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District II  
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District III  
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Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised August 1, 2011  
File copy to appropriate  
District Office

JAN 27 2016

☐ AMENDED REPORT

RECEIVED

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                     |                                                  |                                            |
|-------------------------------------|--------------------------------------------------|--------------------------------------------|
| 1 API Number<br><b>30-015-42173</b> | 2 Pool Code<br><b>98018</b>                      | 3 Pool Name<br><b>Wildcat; Bone Spring</b> |
| 4 Property Code<br><b>40451</b>     | 5 Property Name<br><b>MEDWICK 32 FEDERAL COM</b> | 6 Well Number<br><b>811</b>                |
| 7 OGRHD No.<br><b>215099</b>        | 8 Operator Name<br><b>CIMAREX ENERGY CO.</b>     | 9 Elevation<br><b>3192'</b>                |

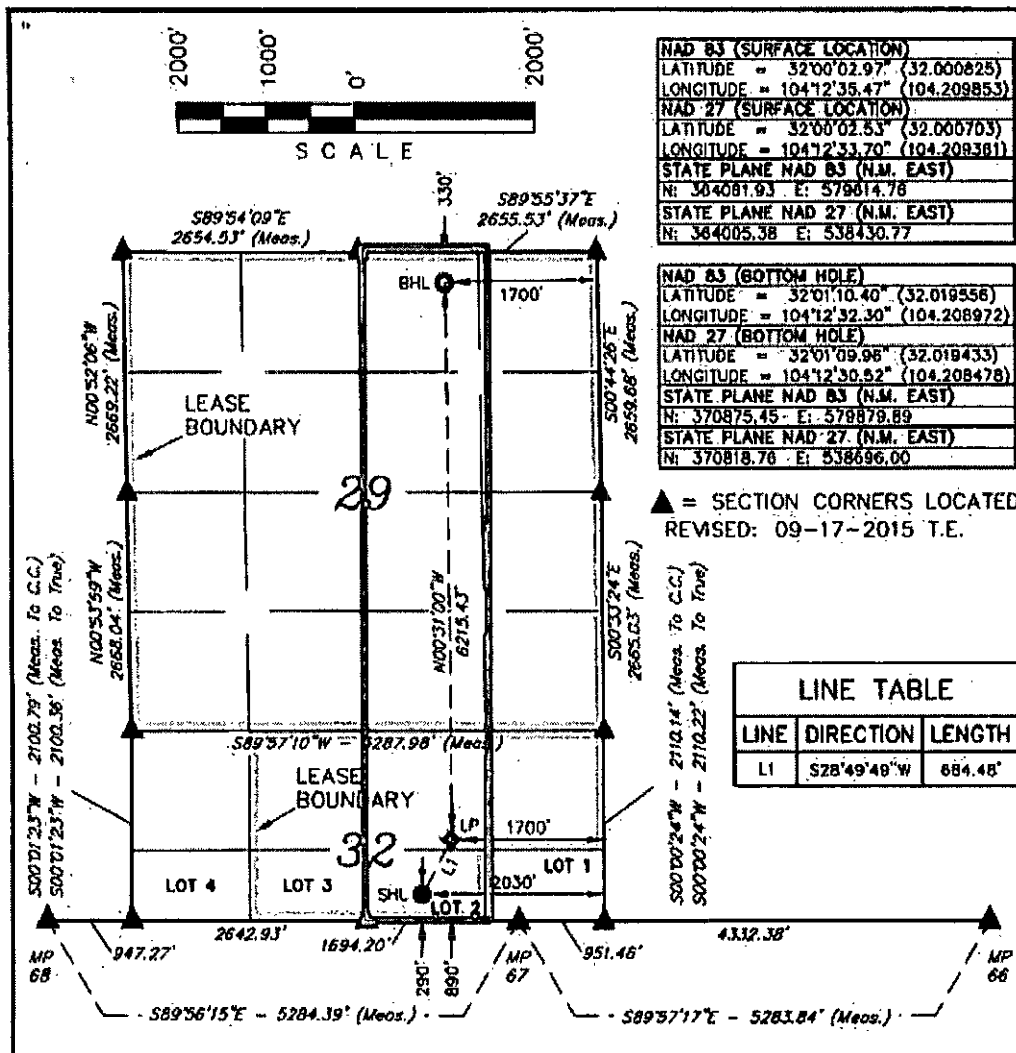
"Surface Location

| UL or lot no. | Section   | Township   | Range      | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County      |
|---------------|-----------|------------|------------|---------|---------------|------------------|---------------|----------------|-------------|
| <b>2</b>      | <b>32</b> | <b>26S</b> | <b>27E</b> |         | <b>290</b>    | <b>SOUTH</b>     | <b>2030</b>   | <b>EAST</b>    | <b>EDDY</b> |

"Bottom Hole Location If Different From Surface

| UL or lot no.                       | Section           | Township              | Range        | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County      |
|-------------------------------------|-------------------|-----------------------|--------------|---------|---------------|------------------|---------------|----------------|-------------|
| <b>B</b>                            | <b>29</b>         | <b>26S</b>            | <b>27E</b>   |         | <b>330</b>    | <b>NORTH</b>     | <b>1700</b>   | <b>EAST</b>    | <b>EDDY</b> |
| 10 Dedicated Acres<br><b>223.32</b> | 11 Unit or Infill | 12 Consolidation Code | 13 Order No. |         |               |                  |               |                |             |

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



"OPERATOR  
CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or has a valid mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore approved by the Division.

*Aricka Easterling* 10/1/15  
Signature Date

Aricka Easterling

Printed Name

aeasterling@cimarex.com

E-mail Address

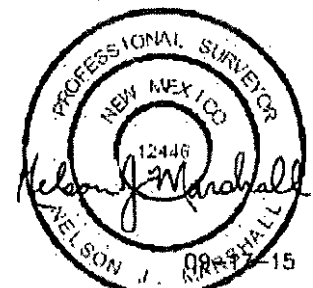
"SURVEYOR  
CERTIFICATION

I hereby certify that the well location shown on this plat was plotted by specific notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

September 4, 2013

Date of Survey

Signature and Seal of Professional Surveyor:



Certificate Number:



# Cimarex Medwick 32 Federal #8H Rev2 JLP 30-Sep-15 Proposal Geodetic Report (Non-Def Plan)



**Report Date:** September 30, 2015 - 03:26 PM  
**Client:** Cimarex  
**Field:** NM Eddy County (NAD 83)  
**Structure / Slot:** Cimarex Medwick 32 Federal #8H / Cimarex Medwick 32 Federal #8H  
**Well:** Cimarex Medwick 32 Federal #8H  
**Borehole:** Original Borehole  
**UWI / API#:** Unknown / Unknown  
**Survey Name:** Cimarex Medwick 32 Federal #8H Rev2 JLP 30-Sep-15  
**Survey Date:** September 25, 2013  
**Tort / AHD / DDI / ERD Ratio:** 121 807' / 6995 093 ft / 6 207' / 0.939  
**Coordinate Reference System:** NAD83 New Mexico State Plane, Eastern Zone, US Feet  
**Location Lat / Long:** N 32° 0' 2.97427", W 104° 12' 35.46894"  
**Location Grid N/E Y/X:** N 364061.930 RUS, E 579614.760 RUS  
**CRS Grid Convergence Angle:** 0.0654 °  
**Grid Scale Factor:** 0.99991077  
**Version / Patch:** 2.8.572.0

**Survey / DLS Computation:** Minimum Curvature / Lubinski  
**Vertical Section Azimuth:** 2.228 ° (Grid North)  
**Vertical Section Origin:** 0.000 ft, 0.000 ft  
**TVD Reference Datum:** Ground Level  
**TVD Reference Elevation:** 3192.000 ft above MSL  
**Seabed / Ground Elevation:** 3192.000 ft above MSL  
**Magnetic Declination:** 7.554 °  
**Total Gravity Field Strength:** 998.6854mgn (9.80665 Based)  
**Gravity Model:** DOX  
**Total Magnetic Field Strength:** 48138.165 nT  
**Magnetic Dip Angle:** 59.703 °  
**Declination Date:** September 30, 2015  
**Magnetic Declination Model:** HDGM 2015  
**North Reference:** Grid North  
**Grid Convergence Used:** 0.0654 °  
**Total Corr Mag North->Grid North:** 7.4889 °  
**Local Coord Referenced To:** Structure Reference Point

| Comments                     | MD<br>(ft) | Incl<br>(°) | Azim Grid<br>(°) | TVD<br>(ft) | VSEC<br>(ft) | NS<br>(ft) | EW<br>(ft) | DLS<br>(°/100ft) | Northing<br>(ftUS) | Easting<br>(ftUS) | Latitude<br>(N/S ° ' '')   | Longitude<br>(E/W ° ' '') |
|------------------------------|------------|-------------|------------------|-------------|--------------|------------|------------|------------------|--------------------|-------------------|----------------------------|---------------------------|
| SHL (290' FSL,<br>2030' FEL) | 0.00       | 0.00        | 90.00            | 0.00        | 0.00         | 0.00       | 0.00       | N/A              | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|                              | 100.00     | 0.00        | 90.00            | 100.00      | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|                              | 200.00     | 0.00        | 90.00            | 200.00      | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|                              | 300.00     | 0.00        | 90.00            | 300.00      | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|                              | 400.00     | 0.00        | 90.00            | 400.00      | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|                              | 500.00     | 0.00        | 90.00            | 500.00      | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|                              | 600.00     | 0.00        | 90.00            | 600.00      | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|                              | 700.00     | 0.00        | 90.00            | 700.00      | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|                              | 800.00     | 0.00        | 90.00            | 800.00      | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|                              | 900.00     | 0.00        | 90.00            | 900.00      | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|                              | 1000.00    | 0.00        | 90.00            | 1000.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|                              | 1100.00    | 0.00        | 90.00            | 1100.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|                              | 1200.00    | 0.00        | 90.00            | 1200.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|                              | 1300.00    | 0.00        | 90.00            | 1300.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|                              | 1400.00    | 0.00        | 90.00            | 1400.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|                              | 1500.00    | 0.00        | 90.00            | 1500.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|                              | 1600.00    | 0.00        | 90.00            | 1600.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|                              | 1700.00    | 0.00        | 90.00            | 1700.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|                              | 1800.00    | 0.00        | 90.00            | 1800.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|                              | 1900.00    | 0.00        | 90.00            | 1900.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|                              | 2000.00    | 0.00        | 90.00            | 2000.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|                              | 2100.00    | 0.00        | 90.00            | 2100.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |

| Comments     | MD<br>(ft) | Incl<br>(°) | Azim Grid<br>(°) | TVD<br>(ft) | VSEC<br>(ft) | NS<br>(ft) | EW<br>(ft) | DLS<br>(°/100ft) | Northing<br>(ftUS) | Easting<br>(ftUS) | Latitude<br>(N/S ° ' '')   | Longitude<br>(E/W ° ' '') |
|--------------|------------|-------------|------------------|-------------|--------------|------------|------------|------------------|--------------------|-------------------|----------------------------|---------------------------|
|              | 2200.00    | 0.00        | 90.00            | 2200.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 2300.00    | 0.00        | 90.00            | 2300.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 2400.00    | 0.00        | 90.00            | 2400.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 2500.00    | 0.00        | 90.00            | 2500.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 2600.00    | 0.00        | 90.00            | 2600.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 2700.00    | 0.00        | 90.00            | 2700.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 2800.00    | 0.00        | 90.00            | 2800.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 2900.00    | 0.00        | 90.00            | 2900.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 3000.00    | 0.00        | 90.00            | 3000.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 3100.00    | 0.00        | 90.00            | 3100.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 3200.00    | 0.00        | 90.00            | 3200.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 3300.00    | 0.00        | 90.00            | 3300.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 3400.00    | 0.00        | 90.00            | 3400.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 3500.00    | 0.00        | 90.00            | 3500.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 3600.00    | 0.00        | 90.00            | 3600.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 3700.00    | 0.00        | 90.00            | 3700.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 3800.00    | 0.00        | 90.00            | 3800.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 3900.00    | 0.00        | 90.00            | 3900.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 4000.00    | 0.00        | 90.00            | 4000.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 4100.00    | 0.00        | 90.00            | 4100.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 4200.00    | 0.00        | 90.00            | 4200.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 4300.00    | 0.00        | 90.00            | 4300.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 4400.00    | 0.00        | 90.00            | 4400.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 4500.00    | 0.00        | 90.00            | 4500.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 4600.00    | 0.00        | 90.00            | 4600.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 4700.00    | 0.00        | 90.00            | 4700.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 4800.00    | 0.00        | 90.00            | 4800.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 4900.00    | 0.00        | 90.00            | 4900.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 5000.00    | 0.00        | 90.00            | 5000.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 5100.00    | 0.00        | 90.00            | 5100.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 5200.00    | 0.00        | 90.00            | 5200.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 5300.00    | 0.00        | 90.00            | 5300.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 5400.00    | 0.00        | 90.00            | 5400.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 5500.00    | 0.00        | 90.00            | 5500.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 5600.00    | 0.00        | 90.00            | 5600.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 5700.00    | 0.00        | 90.00            | 5700.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 5800.00    | 0.00        | 90.00            | 5800.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 5900.00    | 0.00        | 90.00            | 5900.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 6000.00    | 0.00        | 90.00            | 6000.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 6100.00    | 0.00        | 90.00            | 6100.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 6200.00    | 0.00        | 90.00            | 6200.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 6300.00    | 0.00        | 90.00            | 6300.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 6400.00    | 0.00        | 90.00            | 6400.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 6500.00    | 0.00        | 90.00            | 6500.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 6600.00    | 0.00        | 90.00            | 6600.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
|              | 6700.00    | 0.00        | 90.00            | 6700.00     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
| Build @      | 6728.94    | 0.00        | 90.00            | 6728.94     | 0.00         | 0.00       | 0.00       | 0.00             | 364061.93          | 579614.76         | N 32 0 2.97 W 104 12 35.47 |                           |
| 12°/100' DLS | 6800.00    | 8.53        | 90.00            | 6799.74     | 0.21         | 0.00       | 5.28       | 12.00            | 364061.93          | 579620.04         | N 32 0 2.97 W 104 12 35.41 |                           |

| Comments                       | MD<br>(ft) | Incl<br>(°) | Azim Grid<br>(°) | TVD<br>(ft) | VSEC<br>(ft) | NS<br>(ft) | EW<br>(ft) | DLS<br>(°/100ft) | Northing<br>(ftUS) | Easting<br>(ftUS) | Latitude<br>(N/S ° ' '')    | Longitude<br>(E/W ° ' '') |
|--------------------------------|------------|-------------|------------------|-------------|--------------|------------|------------|------------------|--------------------|-------------------|-----------------------------|---------------------------|
| Build & Turn @<br>12"/100' DLS | 6900.00    | 20.53       | 90.00            | 6896.36     | 1.18         | 0.00       | 30.32      | 12.00            | 364061.93          | 579645.07         | N 32 0 2.97 W 104 12 35.12  |                           |
|                                | 6995.61    | 32.00       | 90.00            | 6981.96     | 2.82         | 0.00       | 72.55      | 12.00            | 364061.93          | 579687.31         | N 32 0 2.97 W 104 12 34.63  |                           |
|                                | 7000.00    | 32.00       | 89.01            | 6985.58     | 2.93         | 0.02       | 74.88      | 12.00            | 364061.95          | 579689.63         | N 32 0 2.97 W 104 12 34.60  |                           |
|                                | 7100.00    | 33.97       | 67.16            | 7069.86     | 16.31        | 11.37      | 127.31     | 12.00            | 364073.30          | 579742.06         | N 32 0 3.09 W 104 12 33.99  |                           |
|                                | 7200.00    | 39.26       | 49.01            | 7150.33     | 49.94        | 43.08      | 177.13     | 12.00            | 364105.01          | 579791.88         | N 32 0 3.40 W 104 12 33.41  |                           |
|                                | 7300.00    | 46.73       | 35.18            | 7223.58     | 102.35       | 93.78      | 222.16     | 12.00            | 364155.70          | 579836.90         | N 32 0 3.90 W 104 12 32.89  |                           |
|                                | 7400.00    | 55.49       | 24.60            | 7286.41     | 171.25       | 161.24     | 260.43     | 12.00            | 364223.18          | 579875.17         | N 32 0 4.57 W 104 12 32.44  |                           |
|                                | 7500.00    | 64.98       | 16.12            | 7336.07     | 253.63       | 242.53     | 290.27     | 12.00            | 364304.44          | 579905.00         | N 32 0 5.37 W 104 12 32.09  |                           |
|                                | 7600.00    | 74.88       | 8.88             | 7370.39     | 345.89       | 334.08     | 310.37     | 12.00            | 364395.98          | 579925.10         | N 32 0 6.28 W 104 12 31.86  |                           |
|                                | 7700.00    | 84.98       | 2.30             | 7387.87     | 444.00       | 431.89     | 319.86     | 12.00            | 364493.78          | 579934.59         | N 32 0 7.24 W 104 12 31.75  |                           |
| Landing Point                  | 7743.98    | 89.46       | 359.50           | 7390.00     | 487.90       | 475.80     | 320.55     | 12.00            | 364537.68          | 579935.28         | N 32 0 7.68 W 104 12 31.74  |                           |
|                                | 7800.00    | 89.46       | 359.50           | 7390.54     | 543.86       | 531.82     | 320.06     | 0.00             | 364593.70          | 579934.79         | N 32 0 8.23 W 104 12 31.75  |                           |
|                                | 7900.00    | 89.46       | 359.50           | 7391.48     | 643.74       | 631.81     | 319.19     | 0.00             | 364689.68          | 579933.92         | N 32 0 9.22 W 104 12 31.75  |                           |
|                                | 8000.00    | 89.46       | 359.50           | 7392.43     | 743.62       | 731.80     | 318.31     | 0.00             | 364793.66          | 579933.04         | N 32 0 10.21 W 104 12 31.76 |                           |
|                                | 8100.00    | 89.46       | 359.50           | 7393.38     | 843.51       | 831.79     | 317.44     | 0.00             | 364893.65          | 579932.17         | N 32 0 11.20 W 104 12 31.77 |                           |
|                                | 8200.00    | 89.46       | 359.50           | 7394.33     | 943.39       | 931.78     | 316.56     | 0.00             | 364993.63          | 579931.29         | N 32 0 12.19 W 104 12 31.78 |                           |
|                                | 8300.00    | 89.46       | 359.50           | 7395.28     | 1043.27      | 1031.78    | 315.69     | 0.00             | 365093.61          | 579930.42         | N 32 0 13.18 W 104 12 31.79 |                           |
|                                | 8400.00    | 89.46       | 359.50           | 7396.23     | 1143.15      | 1131.77    | 314.82     | 0.00             | 365193.59          | 579929.55         | N 32 0 14.17 W 104 12 31.80 |                           |
|                                | 8500.00    | 89.46       | 359.50           | 7397.17     | 1243.03      | 1231.76    | 313.94     | 0.00             | 365293.58          | 579928.67         | N 32 0 15.16 W 104 12 31.81 |                           |
|                                | 8600.00    | 89.46       | 359.50           | 7398.12     | 1342.92      | 1331.75    | 313.07     | 0.00             | 365393.56          | 579927.80         | N 32 0 16.15 W 104 12 31.82 |                           |
|                                | 8700.00    | 89.46       | 359.50           | 7399.07     | 1442.80      | 1431.74    | 312.19     | 0.00             | 365493.54          | 579926.93         | N 32 0 17.14 W 104 12 31.82 |                           |
|                                | 8800.00    | 89.46       | 359.50           | 7400.02     | 1542.68      | 1531.73    | 311.32     | 0.00             | 365593.52          | 579926.05         | N 32 0 18.13 W 104 12 31.83 |                           |
|                                | 8900.00    | 89.46       | 359.50           | 7400.97     | 1642.56      | 1631.73    | 310.45     | 0.00             | 365693.51          | 579925.18         | N 32 0 19.12 W 104 12 31.84 |                           |
|                                | 9000.00    | 89.46       | 359.50           | 7401.91     | 1742.44      | 1731.72    | 309.57     | 0.00             | 365793.49          | 579924.30         | N 32 0 20.11 W 104 12 31.85 |                           |
|                                | 9100.00    | 89.46       | 359.50           | 7402.86     | 1842.33      | 1831.71    | 308.70     | 0.00             | 365893.47          | 579923.43         | N 32 0 21.10 W 104 12 31.86 |                           |
|                                | 9200.00    | 89.46       | 359.50           | 7403.81     | 1942.21      | 1931.70    | 307.82     | 0.00             | 365993.45          | 579922.56         | N 32 0 22.09 W 104 12 31.87 |                           |
|                                | 9300.00    | 89.46       | 359.50           | 7404.76     | 2042.09      | 2031.69    | 306.95     | 0.00             | 366093.44          | 579921.68         | N 32 0 23.08 W 104 12 31.88 |                           |
|                                | 9400.00    | 89.46       | 359.50           | 7405.70     | 2141.97      | 2131.68    | 306.08     | 0.00             | 366193.42          | 579920.81         | N 32 0 24.06 W 104 12 31.89 |                           |
|                                | 9500.00    | 89.46       | 359.50           | 7406.65     | 2241.85      | 2231.68    | 305.20     | 0.00             | 366293.40          | 579919.94         | N 32 0 25.05 W 104 12 31.89 |                           |
|                                | 9600.00    | 89.46       | 359.50           | 7407.60     | 2341.74      | 2331.67    | 304.33     | 0.00             | 366393.38          | 579919.06         | N 32 0 26.04 W 104 12 31.90 |                           |
|                                | 9700.00    | 89.46       | 359.50           | 7408.55     | 2441.62      | 2431.66    | 303.46     | 0.00             | 366493.37          | 579918.19         | N 32 0 27.03 W 104 12 31.91 |                           |
|                                | 9800.00    | 89.46       | 359.50           | 7409.49     | 2541.50      | 2531.65    | 302.58     | 0.00             | 366593.35          | 579917.31         | N 32 0 28.02 W 104 12 31.92 |                           |
|                                | 9900.00    | 89.46       | 359.50           | 7410.44     | 2641.38      | 2631.64    | 301.71     | 0.00             | 366693.33          | 579916.44         | N 32 0 29.01 W 104 12 31.93 |                           |
|                                | 10000.00   | 89.46       | 359.50           | 7411.39     | 2741.27      | 2731.63    | 300.83     | 0.00             | 366793.31          | 579915.57         | N 32 0 30.00 W 104 12 31.94 |                           |
|                                | 10100.00   | 89.46       | 359.50           | 7412.33     | 2841.15      | 2831.63    | 299.96     | 0.00             | 366893.30          | 579914.69         | N 32 0 30.99 W 104 12 31.95 |                           |
|                                | 10200.00   | 89.46       | 359.50           | 7413.28     | 2941.03      | 2931.62    | 299.09     | 0.00             | 366993.28          | 579913.82         | N 32 0 31.98 W 104 12 31.96 |                           |
|                                | 10300.00   | 89.46       | 359.50           | 7414.23     | 3040.91      | 3031.61    | 298.21     | 0.00             | 367093.26          | 579912.94         | N 32 0 32.97 W 104 12 31.97 |                           |
|                                | 10400.00   | 89.46       | 359.50           | 7415.18     | 3140.79      | 3131.60    | 297.34     | 0.00             | 367193.24          | 579912.07         | N 32 0 33.96 W 104 12 31.97 |                           |
|                                | 10500.00   | 89.46       | 359.50           | 7416.12     | 3240.68      | 3231.59    | 296.46     | 0.00             | 367293.23          | 579911.20         | N 32 0 34.95 W 104 12 31.98 |                           |
|                                | 10600.00   | 89.46       | 359.50           | 7417.07     | 3340.56      | 3331.58    | 295.59     | 0.00             | 367393.21          | 579910.32         | N 32 0 35.94 W 104 12 31.99 |                           |
|                                | 10700.00   | 89.46       | 359.50           | 7418.02     | 3440.44      | 3431.58    | 294.72     | 0.00             | 367493.19          | 579909.45         | N 32 0 36.93 W 104 12 32.00 |                           |
|                                | 10800.00   | 89.46       | 359.50           | 7418.96     | 3540.32      | 3531.57    | 293.84     | 0.00             | 367593.18          | 579908.58         | N 32 0 37.92 W 104 12 32.01 |                           |
|                                | 10900.00   | 89.46       | 359.50           | 7419.91     | 3640.20      | 3631.56    | 292.97     | 0.00             | 367693.16          | 579907.70         | N 32 0 38.91 W 104 12 32.02 |                           |
|                                | 11000.00   | 89.46       | 359.50           | 7420.86     | 3740.09      | 3731.55    | 292.09     | 0.00             | 367793.14          | 579906.83         | N 32 0 39.90 W 104 12 32.03 |                           |
|                                | 11100.00   | 89.46       | 359.50           | 7421.80     | 3839.97      | 3831.54    | 291.22     | 0.00             | 367893.12          | 579905.95         | N 32 0 40.89 W 104 12 32.04 |                           |
|                                | 11200.00   | 89.46       | 359.50           | 7422.75     | 3939.85      | 3931.53    | 290.35     | 0.00             | 367993.11          | 579905.08         | N 32 0 41.88 W 104 12 32.04 |                           |
|                                | 11300.00   | 89.46       | 359.50           | 7423.69     | 4039.73      | 4031.53    | 289.47     | 0.00             | 368093.09          | 579904.21         | N 32 0 42.86 W 104 12 32.05 |                           |

| Comments                                                                | MD<br>(ft) | Incl<br>(°) | Azim Grid<br>(°) | TVD<br>(ft) | VSEC<br>(ft) | NS<br>(ft) | EW<br>(ft) | DLS<br>(°/100ft) | Northing<br>(ftUS) | Easting<br>(ftUS) | Latitude<br>(N/S ° ' '')    | Longitude<br>(E/W ° ' '') |
|-------------------------------------------------------------------------|------------|-------------|------------------|-------------|--------------|------------|------------|------------------|--------------------|-------------------|-----------------------------|---------------------------|
|                                                                         | 11400.00   | 89.46       | 359.50           | 7424.64     | 4139.81      | 4131.52    | 288.60     | 0.00             | 368193.07          | 579903.33         | N 32 0 43.85 W 104 12 32.06 |                           |
|                                                                         | 11500.00   | 89.46       | 359.50           | 7425.59     | 4239.50      | 4231.51    | 287.73     | 0.00             | 368293.05          | 579902.46         | N 32 0 44.84 W 104 12 32.07 |                           |
|                                                                         | 11600.00   | 89.46       | 359.50           | 7426.53     | 4339.38      | 4331.50    | 286.85     | 0.00             | 368393.04          | 579901.59         | N 32 0 45.83 W 104 12 32.08 |                           |
|                                                                         | 11700.00   | 89.46       | 359.50           | 7427.48     | 4439.26      | 4431.49    | 285.98     | 0.00             | 368493.02          | 579900.71         | N 32 0 46.82 W 104 12 32.09 |                           |
|                                                                         | 11800.00   | 89.46       | 359.50           | 7428.42     | 4539.14      | 4531.48    | 285.10     | 0.00             | 368593.00          | 579899.84         | N 32 0 47.81 W 104 12 32.10 |                           |
|                                                                         | 11900.00   | 89.46       | 359.50           | 7429.37     | 4639.03      | 4631.48    | 284.23     | 0.00             | 368692.98          | 579898.96         | N 32 0 48.80 W 104 12 32.11 |                           |
|                                                                         | 12000.00   | 89.46       | 359.50           | 7430.32     | 4738.91      | 4731.47    | 283.36     | 0.00             | 368792.97          | 579898.09         | N 32 0 49.79 W 104 12 32.12 |                           |
|                                                                         | 12100.00   | 89.46       | 359.50           | 7431.26     | 4838.79      | 4831.46    | 282.48     | 0.00             | 368892.95          | 579897.22         | N 32 0 50.78 W 104 12 32.12 |                           |
|                                                                         | 12200.00   | 89.46       | 359.50           | 7432.21     | 4938.67      | 4931.45    | 281.61     | 0.00             | 368992.93          | 579896.34         | N 32 0 51.77 W 104 12 32.13 |                           |
|                                                                         | 12300.00   | 89.46       | 359.50           | 7433.15     | 5038.55      | 5031.44    | 280.73     | 0.00             | 369092.91          | 579895.47         | N 32 0 52.76 W 104 12 32.14 |                           |
|                                                                         | 12400.00   | 89.46       | 359.50           | 7434.10     | 5138.44      | 5131.43    | 279.86     | 0.00             | 369192.90          | 579894.59         | N 32 0 53.75 W 104 12 32.15 |                           |
|                                                                         | 12500.00   | 89.46       | 359.50           | 7435.04     | 5238.32      | 5231.43    | 278.99     | 0.00             | 369292.88          | 579893.72         | N 32 0 54.74 W 104 12 32.16 |                           |
|                                                                         | 12600.00   | 89.46       | 359.50           | 7435.99     | 5338.20      | 5331.42    | 278.11     | 0.00             | 369392.86          | 579892.85         | N 32 0 55.73 W 104 12 32.17 |                           |
|                                                                         | 12700.00   | 89.46       | 359.50           | 7436.93     | 5438.08      | 5431.41    | 277.24     | 0.00             | 369492.84          | 579891.97         | N 32 0 56.72 W 104 12 32.18 |                           |
|                                                                         | 12800.00   | 89.46       | 359.50           | 7437.88     | 5537.96      | 5531.40    | 276.36     | 0.00             | 369592.83          | 579891.10         | N 32 0 57.71 W 104 12 32.19 |                           |
|                                                                         | 12900.00   | 89.46       | 359.50           | 7438.83     | 5637.85      | 5631.39    | 275.49     | 0.00             | 369692.81          | 579890.23         | N 32 0 58.70 W 104 12 32.19 |                           |
|                                                                         | 13000.00   | 89.46       | 359.50           | 7439.77     | 5737.73      | 5731.39    | 274.62     | 0.00             | 369792.79          | 579889.35         | N 32 0 59.69 W 104 12 32.20 |                           |
|                                                                         | 13100.00   | 89.46       | 359.50           | 7440.72     | 5837.61      | 5831.38    | 273.74     | 0.00             | 369892.77          | 579888.48         | N 32 1 0 58 W 104 12 32.21  |                           |
|                                                                         | 13200.00   | 89.46       | 359.50           | 7441.66     | 5937.49      | 5931.37    | 272.87     | 0.00             | 369992.76          | 579887.60         | N 32 1 1 56 W 104 12 32.22  |                           |
|                                                                         | 13300.00   | 89.46       | 359.50           | 7442.61     | 6037.38      | 6031.36    | 272.00     | 0.00             | 370092.74          | 579886.73         | N 32 1 2 55 W 104 12 32.23  |                           |
|                                                                         | 13400.00   | 89.46       | 359.50           | 7443.55     | 6137.26      | 6131.35    | 271.12     | 0.00             | 370192.72          | 579885.86         | N 32 1 3 54 W 104 12 32.24  |                           |
|                                                                         | 13500.00   | 89.46       | 359.50           | 7444.49     | 6237.14      | 6231.34    | 270.25     | 0.00             | 370292.71          | 579884.98         | N 32 1 4 53 W 104 12 32.25  |                           |
|                                                                         | 13600.00   | 89.46       | 359.50           | 7445.44     | 6337.02      | 6331.34    | 269.37     | 0.00             | 370392.69          | 579884.11         | N 32 1 5 52 W 104 12 32.26  |                           |
|                                                                         | 13700.00   | 89.46       | 359.50           | 7446.38     | 6436.90      | 6431.33    | 268.50     | 0.00             | 370492.67          | 579883.24         | N 32 1 6 51 W 104 12 32.27  |                           |
|                                                                         | 13800.00   | 89.46       | 359.50           | 7447.33     | 6536.79      | 6531.32    | 267.63     | 0.00             | 370592.65          | 579882.36         | N 32 1 7 50 W 104 12 32.27  |                           |
|                                                                         | 13900.00   | 89.46       | 359.50           | 7448.27     | 6636.67      | 6631.31    | 266.75     | 0.00             | 370692.64          | 579881.49         | N 32 1 8 59 W 104 12 32.28  |                           |
|                                                                         | 14000.00   | 89.46       | 359.50           | 7449.22     | 6736.55      | 6731.30    | 265.88     | 0.00             | 370792.62          | 579880.61         | N 32 1 9 58 W 104 12 32.29  |                           |
| Cimarex<br>Medwick 32<br>Federal #8H -<br>PBHL (330'<br>FNL, 1700' FEL) | 14082.85   | 89.46       | 359.50           | 7450.00     | 6819.30      | 6814.14    | 265.15     | 0.00             | 370875.45          | 579879.89         | N 32 1 10.40 W 104 12 32.30 |                           |

Survey Type: Non-Def Plan

Survey Error Model: ISCWSA Rev 0 \*\*\* 3-D 95.000% Confidence 2.7955 sigma  
Survey Program:

| Description | Part | MD From<br>(ft) | MD To<br>(ft) | EOU Freq<br>(ft) | Hole Size<br>(in) | Casing<br>Diameter<br>(in) | Survey Tool Type | Borehole / Survey                                          |
|-------------|------|-----------------|---------------|------------------|-------------------|----------------------------|------------------|------------------------------------------------------------|
|             | 1    | 0.000           | 14082.846     | 1/100.000        | 30.000            | 30.000                     | SLB_MWD-STD      | Original Borehole / Cimarex<br>Medwick 32 Federal #8H Rev2 |

Schlumberger

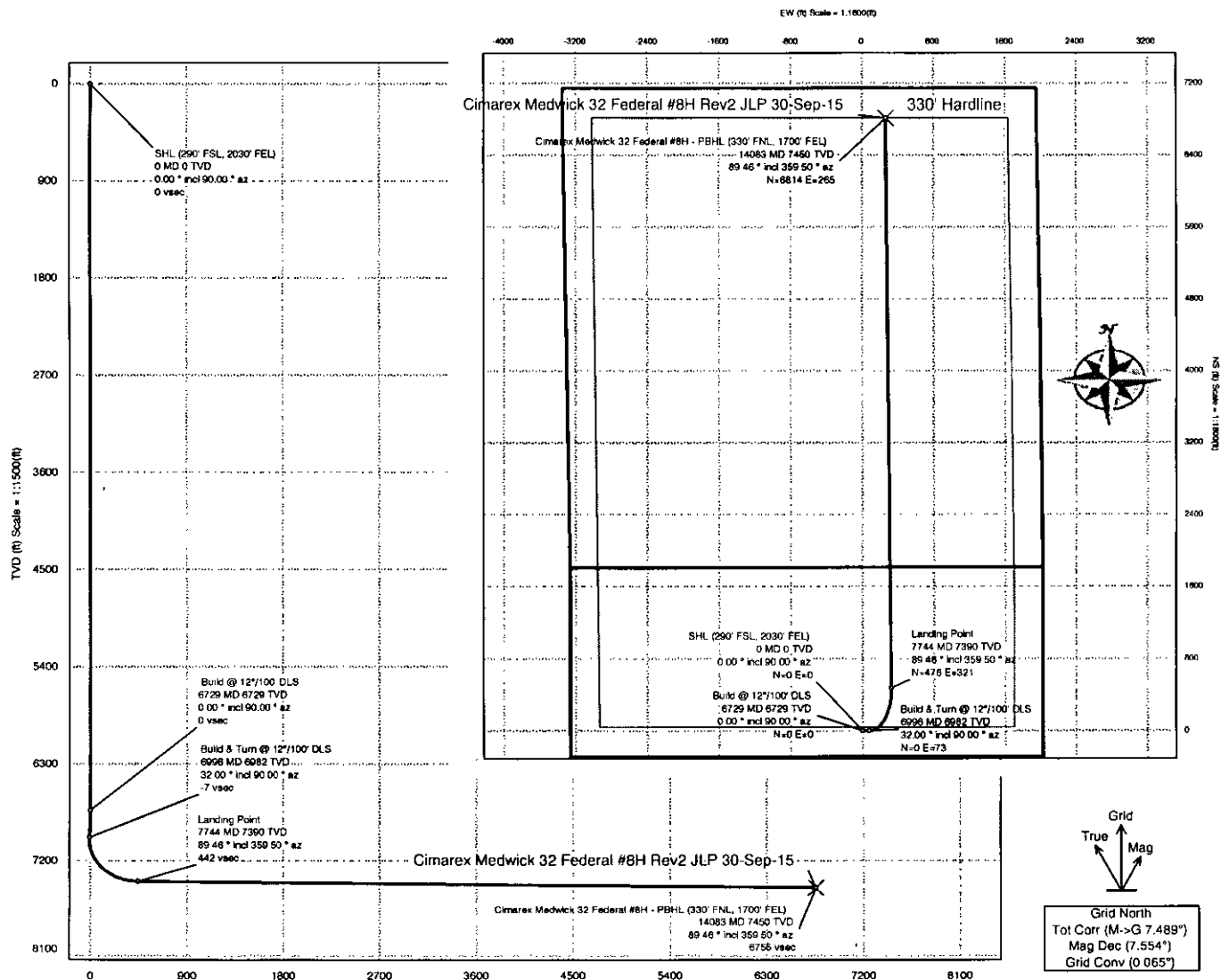
Cimarex

CIMAREX

|                   |                        |                         |            |
|-------------------|------------------------|-------------------------|------------|
| Borehole:         | Well:                  | Field:                  | Structure: |
| Original Borehole | Medwick 32 Federal #8H | NM Eddy County (NAD 83) | TBD        |

|                                        |                                                     |                                         |
|----------------------------------------|-----------------------------------------------------|-----------------------------------------|
| Gravity & Magnetic Parameters          | Surface Location                                    | Miscellaneous                           |
| Model: HDGM                            | NAD83 New Mexico State Plane, Eastern Zone, US Feet | Slot: #8H                               |
| Dip: 59.703°                           | 364061.931N                                         | TVD Ref: Ground Level(3192ft above MSL) |
| Date: 30-Sep-2015                      | Lat: N 32 0 2.97                                    | Plan: Rev2 JLP 30-Sep-15                |
| MagDec: 7.554°                         | Northing: 579614.781N                               |                                         |
| FS: 48138.165N                         | Grid Conv: 0.0654°                                  |                                         |
| Gravity FS: 998.685mgN (9.80665 Based) | Scale Fact: 0.99991077                              |                                         |
|                                        | Lon: W 104 12 35.47                                 |                                         |



Critical Points

| Critical Point                                              | MD       | INCL  | AZIM   | TVD     | VSEC    | N(+)/B(-) | E(+)/W(-) | DLS   |
|-------------------------------------------------------------|----------|-------|--------|---------|---------|-----------|-----------|-------|
| SHL (290' FSL, 2030' FEL)                                   | 0.00     | 0.00  | 90.00  | 0.00    | 0.00    | 0.00      | 0.00      |       |
| Build @ 12°/100' DLS                                        | 6728.94  | 0.00  | 90.00  | 6728.94 | 0.00    | 0.00      | 0.00      | 0.00  |
| Build & Turn @ 12°/100' DLS                                 | 6995.61  | 32.00 | 90.00  | 6981.96 | 2.82    | 0.00      | 72.55     | 12.00 |
| Landing Point                                               | 7743.98  | 89.46 | 359.50 | 7390.00 | 487.90  | 475.80    | 320.55    | 12.00 |
| Cimarex Medwick 32 Federal #8H - PBHL (330' FNL, 1700' FEL) | 14082.85 | 89.46 | 359.50 | 7450.00 | 6819.30 | 6814.14   | 265.15    | 0.00  |

|                   |                                                   |
|-------------------|---------------------------------------------------|
| <b>CONTROLLED</b> |                                                   |
| Plan ref          | Cimarex Medwick 32 Federal #8H Rev2 JLP 30-Sep-15 |
| Drawing ref       |                                                   |
| Copy number       | of 3                                              |
| Date              | 01-Oct-2015                                       |
| 1                 | Client                                            |
| 2                 | Client                                            |
| 3                 | Office                                            |
| 4                 | Office                                            |
| Copy number       | for                                               |