County, New Mexico              |               |                |
| 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                  | Sec 35, T23S, R28E |                                                                     |                                                                         |
| Site Position:        | Map                | <b>Northing:</b> 456,438.18 usft<br><b>Easting:</b> 585,924.08 usft | <b>Latitude:</b> 32° 15' 16.415 N<br><b>Longitude:</b> 104° 3' 19.382 W |
| Position Uncertainty: | 0.0 usft           | Slot Radius: 13-3/16 "                                              | Grid Convergence: 0.15 °                                                |

|                      |                                                       |                                                                     |                                                                         |
|----------------------|-------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------------------------------------------|
| Well                 | Layla 35 MD Fee #2H                                   |                                                                     |                                                                         |
| Well Position        | <b>+N/-S</b> -12.3 usft<br><b>+E/-W</b> -2,659.4 usft | <b>Northing:</b> 456,425.90 usft<br><b>Easting:</b> 583,264.70 usft | <b>Latitude:</b> 32° 15' 16.361 N<br><b>Longitude:</b> 104° 3' 50.352 W |
| Position Uncertainty | 0.0 usft                                              | Wellhead Elevation:                                                 | Ground Level: 3,018.0 usft                                              |

|           |             |             |                 |               |                     |
|-----------|-------------|-------------|-----------------|---------------|---------------------|
| Wellbore  | Wellbore #1 |             |                 |               |                     |
| Magnetics | Model Name  | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
|           | IGRF2010    | 10/29/2013  | 7.52            | 60.07         | 48,347              |

|                   |                         |              |               |               |
|-------------------|-------------------------|--------------|---------------|---------------|
| Design            | Design #2               |              |               |               |
| Audit Notes:      |                         |              |               |               |
| Version:          | Phase:                  | PLAN         | Tie On Depth: | 0.0           |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft)  | Direction (°) |
|                   | 0.0                     | 0.0          | 0.0           | 0.12          |

| Plan Sections         |                 |             |                       |              |              |                         |                        |                       |         |                     |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|-----------------------|---------|---------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target              |
| 0.0                   | 0.00            | 0.00        | 0.0                   | 0.0          | 0.0          | 0.00                    | 0.00                   | 0.00                  | 0.00    |                     |
| 9,960.0               | 0.00            | 0.00        | 9,960.0               | 0.0          | 0.0          | 0.00                    | 0.00                   | 0.00                  | 0.00    |                     |
| 10,857.3              | 89.73           | 0.12        | 10,533.0              | 570.3        | 1.2          | 10.00                   | 10.00                  | 0.01                  | 0.12    |                     |
| 15,125.4              | 89.73           | 0.12        | 10,553.0              | 4,838.3      | 10.4         | 0.00                    | 0.00                   | 0.00                  | 0.00    | PBHL Layla 35 MD Fe |

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| Project:  | Eddy County, New Mexico   | MD Reference:                | WELL @ 3038.0usft (Patterson UTI) |
| Site:     | Sec 35, T23S, R28E        | North Reference:             | Grid                              |
| Well:     | Layla 35 MD Fee #2H       | Survey Calculation Method:   | Minimum Curvature                 |
| Wellbore: | Wellbore #1               |                              |                                   |
| Design:   | Design #2                 |                              |                                   |

Planned Survey

| Measured Depth (usft)                                    | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|----------------------------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| <b>Build 10° / 100'</b>                                  |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,960.0                                                  | 0.00            | 0.00        | 9,960.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 10,000.0                                                 | 4.00            | 0.12        | 10,000.0              | 1.4          | 0.0          | 1.4                     | 10.00                   | 10.00                  | 0.00                  |
| 10,100.0                                                 | 14.00           | 0.12        | 10,098.6              | 17.0         | 0.0          | 17.0                    | 10.00                   | 10.00                  | 0.00                  |
| 10,200.0                                                 | 24.00           | 0.12        | 10,193.0              | 49.5         | 0.1          | 49.5                    | 10.00                   | 10.00                  | 0.00                  |
| 10,300.0                                                 | 34.00           | 0.12        | 10,280.4              | 98.0         | 0.2          | 98.0                    | 10.00                   | 10.00                  | 0.00                  |
| 10,400.0                                                 | 44.00           | 0.12        | 10,358.0              | 160.8        | 0.3          | 160.8                   | 10.00                   | 10.00                  | 0.00                  |
| 10,500.0                                                 | 54.00           | 0.12        | 10,423.5              | 236.2        | 0.5          | 236.2                   | 10.00                   | 10.00                  | 0.00                  |
| 10,600.0                                                 | 64.00           | 0.12        | 10,475.0              | 321.8        | 0.7          | 321.8                   | 10.00                   | 10.00                  | 0.00                  |
| 10,700.0                                                 | 74.00           | 0.12        | 10,510.8              | 415.0        | 0.9          | 415.0                   | 10.00                   | 10.00                  | 0.00                  |
| 10,800.0                                                 | 84.00           | 0.12        | 10,529.8              | 513.1        | 1.1          | 513.1                   | 10.00                   | 10.00                  | 0.00                  |
| <b>End of Curve / 89.73° Inc / .12° Azm / 10533' TVD</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,857.3                                                 | 89.73           | 0.12        | 10,533.0              | 570.3        | 1.2          | 570.3                   | 10.00                   | 10.00                  | 0.00                  |
| 10,900.0                                                 | 89.73           | 0.12        | 10,533.2              | 613.0        | 1.3          | 613.0                   | 0.00                    | 0.00                   | 0.00                  |
| 11,000.0                                                 | 89.73           | 0.12        | 10,533.6              | 713.0        | 1.5          | 713.0                   | 0.00                    | 0.00                   | 0.00                  |
| 11,100.0                                                 | 89.73           | 0.12        | 10,534.1              | 813.0        | 1.7          | 813.0                   | 0.00                    | 0.00                   | 0.00                  |
| 11,200.0                                                 | 89.73           | 0.12        | 10,534.6              | 913.0        | 2.0          | 913.0                   | 0.00                    | 0.00                   | 0.00                  |
| 11,300.0                                                 | 89.73           | 0.12        | 10,535.0              | 1,013.0      | 2.2          | 1,013.0                 | 0.00                    | 0.00                   | 0.00                  |
| 11,400.0                                                 | 89.73           | 0.12        | 10,535.5              | 1,112.9      | 2.4          | 1,113.0                 | 0.00                    | 0.00                   | 0.00                  |
| 11,500.0                                                 | 89.73           | 0.12        | 10,536.0              | 1,212.9      | 2.6          | 1,213.0                 | 0.00                    | 0.00                   | 0.00                  |
| 11,600.0                                                 | 89.73           | 0.12        | 10,536.4              | 1,312.9      | 2.8          | 1,312.9                 | 0.00                    | 0.00                   | 0.00                  |
| 11,700.0                                                 | 89.73           | 0.12        | 10,536.9              | 1,412.9      | 3.0          | 1,412.9                 | 0.00                    | 0.00                   | 0.00                  |
| 11,800.0                                                 | 89.73           | 0.12        | 10,537.4              | 1,512.9      | 3.3          | 1,512.9                 | 0.00                    | 0.00                   | 0.00                  |
| 11,900.0                                                 | 89.73           | 0.12        | 10,537.8              | 1,612.9      | 3.5          | 1,612.9                 | 0.00                    | 0.00                   | 0.00                  |
| 12,000.0                                                 | 89.73           | 0.12        | 10,538.3              | 1,712.9      | 3.7          | 1,712.9                 | 0.00                    | 0.00                   | 0.00                  |
| 12,100.0                                                 | 89.73           | 0.12        | 10,538.8              | 1,812.9      | 3.9          | 1,812.9                 | 0.00                    | 0.00                   | 0.00                  |
| 12,200.0                                                 | 89.73           | 0.12        | 10,539.3              | 1,912.9      | 4.1          | 1,912.9                 | 0.00                    | 0.00                   | 0.00                  |
| 12,300.0                                                 | 89.73           | 0.12        | 10,539.7              | 2,012.9      | 4.3          | 2,012.9                 | 0.00                    | 0.00                   | 0.00                  |
| 12,400.0                                                 | 89.73           | 0.12        | 10,540.2              | 2,112.9      | 4.5          | 2,112.9                 | 0.00                    | 0.00                   | 0.00                  |
| 12,500.0                                                 | 89.73           | 0.12        | 10,540.7              | 2,212.9      | 4.8          | 2,212.9                 | 0.00                    | 0.00                   | 0.00                  |
| 12,600.0                                                 | 89.73           | 0.12        | 10,541.1              | 2,312.9      | 5.0          | 2,312.9                 | 0.00                    | 0.00                   | 0.00                  |
| 12,700.0                                                 | 89.73           | 0.12        | 10,541.6              | 2,412.9      | 5.2          | 2,412.9                 | 0.00                    | 0.00                   | 0.00                  |
| 12,800.0                                                 | 89.73           | 0.12        | 10,542.1              | 2,512.9      | 5.4          | 2,512.9                 | 0.00                    | 0.00                   | 0.00                  |
| 12,900.0                                                 | 89.73           | 0.12        | 10,542.5              | 2,612.9      | 5.6          | 2,612.9                 | 0.00                    | 0.00                   | 0.00                  |
| 13,000.0                                                 | 89.73           | 0.12        | 10,543.0              | 2,712.9      | 5.8          | 2,712.9                 | 0.00                    | 0.00                   | 0.00                  |
| 13,100.0                                                 | 89.73           | 0.12        | 10,543.5              | 2,812.9      | 6.0          | 2,812.9                 | 0.00                    | 0.00                   | 0.00                  |
| 13,200.0                                                 | 89.73           | 0.12        | 10,544.0              | 2,912.9      | 6.3          | 2,912.9                 | 0.00                    | 0.00                   | 0.00                  |
| 13,300.0                                                 | 89.73           | 0.12        | 10,544.4              | 3,012.9      | 6.5          | 3,012.9                 | 0.00                    | 0.00                   | 0.00                  |
| 13,400.0                                                 | 89.73           | 0.12        | 10,544.9              | 3,112.9      | 6.7          | 3,112.9                 | 0.00                    | 0.00                   | 0.00                  |
| 13,500.0                                                 | 89.73           | 0.12        | 10,545.4              | 3,212.9      | 6.9          | 3,212.9                 | 0.00                    | 0.00                   | 0.00                  |
| 13,600.0                                                 | 89.73           | 0.12        | 10,545.8              | 3,312.9      | 7.1          | 3,312.9                 | 0.00                    | 0.00                   | 0.00                  |
| 13,700.0                                                 | 89.73           | 0.12        | 10,546.3              | 3,412.9      | 7.3          | 3,412.9                 | 0.00                    | 0.00                   | 0.00                  |
| 13,800.0                                                 | 89.73           | 0.12        | 10,546.8              | 3,512.9      | 7.6          | 3,512.9                 | 0.00                    | 0.00                   | 0.00                  |
| 13,900.0                                                 | 89.73           | 0.12        | 10,547.2              | 3,612.9      | 7.8          | 3,612.9                 | 0.00                    | 0.00                   | 0.00                  |
| 14,000.0                                                 | 89.73           | 0.12        | 10,547.7              | 3,712.9      | 8.0          | 3,712.9                 | 0.00                    | 0.00                   | 0.00                  |
| 14,100.0                                                 | 89.73           | 0.12        | 10,548.2              | 3,812.9      | 8.2          | 3,812.9                 | 0.00                    | 0.00                   | 0.00                  |
| 14,200.0                                                 | 89.73           | 0.12        | 10,548.7              | 3,912.9      | 8.4          | 3,912.9                 | 0.00                    | 0.00                   | 0.00                  |
| 14,300.0                                                 | 89.73           | 0.12        | 10,549.1              | 4,012.9      | 8.6          | 4,012.9                 | 0.00                    | 0.00                   | 0.00                  |
| 14,400.0                                                 | 89.73           | 0.12        | 10,549.6              | 4,112.9      | 8.8          | 4,112.9                 | 0.00                    | 0.00                   | 0.00                  |
| 14,500.0                                                 | 89.73           | 0.12        | 10,550.1              | 4,212.9      | 9.1          | 4,212.9                 | 0.00                    | 0.00                   | 0.00                  |
| 14,600.0                                                 | 89.73           | 0.12        | 10,550.5              | 4,312.9      | 9.3          | 4,312.9                 | 0.00                    | 0.00                   | 0.00                  |
| 14,700.0                                                 | 89.73           | 0.12        | 10,551.0              | 4,412.9      | 9.5          | 4,412.9                 | 0.00                    | 0.00                   | 0.00                  |
| 14,800.0                                                 | 89.73           | 0.12        | 10,551.5              | 4,512.9      | 9.7          | 4,512.9                 | 0.00                    | 0.00                   | 0.00                  |
| 14,900.0                                                 | 89.73           | 0.12        | 10,551.9              | 4,612.9      | 9.9          | 4,612.9                 | 0.00                    | 0.00                   | 0.00                  |

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|           |                           |                              |                                   |
|-----------|---------------------------|------------------------------|-----------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well Layla 35 MD Fee #2H          |
| Company:  | Mewbourne Oil Co          | TVD Reference:               | WELL @ 3038.0usft (Patterson UTI) |
| Project:  | Eddy County, New Mexico   | MD Reference:                | WELL @ 3038.0usft (Patterson UTI) |
| Site:     | Sec 35, T23S, R28E        | North Reference:             | Grid                              |
| Well:     | Layla 35 MD Fee #2H       | Survey Calculation Method:   | Minimum Curvature                 |
| Wellbore: | Wellbore #1               |                              |                                   |
| Design:   | Design #2                 |                              |                                   |

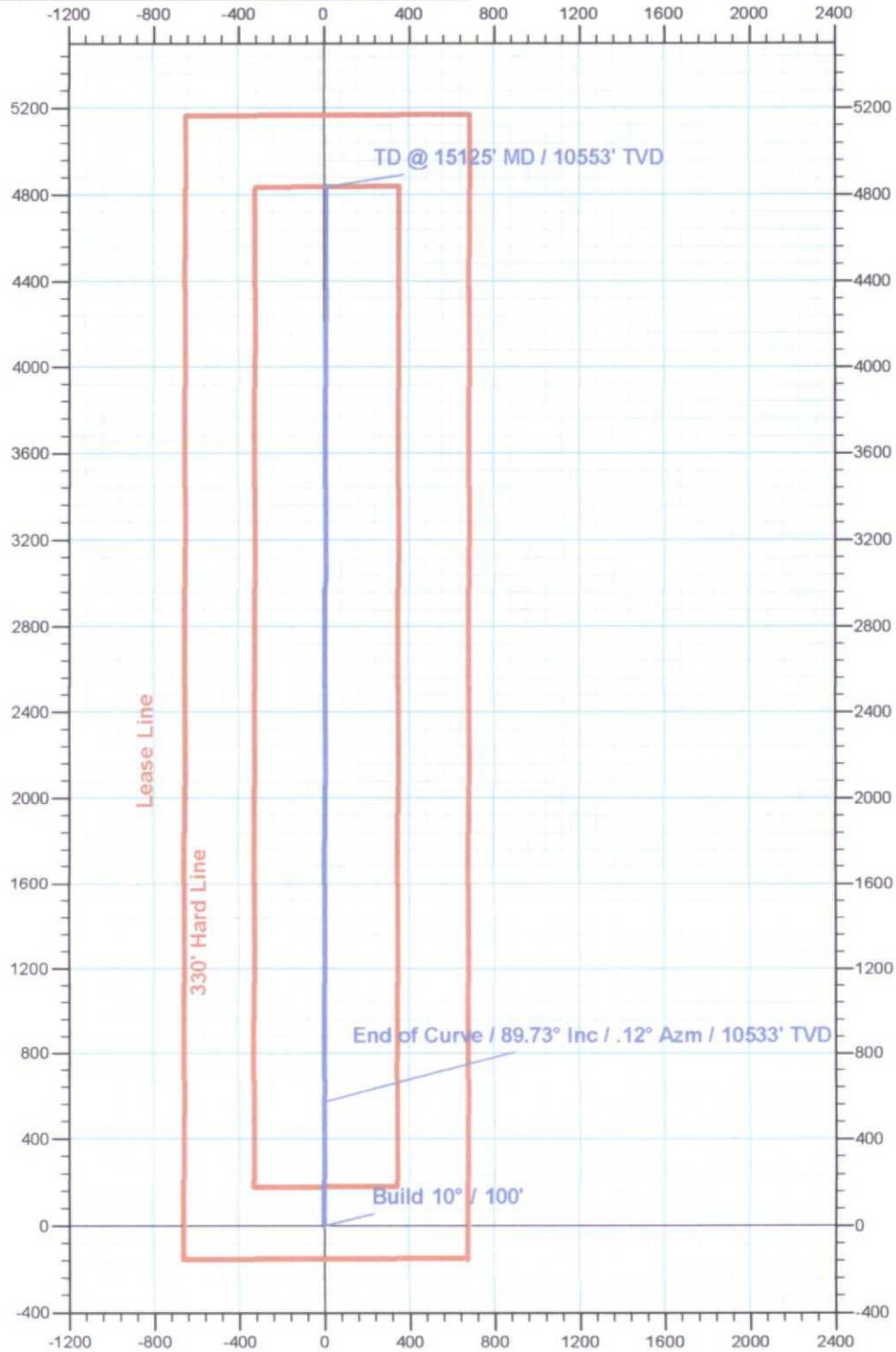
| Planned Survey                     |                 |             |                       |              |              |                         |                         |                        |                       |  |
|------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft)              | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 15,000.0                           | 89.73           | 0.12        | 10,552.4              | 4,712.9      | 10.1         | 4,712.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 15,100.0                           | 89.73           | 0.12        | 10,552.9              | 4,812.9      | 10.4         | 4,812.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| <b>TD @ 15125' MD / 10553' TVD</b> |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 15,125.4                           | 89.73           | 0.12        | 10,553.0              | 4,838.3      | 10.4         | 4,838.3                 | 0.00                    | 0.00                   | 0.00                  |  |

| Design Targets                                                                            |               |              |            |              |              |                 |                |                 |                  |  |
|-------------------------------------------------------------------------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|-----------------|------------------|--|
| Target Name                                                                               | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude        | Longitude        |  |
| PBHL Layla 35 MD Fee<br>- hit/miss target<br>- Shape<br>- Point                           | 0.00          | 0.00         | 10,553.0   | 4,838.3      | 10.4         | 461,264.17      | 583,275.11     | 32° 16' 4.241 N | 104° 3' 50.089 W |  |
| PBHL Layla 35 MD Fee<br>- plan hits target center<br>- Point                              | 0.00          | 0.00         | 10,633.0   | 4,838.3      | 10.4         | 461,264.17      | 583,275.11     | 32° 16' 4.241 N | 104° 3' 50.089 W |  |
| - plan misses target center by 80.0usft at 15125.4usft MD (10553.0 TVD, 4838.3 N, 10.4 E) |               |              |            |              |              |                 |                |                 |                  |  |

| Plan Annotations      |                       |                   |              |                                                   |  |
|-----------------------|-----------------------|-------------------|--------------|---------------------------------------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              | Comment                                           |  |
|                       |                       | +N/-S (usft)      | +E/-W (usft) |                                                   |  |
| 9,960.0               | 9,960.0               | 0.0               | 0.0          | Build 10° / 100'                                  |  |
| 10,857.3              | 10,533.0              | 570.3             | 1.2          | End of Curve / 89.73° Inc / .12° Azm / 10533' TVD |  |
| 15,125.4              | 10,553.0              | 4,838.3           | 10.4         | TD @ 15125' MD / 10553' TVD                       |  |

# Mewbourne Oil Company

Eddy County, New Mexico  
Sec 35, T23S, R28E  
Layla 35 MD Fee #2H  
Quote 130935



# Mewbourne Oil Company

Eddy County, New Mexico  
Sec 35, T23S, R28E  
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