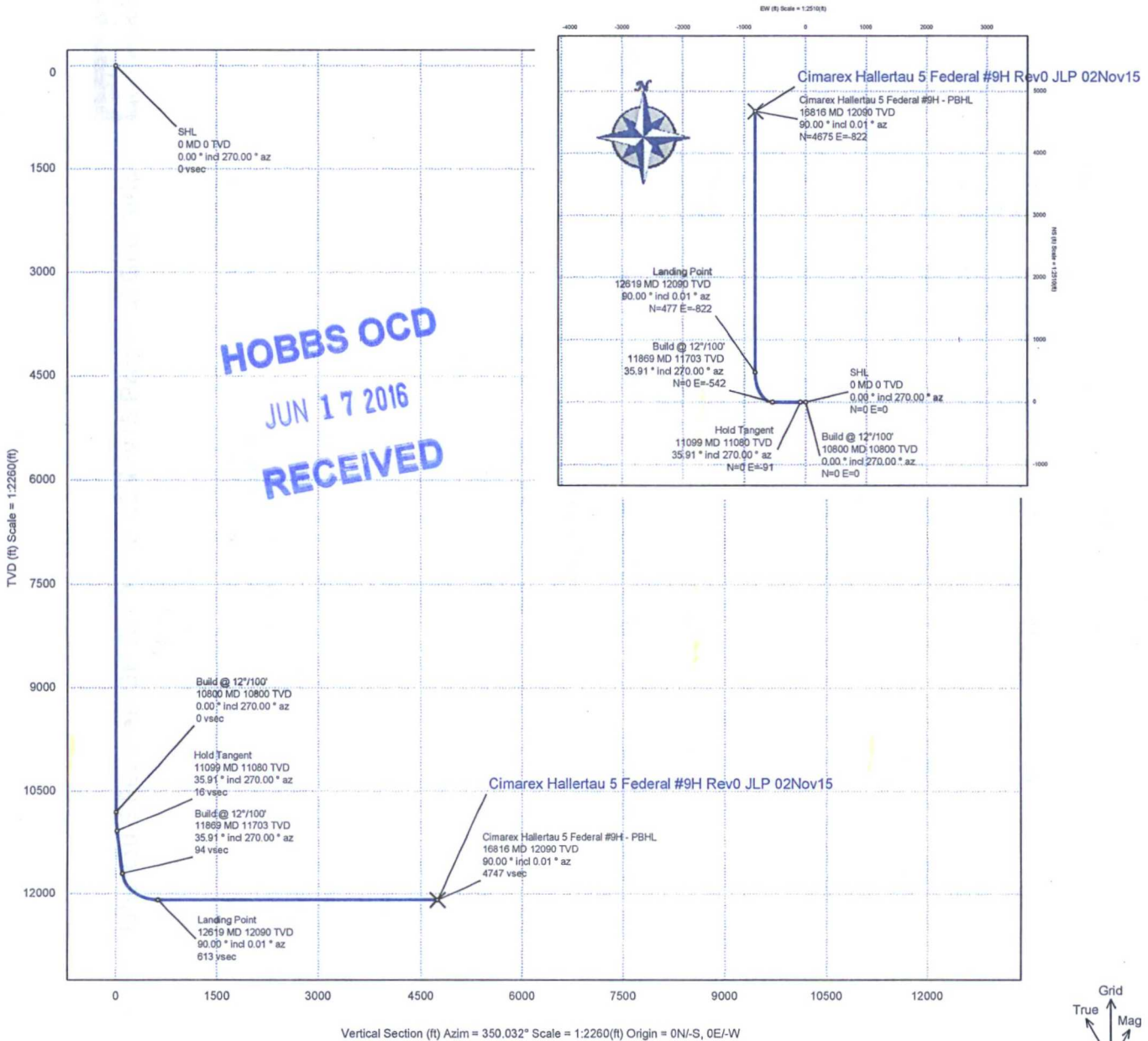




# Cimarex



|                                                                                                                                                                        |                                                                                                                                                               |                                                                                              |                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------|
| Borehole:<br><b>Original Borehole</b>                                                                                                                                  | Well:<br><b>Cimarex Hallertau 5 Federal #9H</b>                                                                                                               | Field:<br><b>NM Lea County (NAD 83)</b>                                                      | Structure:<br><b>TBD</b> |
| Gravity & Magnetic Parameters<br>Model: HDGM<br>2015<br>MagDec: 7.009°<br>Dip: 59.79°<br>FS: 48130.816n<br>Date: 02-Nov-2015<br>Gravity FS: 998.428mgn (9.80665 Based) | Surface Location<br>Lat: N 32 3 56.94<br>Lon: W 103 42 0.26<br>Northing: 388256.69RU<br>Easting: 5737501.88RU<br>Grid Conv: 0.3362°<br>Scale Fact: 0.99995316 | Miscellaneous<br>Slot: #9H<br>TVD Ref: Unknown(3272.5ft above MSL)<br>Plan: Rev0 JLP 02Nov15 |                          |



Vertical Section (ft) Azim = 350.032° Scale = 1:2260(ft) Origin = 0N/-S, 0E/-W



Grid North  
Tot Corr (M->G 6.673°)  
Mag Dec (7.009°)  
Grid Conv (0.336°)

| Critical Points                        |          |       |        |          |         |           |           |       |
|----------------------------------------|----------|-------|--------|----------|---------|-----------|-----------|-------|
| Critical Point                         | MD       | INCL  | AZIM   | TVD      | VSEC    | N(+)/S(-) | E(+)/W(-) | DLS   |
| SHL                                    | 0.00     | 0.00  | 270.00 | 0.00     | 0.00    | 0.00      | 0.00      |       |
| Build @ 12°/100'                       | 10800.00 | 0.00  | 270.00 | 10800.00 | 0.00    | 0.00      | 0.00      | 0.00  |
| Hold Tangent                           | 11099.25 | 35.91 | 270.00 | 11080.04 | 15.71   | 0.00      | -90.75    | 12.00 |
| Build @ 12°/100'                       | 11868.71 | 35.91 | 270.00 | 11703.26 | 93.82   | 0.00      | -542.05   | 0.00  |
| Landing Point                          | 12618.74 | 90.00 | 0.01   | 12090.00 | 612.58  | 477.50    | -822.05   | 12.00 |
| Cimarex Hallertau 5 Federal #9H - PBHL | 16816.14 | 90.00 | 0.01   | 12090.00 | 4746.54 | 4674.90   | -821.58   | 0.00  |

|                   |                                 |
|-------------------|---------------------------------|
| <b>CONTROLLED</b> |                                 |
| Plan ref          | Cimarex Hallertau 5 Federal #9H |
| Drawing ref       | Rev0 JLP 02Nov15                |
| Copy number       | of 3                            |
| Date              | 02-Nov-2015                     |
| 1                 | Client                          |
| 2                 | Client                          |
| 3                 | Office                          |
| 4                 | Office                          |
| Copy number for   |                                 |

## Cimarex Hallertau 5 Federal #9H Rev0 JLP 02Nov15 Proposal Geodetic

## Report

(Non-Def Plan)

## Report Date:

November 02, 2015 - 03:58 PM

## Client:

Cimarex

## Field:

NM Lea County (NAD 83)

## Structure / Slot:

Cimarex Hallertau 5 Federal #9H / Cimarex Hallertau 5 Federal #9H

## Survey / DLS Computation:

Minimum Curvature / Lubinski

## Vertical Section Azimuth:

350.032° (Grid North)

## Vertical Section Origin:

0.000 ft, 0.000 ft

## TVD Reference Datum:

Unknown

## Well:

Cimarex Hallertau 5 Federal #9H

## Borehole:

Original Borehole

## UWI / API#:

Unknown / Unknown

## Survey Name:

Cimarex Hallertau 5 Federal #9H Rev0 JLP 02Nov15

## Survey Date:

November 02, 2015

## Tort / AHD / DDI / ERD Ratio:

125.914° / 5344.556 ft / 5.971 / 0.442

## Coordinate Reference System:

NAD83 New Mexico State Plane, Eastern Zone, US Feet

## Location Lat / Long:

N 32° 3' 56.93508", W 103° 42' 0.26477"

## Location Grid N/E Y/X:

N 388256.690 ftUS, E 737501.880 ftUS

## CRS Grid Convergence Angle:

0.3362°

## Grid Scale Factor:

0.99995316

## Version / Patch:

2.8.572.0

Minimum Curvature / Lubinski

350.032° (Grid North)

0.000 ft, 0.000 ft

Unknown

3272.500 ft above MSL

3272.500 ft above MSL

7.009°

998.4279mgn (9.80665 Based)

GARM

48130.816 nT

59.790°

November 02, 2015

HDGM 2015

Grid North

0.3362°

6.6729°

Structure Reference Point

Local Coord Referenced To:

| 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      | 0.00       | 0.00        | 270.00           | 0.00        | 0.00         | 0.00       | 0.00       | N/A              | 388256.69          | 737501.88         | N 32° 3' 56.94"          | W 103° 42' 0.26"          |
|          | 100.00     | 0.00        | 270.00           | 100.00      | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32° 3' 56.94"          | W 103° 42' 0.26"          |
|          | 200.00     | 0.00        | 270.00           | 200.00      | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32° 3' 56.94"          | W 103° 42' 0.26"          |
|          | 300.00     | 0.00        | 270.00           | 300.00      | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32° 3' 56.94"          | W 103° 42' 0.26"          |
|          | 400.00     | 0.00        | 270.00           | 400.00      | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32° 3' 56.94"          | W 103° 42' 0.26"          |
|          | 500.00     | 0.00        | 270.00           | 500.00      | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32° 3' 56.94"          | W 103° 42' 0.26"          |
|          | 600.00     | 0.00        | 270.00           | 600.00      | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32° 3' 56.94"          | W 103° 42' 0.26"          |
|          | 700.00     | 0.00        | 270.00           | 700.00      | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32° 3' 56.94"          | W 103° 42' 0.26"          |
|          | 800.00     | 0.00        | 270.00           | 800.00      | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32° 3' 56.94"          | W 103° 42' 0.26"          |
|          | 900.00     | 0.00        | 270.00           | 900.00      | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32° 3' 56.94"          | W 103° 42' 0.26"          |
|          | 1000.00    | 0.00        | 270.00           | 1000.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32° 3' 56.94"          | W 103° 42' 0.26"          |
|          | 1100.00    | 0.00        | 270.00           | 1100.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32° 3' 56.94"          | W 103° 42' 0.26"          |
|          | 1200.00    | 0.00        | 270.00           | 1200.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32° 3' 56.94"          | W 103° 42' 0.26"          |
|          | 1300.00    | 0.00        | 270.00           | 1300.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32° 3' 56.94"          | W 103° 42' 0.26"          |
|          | 1400.00    | 0.00        | 270.00           | 1400.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32° 3' 56.94"          | W 103° 42' 0.26"          |
|          | 1500.00    | 0.00        | 270.00           | 1500.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32° 3' 56.94"          | W 103° 42' 0.26"          |
|          | 1600.00    | 0.00        | 270.00           | 1600.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32° 3' 56.94"          | W 103° 42' 0.26"          |
|          | 1700.00    | 0.00        | 270.00           | 1700.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32° 3' 56.94"          | W 103° 42' 0.26"          |
|          | 1800.00    | 0.00        | 270.00           | 1800.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32° 3' 56.94"          | W 103° 42' 0.26"          |
|          | 1900.00    | 0.00        | 270.00           | 1900.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32° 3' 56.94"          | W 103° 42' 0.26"          |
|          | 2000.00    | 0.00        | 270.00           | 2000.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32° 3' 56.94"          | W 103° 42' 0.26"          |
|          | 2200.00    | 0.00        | 270.00           | 2200.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32° 3' 56.94"          | W 103° 42' 0.26"          |



| 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 ° ' ") |
|----------|------------|-------------|------------------|-------------|--------------|------------|------------|------------------|--------------------|-------------------|-------------------------|--------------------------|
|          | 2300.00    | 0.00        | 270.00           | 2300.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 2400.00    | 0.00        | 270.00           | 2400.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 2500.00    | 0.00        | 270.00           | 2500.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 2600.00    | 0.00        | 270.00           | 2600.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 2700.00    | 0.00        | 270.00           | 2700.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 2800.00    | 0.00        | 270.00           | 2800.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 2900.00    | 0.00        | 270.00           | 2900.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 3000.00    | 0.00        | 270.00           | 3000.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 3100.00    | 0.00        | 270.00           | 3100.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 3200.00    | 0.00        | 270.00           | 3200.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 3300.00    | 0.00        | 270.00           | 3300.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 3400.00    | 0.00        | 270.00           | 3400.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 3500.00    | 0.00        | 270.00           | 3500.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 3600.00    | 0.00        | 270.00           | 3600.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 3700.00    | 0.00        | 270.00           | 3700.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 3800.00    | 0.00        | 270.00           | 3800.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 3900.00    | 0.00        | 270.00           | 3900.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 4000.00    | 0.00        | 270.00           | 4000.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 4100.00    | 0.00        | 270.00           | 4100.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 4200.00    | 0.00        | 270.00           | 4200.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 4300.00    | 0.00        | 270.00           | 4300.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 4400.00    | 0.00        | 270.00           | 4400.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 4500.00    | 0.00        | 270.00           | 4500.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 4600.00    | 0.00        | 270.00           | 4600.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 4700.00    | 0.00        | 270.00           | 4700.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 4800.00    | 0.00        | 270.00           | 4800.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 4900.00    | 0.00        | 270.00           | 4900.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 5000.00    | 0.00        | 270.00           | 5000.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 5100.00    | 0.00        | 270.00           | 5100.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 5200.00    | 0.00        | 270.00           | 5200.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 5300.00    | 0.00        | 270.00           | 5300.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 5400.00    | 0.00        | 270.00           | 5400.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 5500.00    | 0.00        | 270.00           | 5500.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 5600.00    | 0.00        | 270.00           | 5600.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 5700.00    | 0.00        | 270.00           | 5700.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 5800.00    | 0.00        | 270.00           | 5800.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 5900.00    | 0.00        | 270.00           | 5900.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 6000.00    | 0.00        | 270.00           | 6000.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 6100.00    | 0.00        | 270.00           | 6100.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 6200.00    | 0.00        | 270.00           | 6200.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 6300.00    | 0.00        | 270.00           | 6300.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 6400.00    | 0.00        | 270.00           | 6400.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 6500.00    | 0.00        | 270.00           | 6500.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 6600.00    | 0.00        | 270.00           | 6600.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 6700.00    | 0.00        | 270.00           | 6700.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 6800.00    | 0.00        | 270.00           | 6800.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 6900.00    | 0.00        | 270.00           | 6900.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|          | 7000.00    | 0.00        | 270.00           | 7000.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |



| 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 ° ' ") |
|--------------|------------|-------------|------------------|-------------|--------------|------------|------------|------------------|--------------------|-------------------|-------------------------|--------------------------|
|              | 7100.00    | 0.00        | 270.00           | 7100.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 7200.00    | 0.00        | 270.00           | 7200.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 7300.00    | 0.00        | 270.00           | 7300.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 7400.00    | 0.00        | 270.00           | 7400.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 7500.00    | 0.00        | 270.00           | 7500.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 7600.00    | 0.00        | 270.00           | 7600.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 7700.00    | 0.00        | 270.00           | 7700.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 7800.00    | 0.00        | 270.00           | 7800.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 7900.00    | 0.00        | 270.00           | 7900.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 8000.00    | 0.00        | 270.00           | 8000.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 8100.00    | 0.00        | 270.00           | 8100.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 8200.00    | 0.00        | 270.00           | 8200.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 8300.00    | 0.00        | 270.00           | 8300.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 8400.00    | 0.00        | 270.00           | 8400.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 8500.00    | 0.00        | 270.00           | 8500.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 8600.00    | 0.00        | 270.00           | 8600.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 8700.00    | 0.00        | 270.00           | 8700.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 8800.00    | 0.00        | 270.00           | 8800.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 8900.00    | 0.00        | 270.00           | 8900.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 9000.00    | 0.00        | 270.00           | 9000.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 9100.00    | 0.00        | 270.00           | 9100.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 9200.00    | 0.00        | 270.00           | 9200.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 9300.00    | 0.00        | 270.00           | 9300.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 9400.00    | 0.00        | 270.00           | 9400.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 9500.00    | 0.00        | 270.00           | 9500.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 9600.00    | 0.00        | 270.00           | 9600.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 9700.00    | 0.00        | 270.00           | 9700.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 9800.00    | 0.00        | 270.00           | 9800.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 9900.00    | 0.00        | 270.00           | 9900.00     | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 10000.00   | 0.00        | 270.00           | 10000.00    | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 10100.00   | 0.00        | 270.00           | 10100.00    | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 10200.00   | 0.00        | 270.00           | 10200.00    | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 10300.00   | 0.00        | 270.00           | 10300.00    | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 10400.00   | 0.00        | 270.00           | 10400.00    | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 10500.00   | 0.00        | 270.00           | 10500.00    | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 10600.00   | 0.00        | 270.00           | 10600.00    | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 10700.00   | 0.00        | 270.00           | 10700.00    | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 10800.00   | 0.00        | 270.00           | 10800.00    | 0.00         | 0.00       | 0.00       | 0.00             | 388256.69          | 737501.88         | N 32 3 56.94            | W 103 42 0.26            |
|              | 10900.00   | 12.00       | 270.00           | 10899.27    | 1.81         | 0.00       | -10.43     | 12.00            | 388256.69          | 737491.45         | N 32 3 56.94            | W 103 42 0.39            |
|              | 11000.00   | 24.00       | 270.00           | 10994.20    | 7.14         | 0.00       | -41.28     | 12.00            | 388256.69          | 737460.60         | N 32 3 56.94            | W 103 42 0.74            |
| Hold Tangent | 11099.25   | 35.91       | 270.00           | 11080.04    | 15.71        | 0.00       | -90.75     | 12.00            | 388256.69          | 737411.14         | N 32 3 56.94            | W 103 42 1.32            |
|              | 11100.00   | 35.91       | 270.00           | 11080.65    | 15.78        | 0.00       | -91.19     | 0.00             | 388256.69          | 737410.70         | N 32 3 56.94            | W 103 42 1.32            |
|              | 11200.00   | 35.91       | 270.00           | 11161.64    | 25.94        | 0.00       | -149.84    | 0.00             | 388256.69          | 737352.05         | N 32 3 56.94            | W 103 42 2.01            |
|              | 11300.00   | 35.91       | 270.00           | 11242.63    | 36.09        | 0.00       | -208.49    | 0.00             | 388256.69          | 737293.40         | N 32 3 56.95            | W 103 42 2.69            |
|              | 11400.00   | 35.91       | 270.00           | 11323.63    | 46.24        | 0.00       | -267.14    | 0.00             | 388256.69          | 737234.75         | N 32 3 56.95            | W 103 42 3.37            |
|              | 11500.00   | 35.91       | 270.00           | 11404.62    | 56.39        | 0.00       | -325.79    | 0.00             | 388256.69          | 737176.10         | N 32 3 56.95            | W 103 42 4.05            |
|              | 11600.00   | 35.91       | 270.00           | 11485.62    | 66.54        | 0.00       | -384.44    | 0.00             | 388256.69          | 737117.45         | N 32 3 56.96            | W 103 42 4.73            |
|              | 11700.00   | 35.91       | 270.00           | 11566.61    | 76.70        | 0.00       | -443.10    | 0.00             | 388256.69          | 737058.81         | N 32 3 56.96            | W 103 42 5.41            |

Build @  
12"/100'



| 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 ° ' ") |
|---------------------|------------|-------------|------------------|-------------|--------------|------------|------------|------------------|--------------------|-------------------|-------------------------|--------------------------|
|                     | 11800.00   | 35.91       | 270.00           | 11647.60    | 86.85        | 0.00       | -501.75    | 0.00             | 388256.69          | 737000.16         | N 32 3 56.96 W          | 103 42 6.10              |
| Build @<br>12°/100' | 11868.71   | 35.91       | 270.00           | 11703.26    | 93.82        | 0.00       | -542.05    | 0.00             | 388256.69          | 736959.86         | N 32 3 56.97 W          | 103 42 6.56              |
|                     | 11900.00   | 36.08       | 276.38           | 11728.58    | 98.01        | 1.02       | -560.38    | 12.00            | 388257.71          | 736941.52         | N 32 3 56.98 W          | 103 42 6.78              |
|                     | 12000.00   | 38.78       | 295.69           | 11808.26    | 124.65       | 17.94      | -618.08    | 12.00            | 388274.63          | 736883.83         | N 32 3 57.15 W          | 103 42 7.45              |
|                     | 12100.00   | 44.21       | 311.90           | 11883.35    | 170.50       | 54.93      | -672.45    | 12.00            | 388311.62          | 736829.46         | N 32 3 57.52 W          | 103 42 8.08              |
|                     | 12200.00   | 51.49       | 324.82           | 11950.57    | 233.55       | 110.40     | -721.12    | 12.00            | 388367.08          | 736780.79         | N 32 3 58.07 W          | 103 42 8.64              |
|                     | 12300.00   | 59.91       | 335.19           | 12006.98    | 311.04       | 181.90     | -761.97    | 12.00            | 388438.58          | 736739.95         | N 32 3 58.78 W          | 103 42 9.11              |
|                     | 12400.00   | 69.01       | 343.88           | 12050.12    | 399.60       | 266.32     | -793.20    | 12.00            | 388523.00          | 736708.72         | N 32 3 59.62 W          | 103 42 9.46              |
|                     | 12500.00   | 78.50       | 351.53           | 12078.10    | 495.34       | 359.97     | -813.45    | 12.00            | 388616.65          | 736698.47         | N 32 4 0.54 W           | 103 42 9.69              |
|                     | 12600.00   | 88.18       | 358.69           | 12089.70    | 594.09       | 458.76     | -821.84    | 12.00            | 388715.43          | 736680.08         | N 32 4 1.52 W           | 103 42 9.78              |
| Landing Point       | 12618.74   | 90.00       | 0.01             | 12090.00    | 612.58       | 477.50     | -822.05    | 12.00            | 388734.16          | 736679.87         | N 32 4 1.71 W           | 103 42 9.78              |
|                     | 12700.00   | 90.00       | 0.01             | 12090.00    | 692.61       | 558.75     | -822.04    | 0.00             | 388815.42          | 736679.88         | N 32 4 2.51 W           | 103 42 9.78              |
|                     | 12800.00   | 90.00       | 0.01             | 12090.00    | 791.10       | 658.75     | -822.03    | 0.00             | 388915.41          | 736679.89         | N 32 4 3.50 W           | 103 42 9.77              |
|                     | 12900.00   | 90.00       | 0.01             | 12090.00    | 889.59       | 758.75     | -822.02    | 0.00             | 389015.41          | 736679.90         | N 32 4 4.49 W           | 103 42 9.77              |
|                     | 13000.00   | 90.00       | 0.01             | 12090.00    | 988.07       | 858.75     | -822.01    | 0.00             | 389115.40          | 736679.91         | N 32 4 5.48 W           | 103 42 9.76              |
|                     | 13100.00   | 90.00       | 0.01             | 12090.00    | 1086.56      | 958.75     | -822.00    | 0.00             | 389215.40          | 736679.92         | N 32 4 6.47 W           | 103 42 9.75              |
|                     | 13200.00   | 90.00       | 0.01             | 12090.00    | 1185.05      | 1058.75    | -821.99    | 0.00             | 389315.39          | 736679.93         | N 32 4 7.46 W           | 103 42 9.74              |
|                     | 13300.00   | 90.00       | 0.01             | 12090.00    | 1283.54      | 1158.75    | -821.97    | 0.00             | 389415.39          | 736679.95         | N 32 4 8.45 W           | 103 42 9.74              |
|                     | 13400.00   | 90.00       | 0.01             | 12090.00    | 1382.03      | 1258.75    | -821.96    | 0.00             | 389515.38          | 736679.96         | N 32 4 9.44 W           | 103 42 9.73              |
|                     | 13500.00   | 90.00       | 0.01             | 12090.00    | 1480.52      | 1358.75    | -821.95    | 0.00             | 389615.38          | 736679.97         | N 32 4 10.43 W          | 103 42 9.72              |
|                     | 13600.00   | 90.00       | 0.01             | 12090.00    | 1579.01      | 1458.75    | -821.94    | 0.00             | 389715.37          | 736679.98         | N 32 4 11.42 W          | 103 42 9.72              |
|                     | 13700.00   | 90.00       | 0.01             | 12090.00    | 1677.49      | 1558.75    | -821.93    | 0.00             | 389815.37          | 736679.99         | N 32 4 12.41 W          | 103 42 9.71              |
|                     | 13800.00   | 90.00       | 0.01             | 12090.00    | 1775.98      | 1658.75    | -821.92    | 0.00             | 389915.36          | 736680.00         | N 32 4 13.40 W          | 103 42 9.70              |
|                     | 13900.00   | 90.00       | 0.01             | 12090.00    | 1874.47      | 1758.75    | -821.91    | 0.00             | 390015.36          | 736680.01         | N 32 4 14.39 W          | 103 42 9.70              |
|                     | 14000.00   | 90.00       | 0.01             | 12090.00    | 1972.96      | 1858.75    | -821.90    | 0.00             | 390115.35          | 736680.02         | N 32 4 15.38 W          | 103 42 9.69              |
|                     | 14100.00   | 90.00       | 0.01             | 12090.00    | 2071.45      | 1958.75    | -821.88    | 0.00             | 390215.35          | 736680.04         | N 32 4 16.37 W          | 103 42 9.68              |
|                     | 14200.00   | 90.00       | 0.01             | 12090.00    | 2169.94      | 2058.75    | -821.87    | 0.00             | 390315.34          | 736680.05         | N 32 4 17.35 W          | 103 42 9.68              |
|                     | 14300.00   | 90.00       | 0.01             | 12090.00    | 2268.43      | 2158.75    | -821.86    | 0.00             | 390415.34          | 736680.06         | N 32 4 18.34 W          | 103 42 9.67              |
|                     | 14400.00   | 90.00       | 0.01             | 12090.00    | 2366.92      | 2258.75    | -821.85    | 0.00             | 390515.33          | 736680.07         | N 32 4 19.33 W          | 103 42 9.66              |
|                     | 14500.00   | 90.00       | 0.01             | 12090.00    | 2465.40      | 2358.75    | -821.84    | 0.00             | 390615.33          | 736680.08         | N 32 4 20.32 W          | 103 42 9.65              |
|                     | 14600.00   | 90.00       | 0.01             | 12090.00    | 2563.89      | 2458.75    | -821.83    | 0.00             | 390715.32          | 736680.09         | N 32 4 21.31 W          | 103 42 9.65              |
|                     | 14700.00   | 90.00       | 0.01             | 12090.00    | 2662.38      | 2558.75    | -821.82    | 0.00             | 390815.32          | 736680.10         | N 32 4 22.30 W          | 103 42 9.64              |
|                     | 14800.00   | 90.00       | 0.01             | 12090.00    | 2760.87      | 2658.75    | -821.81    | 0.00             | 390915.31          | 736680.11         | N 32 4 23.29 W          | 103 42 9.63              |
|                     | 14900.00   | 90.00       | 0.01             | 12090.00    | 2859.36      | 2758.75    | -821.79    | 0.00             | 391015.31          | 736680.13         | N 32 4 24.28 W          | 103 42 9.63              |
|                     | 15000.00   | 90.00       | 0.01             | 12090.00    | 2957.85      | 2858.75    | -821.78    | 0.00             | 391115.31          | 736680.14         | N 32 4 25.27 W          | 103 42 9.62              |
|                     | 15100.00   | 90.00       | 0.01             | 12090.00    | 3056.34      | 2958.75    | -821.77    | 0.00             | 391215.30          | 736680.15         | N 32 4 26.26 W          | 103 42 9.61              |
|                     | 15200.00   | 90.00       | 0.01             | 12090.00    | 3154.82      | 3058.75    | -821.76    | 0.00             | 391315.30          | 736680.16         | N 32 4 27.25 W          | 103 42 9.61              |
|                     | 15300.00   | 90.00       | 0.01             | 12090.00    | 3253.31      | 3158.75    | -821.75    | 0.00             | 391415.29          | 736680.17         | N 32 4 28.24 W          | 103 42 9.60              |
|                     | 15400.00   | 90.00       | 0.01             | 12090.00    | 3351.80      | 3258.75    | -821.74    | 0.00             | 391515.29          | 736680.18         | N 32 4 29.23 W          | 103 42 9.59              |
|                     | 15500.00   | 90.00       | 0.01             | 12090.00    | 3450.29      | 3358.75    | -821.73    | 0.00             | 391615.28          | 736680.19         | N 32 4 30.22 W          | 103 42 9.59              |
|                     | 15600.00   | 90.00       | 0.01             | 12090.00    | 3548.78      | 3458.75    | -821.72    | 0.00             | 391715.28          | 736680.20         | N 32 4 31.21 W          | 103 42 9.58              |
|                     | 15700.00   | 90.00       | 0.01             | 12090.00    | 3647.27      | 3558.75    | -821.71    | 0.00             | 391815.27          | 736680.21         | N 32 4 32.20 W          | 103 42 9.57              |
|                     | 15800.00   | 90.00       | 0.01             | 12090.00    | 3745.76      | 3658.75    | -821.69    | 0.00             | 391915.27          | 736680.23         | N 32 4 33.19 W          | 103 42 9.56              |
|                     | 15900.00   | 90.00       | 0.01             | 12090.00    | 3844.25      | 3758.75    | -821.68    | 0.00             | 392015.26          | 736680.24         | N 32 4 34.18 W          | 103 42 9.56              |
|                     | 16000.00   | 90.00       | 0.01             | 12090.00    | 3942.73      | 3858.75    | -821.67    | 0.00             | 392115.26          | 736680.25         | N 32 4 35.17 W          | 103 42 9.55              |
|                     | 16100.00   | 90.00       | 0.01             | 12090.00    | 4041.22      | 3958.75    | -821.66    | 0.00             | 392215.25          | 736680.26         | N 32 4 36.16 W          | 103 42 9.54              |
|                     | 16200.00   | 90.00       | 0.01             | 12090.00    | 4139.71      | 4058.75    | -821.65    | 0.00             | 392315.25          | 736680.27         | N 32 4 37.14 W          | 103 42 9.54              |

| 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 °.′.″) |
|-------------------------------------------------|------------|-------------|------------------|-------------|--------------|------------|------------|------------------|--------------------|-------------------|-------------------------|--------------------------|
|                                                 | 16300.00   | 90.00       | 0.01             | 12090.00    | 4238.20      | 4158.75    | -821.64    | 0.00             | 392415.24          | 736680.28         | N 32 4 38.13            | W 103 42 9.53            |
|                                                 | 16400.00   | 90.00       | 0.01             | 12090.00    | 4336.69      | 4258.75    | -821.63    | 0.00             | 392515.24          | 736680.29         | N 32 4 39.12            | W 103 42 9.52            |
|                                                 | 16500.00   | 90.00       | 0.01             | 12090.00    | 4435.18      | 4358.75    | -821.62    | 0.00             | 392615.23          | 736680.30         | N 32 4 40.11            | W 103 42 9.52            |
|                                                 | 16600.00   | 90.00       | 0.01             | 12090.00    | 4533.67      | 4458.75    | -821.60    | 0.00             | 392715.23          | 736680.32         | N 32 4 41.10            | W 103 42 9.51            |
|                                                 | 16700.00   | 90.00       | 0.01             | 12090.00    | 4632.15      | 4558.75    | -821.59    | 0.00             | 392815.22          | 736680.33         | N 32 4 42.09            | W 103 42 9.50            |
|                                                 | 16800.00   | 90.00       | 0.01             | 12090.00    | 4730.64      | 4658.75    | -821.58    | 0.00             | 392915.22          | 736680.34         | N 32 4 43.08            | W 103 42 9.50            |
| Cimarex<br>Hallertau 5<br>Federal #9H -<br>PBHL | 16816.14   | 90.00       | 0.01             | 12090.00    | 4746.54      | 4674.90    | -821.58    | 0.00             | 392931.36          | 736680.34         | N 32 4 43.24            | W 103 42 9.49            |

Survey Type: Non-Def Plan

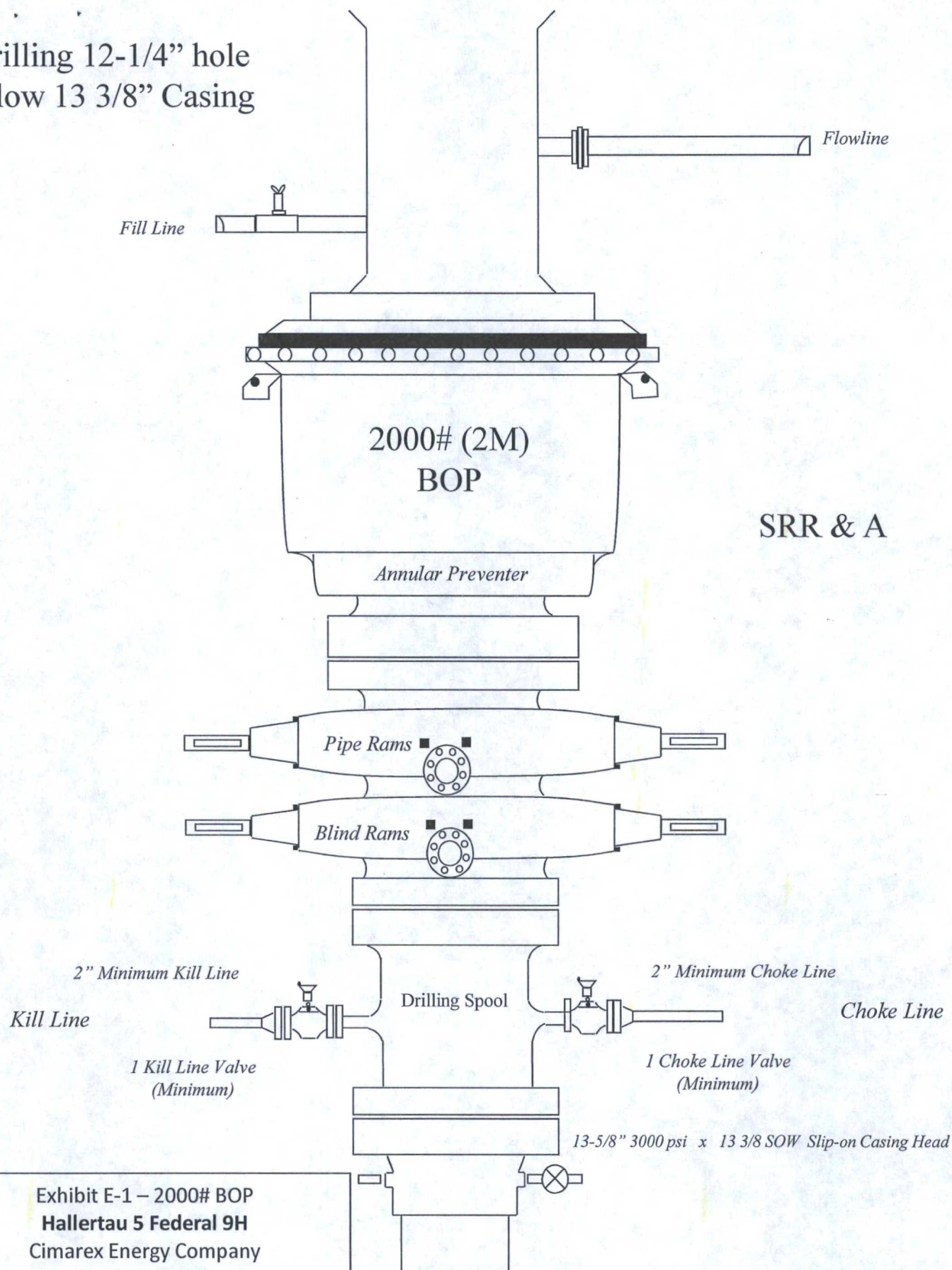
Survey Error Model: ISCWSA Rev 0 \*\*\* 3-D 95.000% Confidence 2.7955 sigma

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           | 16816.144     | 1/100.000        | 30.000            | 30.000                     | SLB_UNKNOWN      | Original Borehole / Cimarex<br>Hallertau 5 Federal #9H Rev0 |



Drilling 12-1/4" hole  
below 13 3/8" Casing



SRR & A

Exhibit E-1 – 2000# BOP  
Hallertau 5 Federal 9H  
Cimarex Energy Company  
5-26S-32E  
Lea County, NM

Drilling 8-3/4" hole below  
9-5/8" Casing

*Fill  
line*

10M Annular Preventer

10M Double  
Ram BOP

Pipe Rams

Blind Rams

2" Kill Line Valves (2)  
with Check Valve

3" Manual Choke Valve  
and 3" HCR Valve

2" Kill Line

3" Choke Line

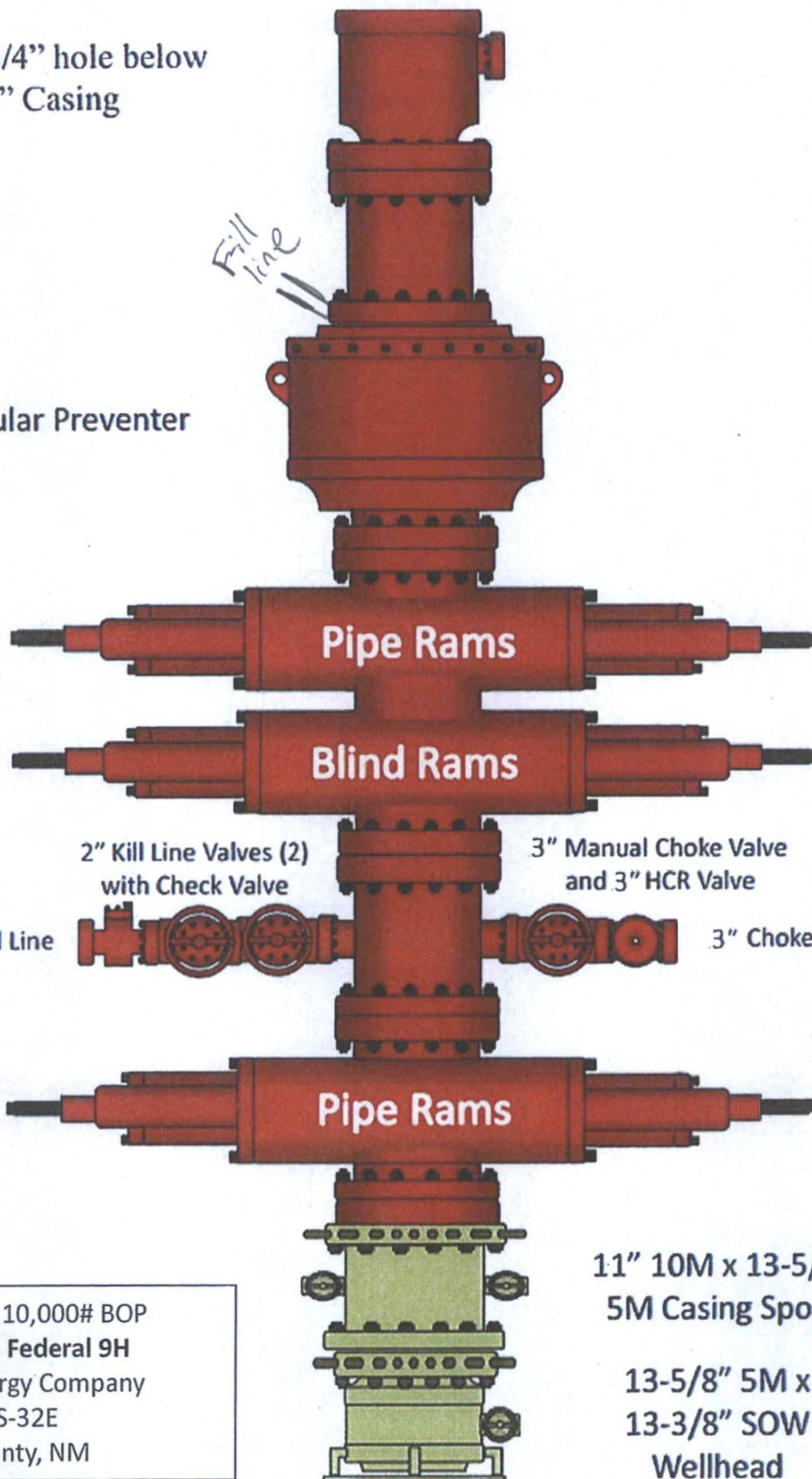
10M Single  
Ram BOP

Pipe Rams

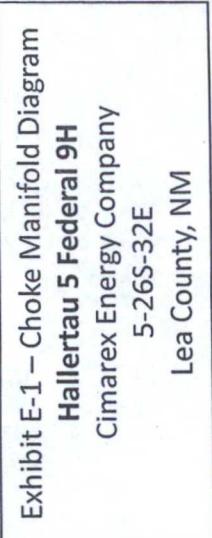
Exhibit E-1 – 10,000# BOP  
Hallertau 5 Federal 9H  
Cimarex Energy Company  
5-26S-32E  
Lea County, NM

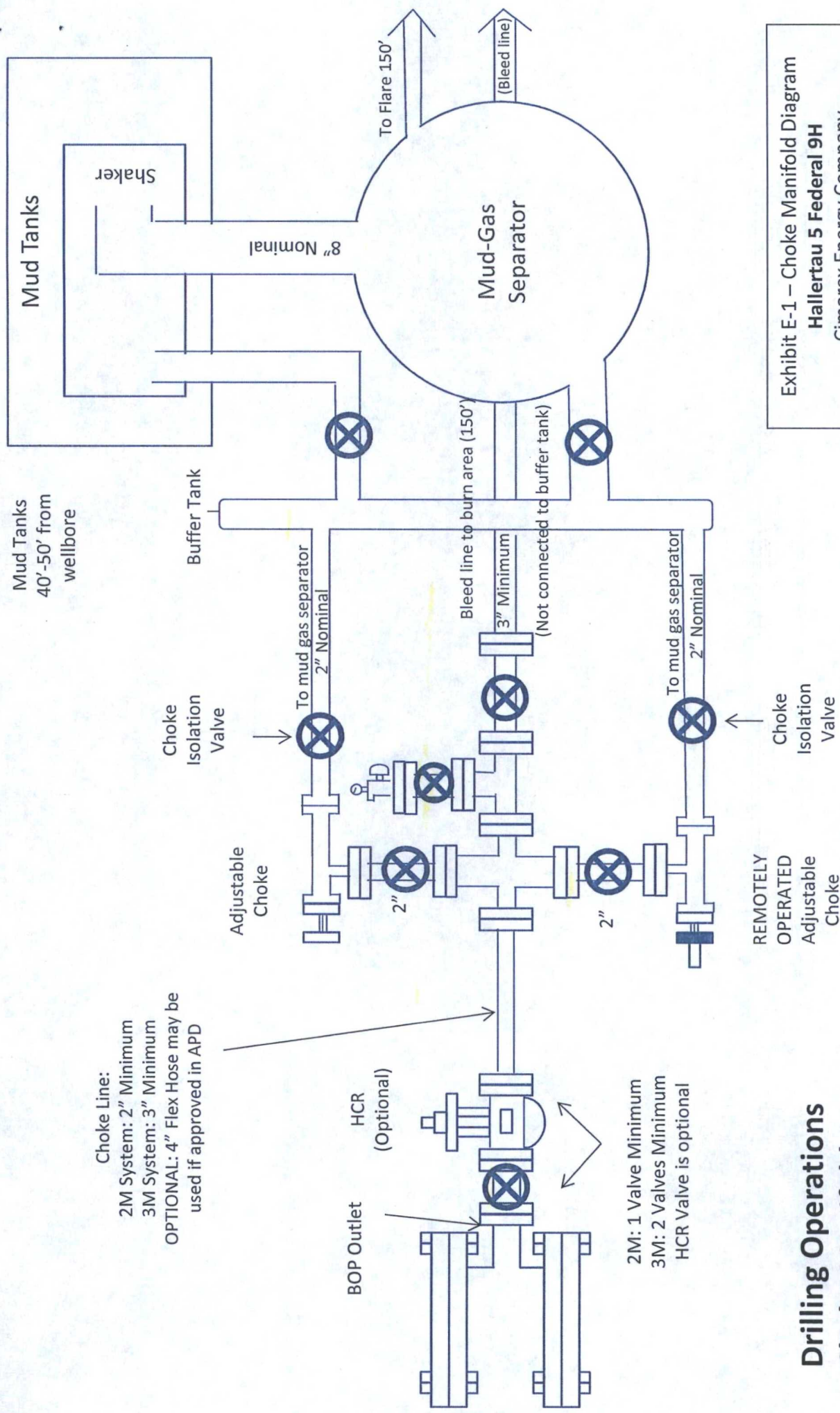
11" 10M x 13-5/8"  
5M Casing Spool

13-5/8" 5M x  
13-3/8" SOW  
Wellhead









Choke Line:  
 2M System: 2" Minimum  
 3M System: 3" Minimum  
 OPTIONAL: 4" Flex Hose may be  
 used if approved in APD

2M: 1 Valve Minimum  
 3M: 2 Valves Minimum  
 HCR Valve is optional

**Drilling Operations  
 Choke Manifold  
 2M/3M Service**

Exhibit E-1 – Choke Manifold Diagram  
**Hallertau 5 Federal 9H**  
 Cimarex Energy Company  
 5-26S-32E  
 Lea County, NM



Exhibit F-1  
Hallertau 5 Federal 9H  
Cimarex Energy Company  
5-26S-32E  
Lea County, NM



## Midwest Hose & Specialty, Inc.

### INTERNAL HYDROSTATIC TEST REPORT

|                                                                         |                      |                               |  |
|-------------------------------------------------------------------------|----------------------|-------------------------------|--|
| <b>Customer:</b>                                                        |                      | <b>P.O. Number:</b>           |  |
| Oderco Inc                                                              |                      | odyd-271                      |  |
| <b>HOSE SPECIFICATIONS</b>                                              |                      |                               |  |
| <b>Type:</b> Stainless Steel Armor<br>Choke & Kill Hose                 |                      | <b>Hose Length:</b> 45'ft.    |  |
| <b>I.D.</b> 4 INCHES                                                    |                      | <b>O.D.</b> 9 INCHES          |  |
| <b>WORKING PRESSURE</b>                                                 | <b>TEST PRESSURE</b> | <b>BURST PRESSURE</b>         |  |
| 10,000 PSI                                                              | 15,000 PSI           | 0 PSI                         |  |
| <b>COUPLINGS</b>                                                        |                      |                               |  |
| <b>Stem Part No.</b>                                                    |                      | <b>Ferrule No.</b>            |  |
| OKC<br>OKC                                                              |                      | OKC<br>OKC                    |  |
| <b>Type of Coupling:</b>                                                |                      |                               |  |
| Swage-It                                                                |                      |                               |  |
| <b>PROCEDURE</b>                                                        |                      |                               |  |
| <i>Hose assembly pressure tested with water at ambient temperature.</i> |                      |                               |  |
| <b>TIME HELD AT TEST PRESSURE</b>                                       |                      | <b>ACTUAL BURST PRESSURE:</b> |  |
| 15 MIN.                                                                 |                      | 0 PSI                         |  |
| <b>Hose Assembly Serial Number:</b>                                     |                      | <b>Hose Serial Number:</b>    |  |
| 79793                                                                   |                      | OKC                           |  |
| <b>Comments:</b>                                                        |                      |                               |  |
|                                                                         |                      |                               |  |
| <b>Date:</b>                                                            | <b>Tested:</b>       | <b>Approved:</b>              |  |
| 3/8/2011                                                                | A. Jaime Sauer       | [Signature]                   |  |



Midwest Hose  
& Specialty, Inc.

## Internal Hydrostatic Test Graph

Customer: Houston

Pick Ticket #: 94260

### Hose Specifications

Hose Type  
C & K

I.D.  
4"

Working Pressure  
10000 PSI

Length  
45'

O.D.  
6.09"

Burst Pressure  
Standard Safety Multiplier Applies

### Verification

Type of Fittings  
41/16 10K

Die Size  
6.38"

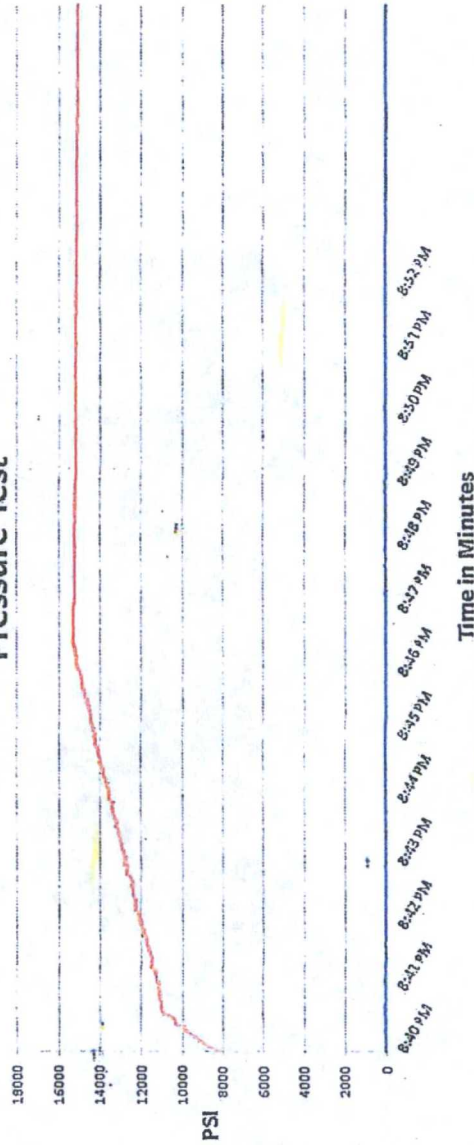
Hose Serial #  
5544

Coupling Method  
Swage

Final O.D.  
6.25"

Hose Assembly Serial #  
79793

### Pressure Test



Test Pressure  
15000 PSI

Time Held at Test Pressure  
11 Minutes

Actual Burst Pressure

Peak Pressure  
15483 PSI

Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: Zac McConnell

Approved By: Kim Thomas

*[Signature]*

*[Signature]*

March 3, 2011

Exhibit F-1 – Co-Flex Hose Hydrostatic Test  
Hallertau 5 Federal 9H  
Cimarex Energy Company  
5-26S-32E  
Lea County, NM



Exhibit F-2 - Co-Flex Hose  
Hallertau 5 Federal 9H  
Cimarex Energy Company  
5-26S-32E  
Lea County, NM



## Midwest Hose & Specialty, Inc.

### Certificate of Conformity

|                                                                                                                                                                                                                                                                                            |               |              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|
| <b>Customer:</b>                                                                                                                                                                                                                                                                           |               | <b>PO</b>    |
| DEM                                                                                                                                                                                                                                                                                        |               | ODYD-271     |
| <b>SPECIFICATIONS</b>                                                                                                                                                                                                                                                                      |               |              |
| <b>Sales Order</b>                                                                                                                                                                                                                                                                         | <b>Dated:</b> |              |
| 79793                                                                                                                                                                                                                                                                                      | 3/8/2011      |              |
| <p>We hereby certify that the material supplied for the referenced purchase order to be true according to the requirements of the purchase order and current industry standards</p> <p>Supplier:<br/>Midwest Hose &amp; Specialty, Inc.<br/>10640 Tanner Road<br/>Houston, Texas 77041</p> |               |              |
| <b>Comments:</b>                                                                                                                                                                                                                                                                           |               |              |
| <b>Approved:</b>                                                                                                                                                                                                                                                                           |               | <b>Date:</b> |
|                                                                                                                                                                                                         |               | 3/8/2011     |





Exhibit F -3- Co-Flex Hose  
Hallertau 5 Federal 9H  
Cimarex Energy Company  
5-26S-32E  
Lea County, NM

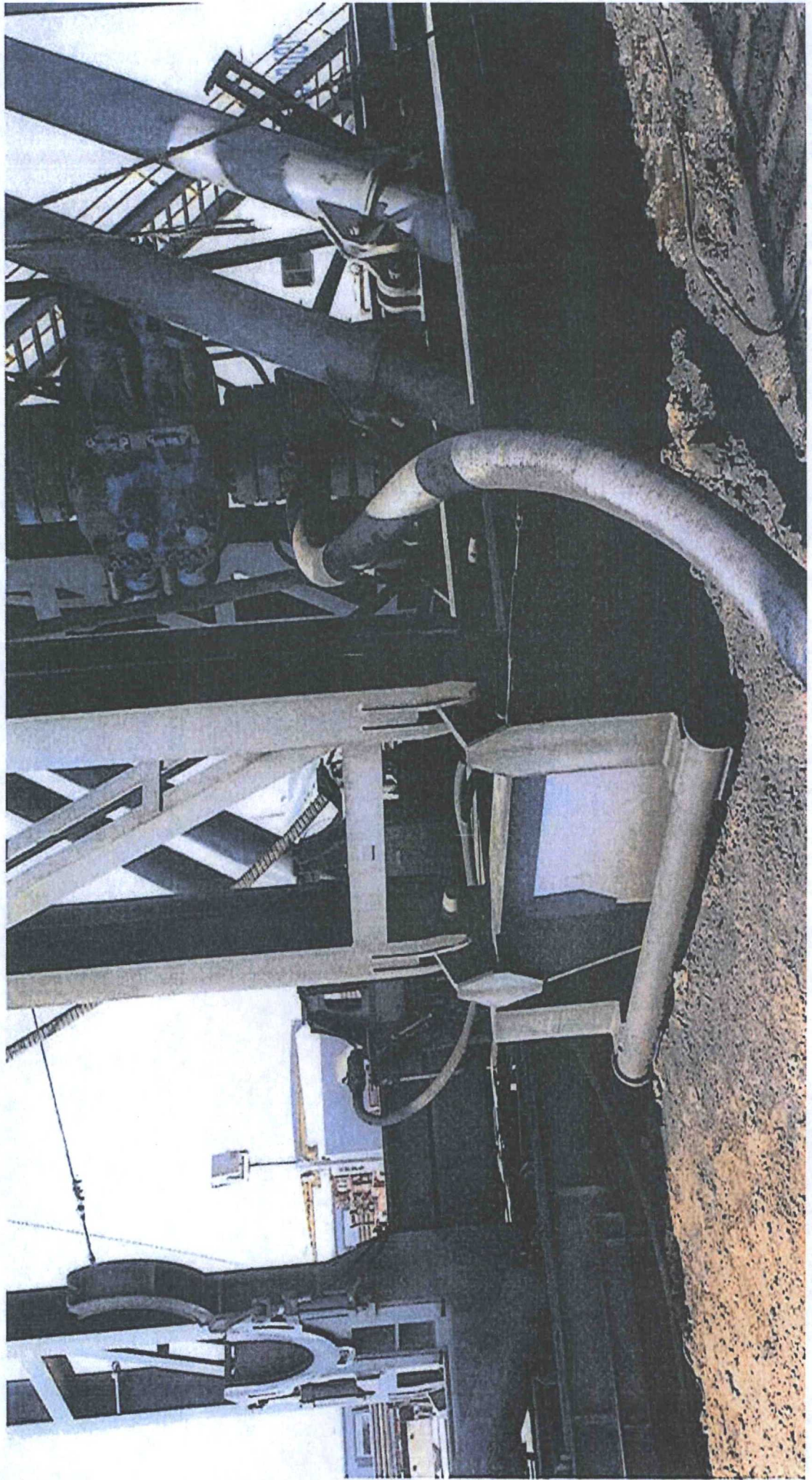
## Specification Sheet Choke & Kill Hose

The Midwest Hose & Specialty Choke & Kill hose is manufactured with only premium components. The reinforcement cables, inner liner and cover are made of the highest quality material to handle the tough drilling applications of today's industry. The end connections are available with API flanges, API male threads, hubs, hammer unions or other special fittings upon request. Hose assembly is manufactured to API 7K. This assembly is wrapped with fire resistant vermiculite coated fiberglass insulation, rated at 2000 degrees with stainless steel armor cover.

|                               |                                                                                                          |
|-------------------------------|----------------------------------------------------------------------------------------------------------|
| <b>Working Pressure:</b>      | 5,000 or 10,000 psi working pressure                                                                     |
| <b>Test Pressure:</b>         | 10,000 or 15,000 psi test pressure                                                                       |
| <b>Reinforcement:</b>         | Multiple steel cables                                                                                    |
| <b>Cover:</b>                 | Stainless Steel Armor                                                                                    |
| <b>Inner Tube:</b>            | Petroleum resistant, Abrasion resistant                                                                  |
| <b>End Fitting:</b>           | API flanges, API male threads, threaded or butt weld hammer unions, unbolt and other special connections |
| <b>Maximum Length:</b>        | 110 Feet                                                                                                 |
| <b>ID:</b>                    | 2-1/2", 3", 3-1/2", 4"                                                                                   |
| <b>Operating Temperature:</b> | -22 deg F to +180 deg F (-30 deg C to +82 deg C)                                                         |



Exhibit F — Co-Flex Hose  
**Hallertau 5 Federal 9H**  
Cimarex Energy Company  
5-26S-32E  
Lea County, NM





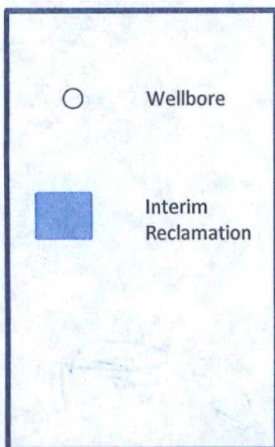
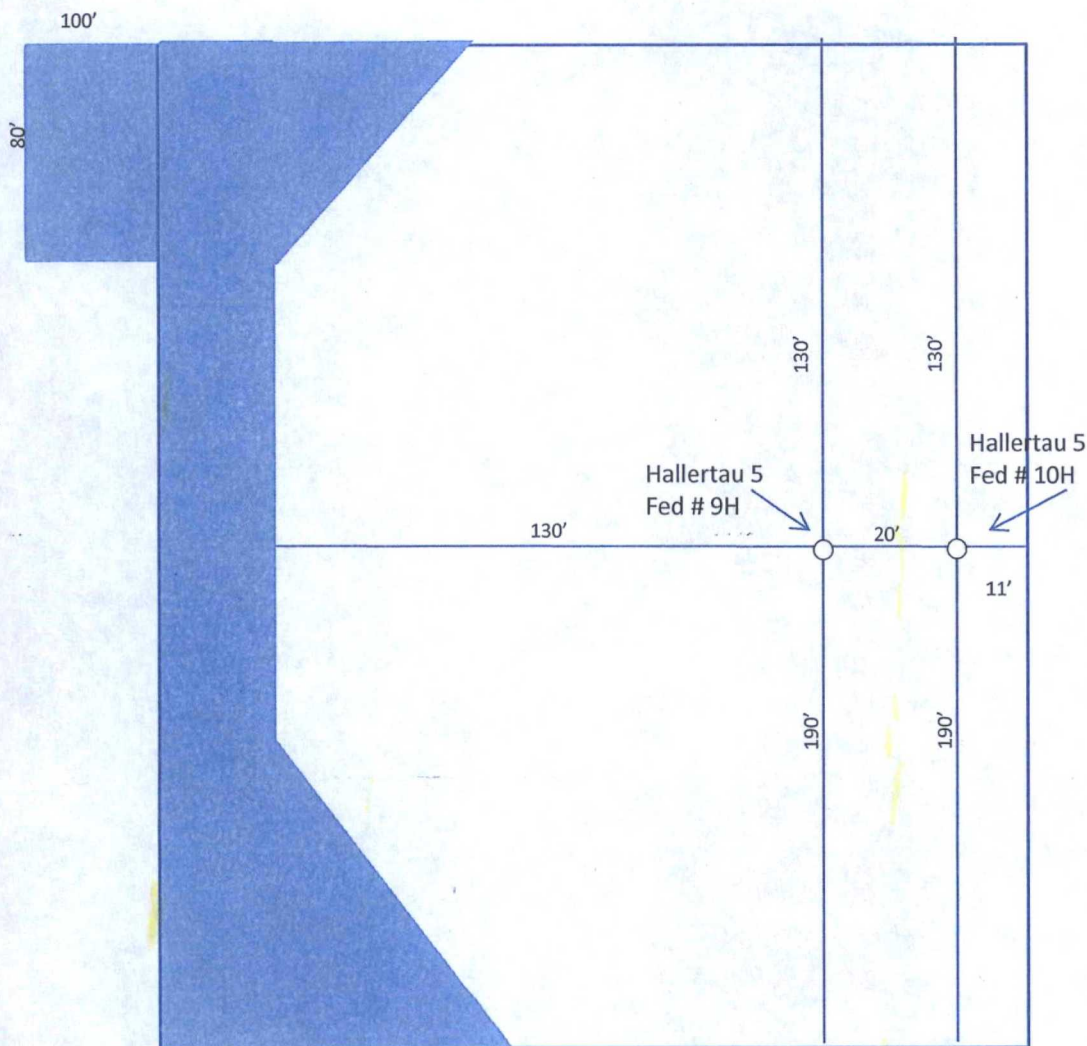


Exhibit D-1  
Interim Reclamation Diagram  
**Hallertau 5 Federal 9H**  
Cimarex Energy Company  
5-26S-32E  
Lea County, NM