

Submit 1 Copy To Appropriate District Office  
District I - (575) 393-6161  
1625 N. French Dr., Hobbs, NM 88240  
District II - (575) 748-1283  
811 S. First St., Artesia, NM 88210  
District III - (505) 334-6178  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV - (505) 476-3460  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
Revised August 1, 2011

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

|                                                                                                     |
|-----------------------------------------------------------------------------------------------------|
| WELL API NO.<br><b>30-015-39971</b>                                                                 |
| 5. Indicate Type of Lease<br>STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/> |
| 6. State Oil & Gas Lease No.                                                                        |
| 7. Lease Name or Unit Agreement Name<br><b>Pinto 36 State Com</b>                                   |
| 8. Well Number <b>6H</b>                                                                            |
| 9. OGRID Number<br><b>229137</b>                                                                    |
| 10. Pool name or Wildcat<br><b>Penasco Draw; SA-Yeso (Assoc) 50270</b>                              |

|                                                                                                                                                                                                                      |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br>(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG-BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)        |  |
| 1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>                                                                                       |  |
| 2. Name of Operator<br><b>COG Operating LLC</b>                                                                                                                                                                      |  |
| 3. Address of Operator<br><b>One Concho Center - 600 W Illinois Ave Midland, TX 79701</b>                                                                                                                            |  |
| 4. Well Location<br>Unit Letter <b>N</b> <b>150</b> feet from the <b>SOUTH</b> line and <b>2230</b> feet from the <b>WEST</b> line<br>Section <b>36</b> Township <b>18S</b> Range <b>25E</b> NMPM County <b>EDDY</b> |  |
| 11. Elevation (Show whether DR, RKB, RT, GR, etc.)<br><b>3495'</b>                                                                                                                                                   |  |

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

**NOTICE OF INTENTION TO:**  
PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐  
DOWNHOLE COMMINGLE ☐

**SUBSEQUENT REPORT OF:**  
REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☐  
CASING/CEMENT JOB ☐

OTHER: **Change Casing Program** ☒

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

**COG proposes to drill an 11" hole to 1200' w/fresh water, run 8-5/8" 32# J-55 and cement to surface. Drill a 7-7/8" hole to 2148' MD and kick off and drill curve to 2669' TVD 2977' MD. Drill a 7-7/8" lateral to new BHL @ 2580' TVD 7240' MD. Run a 5 1/2" 17# L-80 casing to TD cement to surface with 800 sacks.**

**A revised directional plan is attached.**

Spud Date:

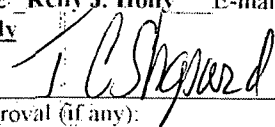
Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

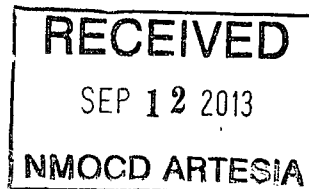
SIGNATURE  TITLE **Permitting Tech** DATE **9/12/2013**

Type or print name: **Kelly J. Holly** E-mail address: **kholly@concho.com** PHONE: **432-685-4384**

**For State Use Only**

APPROVED BY:  TITLE **"Geologist"** DATE **9/12/2013**

Conditions of Approval (if any):





## COG Operating LLC

Eddy County, New Mexico (NAD 27 NME)

Pinto 36 State Com

#6H

WB1

Plan: Plan #1 09-05-13

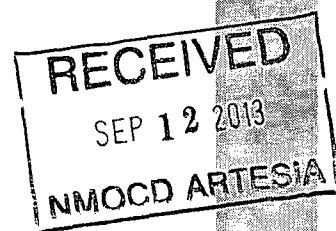
Surface: 150' FSL, 2230' FWL, Sec 36, T18S, R25E, Unit N

PP: 330' FSL, 2235' FWL, Sec 36, T18S, R25E, Unit N

BHL: 330' FNL, 2260' FWL, Sec 36, T18S, R25E, Unit C

## Standard Planning Report

05 September, 2013



PHOENIX  
TECHNOLOGY SERVICES



Phoenix Technology Services  
Planning Report



Database: GCR DB  
Company: COG Operating LLC  
Project: Eddy County, New Mexico (NAD 27 NME)  
Site: Pinto 36 State Com  
Well: #6H  
Wellbore: WB1  
Design: Plan #1 09-05-13

Local Co-ordinate Reference:  
TVD Reference: GL @ 3495.00usft  
MD Reference: GL @ 3495.00usft  
North Reference: Grid  
Survey Calculation Method: Minimum Curvature

Project: Eddy County, New Mexico (NAD 27 NME)

Map System: US State Plane 1927 (Exact solution) System Datum: Mean Sea Level  
Geo Datum: NAD 1927 (NADCON CONUS)  
Map Zone: New Mexico East 3001

Site: Pinto 36 State Com

Site Position: Northing: 617,373.90 usft Latitude: 32° 41' 49.99854 N  
From: Map Easting: 470,225.00 usft Longitude: 104° 25' 48.44242 W  
Position Uncertainty: 0.00 usft Slot Radius: 13-3/16 " Grid Convergence: -0.05°

Well: #6H  
Well Position: +N/-S 61.20 usft Northing: 617,435.10 usft Latitude: 32° 41' 50.57762 N  
+E/-W -2,805.90 usft Easting: 467,419.10 usft Longitude: 104° 26' 21.27918 W  
Position Uncertainty: 0.00 usft Wellhead Elevation: Ground Level: 3,495.00 usft

Wellbore: WB1

| Magnetics | Model Name  | Sample Date | Declination<br>(°) | Dip Angle<br>(°) | Field Strength<br>(nT) |
|-----------|-------------|-------------|--------------------|------------------|------------------------|
|           | IGRF2010_14 | 09/05/13    | 7.75               | 60.42            | 48,582                 |

Design: Plan #1 09-05-13

Audit Notes:

Version: Phase: PLAN Tie On Depth: 0.00

| Vertical Section: | Depth From (TVD)<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Direction<br>(°) |
|-------------------|----------------------------|-----------------|-----------------|------------------|
|                   | 0.00                       | 0.00            | 0.00            | 1.44             |

Plan Sections

| Measured<br>Depth<br>(usft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Dogleg<br>Rate<br>(°/100usft) | Build<br>Rate<br>(°/100usft) | Turn<br>Rate<br>(°/100usft) | TFO<br>(°) | Target              |
|-----------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|------------------------------|-----------------------------|------------|---------------------|
| 0.00                        | 0.00               | 0.00           | 0.00                        | 0.00            | 0.00            | 0.00                          | 0.00                         | 0.00                        | 0.00       |                     |
| 2,148.11                    | 0.00               | 0.00           | 2,148.11                    | 0.00            | 0.00            | 0.00                          | 0.00                         | 0.00                        | 0.00       |                     |
| 2,977.20                    | 91.20              | 1.44           | 2,668.87                    | 531.61          | 13.34           | 11.00                         | 11.00                        | 0.00                        | 1.44       |                     |
| 7,239.66                    | 91.20              | 1.44           | 2,579.60                    | 4,791.80        | 120.20          | 0.00                          | 0.00                         | 0.00                        | 0.00       | PBHL-Pinto 36 State |



Phoenix Technology Services  
Planning Report



Database: GCR DB  
Company: COG Operating LLC  
Project: Eddy County, New Mexico (NAD 27 NME)  
Site: Pinto 36 State Corn  
Well: #6H  
Wellbore: WB1  
Design: Plan #1 09-05-13

Local Co-ordinate Reference:  
TVD Reference: GL @ 3495.00usft  
MD Reference: GL @ 3495.00usft  
North Reference: Grid  
Survey Calculation Method: Minimum Curvature

Planned Survey

| Measured Depth (usft)               | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 0.00                                | 0.00            | 0.00        | 0.00                  | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,148.11                            | 0.00            | 0.00        | 2,148.11              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| KOP Start Build 11.00               |                 |             |                       |              |              |                         |                         |                        |                       |
| 2,200.00                            | 5.71            | 1.44        | 2,199.91              | 2.58         | 0.06         | 2.58                    | 11.00                   | 11.00                  | 0.00                  |
| 2,300.00                            | 16.71           | 1.44        | 2,297.86              | 21.98        | 0.55         | 21.99                   | 11.00                   | 11.00                  | 0.00                  |
| 2,400.00                            | 27.71           | 1.44        | 2,390.30              | 59.71        | 1.50         | 59.73                   | 11.00                   | 11.00                  | 0.00                  |
| 2,500.00                            | 38.71           | 1.44        | 2,473.84              | 114.38       | 2.87         | 114.41                  | 11.00                   | 11.00                  | 0.00                  |
| 2,594.78                            | 49.13           | 1.44        | 2,542.01              | 180.01       | 4.52         | 180.07                  | 11.00                   | 11.00                  | 0.00                  |
| PP-Pinto 36 State #6H               |                 |             |                       |              |              |                         |                         |                        |                       |
| 2,600.00                            | 49.71           | 1.44        | 2,545.41              | 183.97       | 4.61         | 184.03                  | 11.00                   | 11.00                  | 0.00                  |
| 2,700.00                            | 60.71           | 1.44        | 2,602.38              | 265.94       | 6.67         | 266.03                  | 11.00                   | 11.00                  | 0.00                  |
| 2,800.00                            | 71.71           | 1.44        | 2,642.66              | 357.28       | 8.96         | 357.39                  | 11.00                   | 11.00                  | 0.00                  |
| 2,900.00                            | 82.71           | 1.44        | 2,664.77              | 454.61       | 11.40        | 454.76                  | 11.00                   | 11.00                  | 0.00                  |
| 2,974.81                            | 90.94           | 1.44        | 2,668.91              | 529.22       | 13.28        | 529.39                  | 11.00                   | 11.00                  | 0.00                  |
| TL, 2680' TVD @ 0 VZ, 91.2° Inc     |                 |             |                       |              |              |                         |                         |                        |                       |
| 2,977.20                            | 91.20           | 1.44        | 2,668.87              | 531.61       | 13.34        | 531.78                  | 11.00                   | 11.00                  | 0.00                  |
| LP Start 4262.46 hold at 2977.20 MD |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,000.00                            | 91.20           | 1.44        | 2,668.39              | 554.40       | 13.91        | 554.57                  | 0.00                    | 0.00                   | 0.00                  |
| 3,100.00                            | 91.20           | 1.44        | 2,666.29              | 654.35       | 16.41        | 654.55                  | 0.00                    | 0.00                   | 0.00                  |
| 3,200.00                            | 91.20           | 1.44        | 2,664.20              | 754.29       | 18.92        | 754.53                  | 0.00                    | 0.00                   | 0.00                  |
| 3,300.00                            | 91.20           | 1.44        | 2,662.11              | 854.24       | 21.43        | 854.51                  | 0.00                    | 0.00                   | 0.00                  |
| 3,400.00                            | 91.20           | 1.44        | 2,660.01              | 954.19       | 23.94        | 954.49                  | 0.00                    | 0.00                   | 0.00                  |
| 3,500.00                            | 91.20           | 1.44        | 2,657.92              | 1,054.13     | 26.44        | 1,054.46                | 0.00                    | 0.00                   | 0.00                  |
| 3,600.00                            | 91.20           | 1.44        | 2,655.82              | 1,154.08     | 28.95        | 1,154.44                | 0.00                    | 0.00                   | 0.00                  |
| 3,700.00                            | 91.20           | 1.44        | 2,653.73              | 1,254.03     | 31.46        | 1,254.42                | 0.00                    | 0.00                   | 0.00                  |
| 3,800.00                            | 91.20           | 1.44        | 2,651.63              | 1,353.97     | 33.96        | 1,354.40                | 0.00                    | 0.00                   | 0.00                  |
| 3,900.00                            | 91.20           | 1.44        | 2,649.54              | 1,453.92     | 36.47        | 1,454.38                | 0.00                    | 0.00                   | 0.00                  |
| 4,000.00                            | 91.20           | 1.44        | 2,647.45              | 1,553.87     | 38.98        | 1,554.35                | 0.00                    | 0.00                   | 0.00                  |
| 4,100.00                            | 91.20           | 1.44        | 2,645.35              | 1,653.81     | 41.49        | 1,654.33                | 0.00                    | 0.00                   | 0.00                  |
| 4,200.00                            | 91.20           | 1.44        | 2,643.26              | 1,753.76     | 43.99        | 1,754.31                | 0.00                    | 0.00                   | 0.00                  |
| 4,300.00                            | 91.20           | 1.44        | 2,641.16              | 1,853.71     | 46.50        | 1,854.29                | 0.00                    | 0.00                   | 0.00                  |
| 4,400.00                            | 91.20           | 1.44        | 2,639.07              | 1,953.65     | 49.01        | 1,954.27                | 0.00                    | 0.00                   | 0.00                  |
| 4,500.00                            | 91.20           | 1.44        | 2,636.98              | 2,053.60     | 51.51        | 2,054.24                | 0.00                    | 0.00                   | 0.00                  |
| 4,600.00                            | 91.20           | 1.44        | 2,634.88              | 2,153.55     | 54.02        | 2,154.22                | 0.00                    | 0.00                   | 0.00                  |
| 4,700.00                            | 91.20           | 1.44        | 2,632.79              | 2,253.49     | 56.53        | 2,254.20                | 0.00                    | 0.00                   | 0.00                  |
| 4,800.00                            | 91.20           | 1.44        | 2,630.69              | 2,353.44     | 59.03        | 2,354.18                | 0.00                    | 0.00                   | 0.00                  |
| 4,900.00                            | 91.20           | 1.44        | 2,628.60              | 2,453.38     | 61.54        | 2,454.16                | 0.00                    | 0.00                   | 0.00                  |
| 5,000.00                            | 91.20           | 1.44        | 2,626.50              | 2,553.33     | 64.05        | 2,554.13                | 0.00                    | 0.00                   | 0.00                  |
| 5,100.00                            | 91.20           | 1.44        | 2,624.41              | 2,653.28     | 66.56        | 2,654.11                | 0.00                    | 0.00                   | 0.00                  |
| 5,200.00                            | 91.20           | 1.44        | 2,622.32              | 2,753.22     | 69.06        | 2,754.09                | 0.00                    | 0.00                   | 0.00                  |
| 5,300.00                            | 91.20           | 1.44        | 2,620.22              | 2,853.17     | 71.57        | 2,854.07                | 0.00                    | 0.00                   | 0.00                  |
| 5,400.00                            | 91.20           | 1.44        | 2,618.13              | 2,953.12     | 74.08        | 2,954.05                | 0.00                    | 0.00                   | 0.00                  |
| 5,500.00                            | 91.20           | 1.44        | 2,616.03              | 3,053.06     | 76.58        | 3,054.03                | 0.00                    | 0.00                   | 0.00                  |
| 5,600.00                            | 91.20           | 1.44        | 2,613.94              | 3,153.01     | 79.09        | 3,154.00                | 0.00                    | 0.00                   | 0.00                  |
| 5,700.00                            | 91.20           | 1.44        | 2,611.84              | 3,252.96     | 81.60        | 3,253.98                | 0.00                    | 0.00                   | 0.00                  |
| 5,800.00                            | 91.20           | 1.44        | 2,609.75              | 3,352.90     | 84.11        | 3,353.96                | 0.00                    | 0.00                   | 0.00                  |
| 5,900.00                            | 91.20           | 1.44        | 2,607.66              | 3,452.85     | 86.61        | 3,453.94                | 0.00                    | 0.00                   | 0.00                  |
| 6,000.00                            | 91.20           | 1.44        | 2,605.56              | 3,552.80     | 89.12        | 3,553.92                | 0.00                    | 0.00                   | 0.00                  |
| 6,100.00                            | 91.20           | 1.44        | 2,603.47              | 3,652.74     | 91.63        | 3,653.89                | 0.00                    | 0.00                   | 0.00                  |
| 6,200.00                            | 91.20           | 1.44        | 2,601.37              | 3,752.69     | 94.13        | 3,753.87                | 0.00                    | 0.00                   | 0.00                  |
| 6,300.00                            | 91.20           | 1.44        | 2,599.28              | 3,852.64     | 96.64        | 3,853.85                | 0.00                    | 0.00                   | 0.00                  |
| 6,400.00                            | 91.20           | 1.44        | 2,597.18              | 3,952.58     | 99.15        | 3,953.83                | 0.00                    | 0.00                   | 0.00                  |
| 6,500.00                            | 91.20           | 1.44        | 2,595.09              | 4,052.53     | 101.66       | 4,053.81                | 0.00                    | 0.00                   | 0.00                  |
| 6,600.00                            | 91.20           | 1.44        | 2,593.00              | 4,152.48     | 104.16       | 4,153.78                | 0.00                    | 0.00                   | 0.00                  |



Phoenix Technology Services  
Planning Report



|           |                                      |                              |                   |
|-----------|--------------------------------------|------------------------------|-------------------|
| Database: | GCR DB                               | Local Co-ordinate Reference: | Well #6H          |
| Company:  | COG Operating LLC                    | TVD Reference:               | GL @ 3495.00usft  |
| Project:  | Eddy County, New Mexico (NAD 27 NME) | MD Reference:                | GL @ 3495.00usft  |
| Site:     | Pinto 36 State Com                   | North Reference:             | Grid              |
| Well:     | #6H                                  | Survey Calculation Method:   | Minimum Curvature |
| Wellbore: | WB1                                  |                              |                   |
| Design:   | Plan #1 09-05-13                     |                              |                   |

| Planned Survey                          |                 |             |                       |              |              |                         |                         |                        |                       |
|-----------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)                   | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 6,700.00                                | 91.20           | 1.44        | 2,590.90              | 4,252.42     | 106.67       | 4,253.76                | 0.00                    | 0.00                   | 0.00                  |
| 6,800.00                                | 91.20           | 1.44        | 2,588.81              | 4,352.37     | 109.18       | 4,353.74                | 0.00                    | 0.00                   | 0.00                  |
| 6,900.00                                | 91.20           | 1.44        | 2,586.71              | 4,452.32     | 111.68       | 4,453.72                | 0.00                    | 0.00                   | 0.00                  |
| 7,000.00                                | 91.20           | 1.44        | 2,584.62              | 4,552.26     | 114.19       | 4,553.70                | 0.00                    | 0.00                   | 0.00                  |
| 7,100.00                                | 91.20           | 1.44        | 2,582.52              | 4,652.21     | 116.70       | 4,653.67                | 0.00                    | 0.00                   | 0.00                  |
| 7,200.00                                | 91.20           | 1.44        | 2,580.43              | 4,752.16     | 119.21       | 4,753.65                | 0.00                    | 0.00                   | 0.00                  |
| 7,239.66                                | 91.20           | 1.44        | 2,579.60              | 4,791.80     | 120.20       | 4,793.31                | 0.00                    | 0.00                   | 0.00                  |
| TD at 7239.66 - PBHL-Pinto 36 State #6H |                 |             |                       |              |              |                         |                         |                        |                       |

| Design Targets            |               |              |            |              |              |                 |                |                    |                     |
|---------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|--------------------|---------------------|
| Target Name               | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude           | Longitude           |
| - hit/miss target         |               |              |            |              |              |                 |                |                    |                     |
| - Shape                   |               |              |            |              |              |                 |                |                    |                     |
| PP-Pinto 36 State #6H     | 0.00          | 360.00       | 2,542.00   | 180.00       | 4.52         | 617,615.10      | 467,423.62     | 32° 41' 52.35887 N | 104° 26' 21.22845 W |
| - plan hits target center |               |              |            |              |              |                 |                |                    |                     |
| - Point                   |               |              |            |              |              |                 |                |                    |                     |
| PBHL-Pinto 36 State #6H   | 0.00          | 360.00       | 2,579.60   | 4,791.80     | 120.20       | 622,226.90      | 467,539.30     | 32° 42' 37.99655 N | 104° 26' 19.92835 W |
| - plan hits target center |               |              |            |              |              |                 |                |                    |                     |
| - Point                   |               |              |            |              |              |                 |                |                    |                     |

| Formations            |                       |                                 |           |         |                   |  |
|-----------------------|-----------------------|---------------------------------|-----------|---------|-------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name                            | Lithology | Dip (°) | Dip Direction (°) |  |
| 2,974.81              | 2,668.91              | TL, 2680' TVD @ 0 VZ, 91.2° Inc |           | -1.20   | 1.44              |  |

| Plan Annotations      |                       |              |              |                                     |
|-----------------------|-----------------------|--------------|--------------|-------------------------------------|
| Measured Depth (usft) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Comment                             |
| 2,148.11              | 2,148.11              | 0.00         | 0.00         | KOP Start Build 11.00               |
| 2,977.20              | 2,668.87              | 531.61       | 13.34        | LP Start 4262.46 hold at 2977.20 MD |
| 7,239.66              | 2,579.60              | 4,791.80     | 120.20       | TD at 7239.66                       |



Project: Eddy County, New Mexico (NAD 27 NME)  
Site: Pinto 36 State Com  
Well: #6H  
Wellbore: WB1  
Design: Plan #1 09-05-13



PHOENIX  
TECHNOLOGY SERVICES



Azimuths to Grid North  
True North: 0.06°  
Magnetic North: 7.81°  
Magnetic Field  
Strength: 48581.75nT  
Dip Angle: 60.42°  
Date: 09/05/2013  
Model: IGRF2010\_14

| WELL DETAILS |       |           |              |           |                    |                     |
|--------------|-------|-----------|--------------|-----------|--------------------|---------------------|
| +N/-S        | +E/-W | North     | Ground Level | 3495.00   | Latitude           | Longitude           |
| 0.00         | 0.00  | 617435.10 | Easting      | 467419.10 | 32° 41' 50.57762 N | 104° 26' 21.27918 W |

| SECTION DETAILS |         |       |      |         |         |        |       |       |         |                                     |
|-----------------|---------|-------|------|---------|---------|--------|-------|-------|---------|-------------------------------------|
| Sec             | MD      | Inc   | Azi  | TVD     | +N/-S   | +E/-W  | Deg   | TFace | VSec    | Target                              |
| 1               | 0.00    | 0.00  | 0.00 | 0.00    | 0.00    | 0.00   | 0.00  | 0.00  | 0.00    | 0.00                                |
| 2               | 2148.11 | 0.00  | 0.00 | 2148.11 | 0.00    | 0.00   | 0.00  | 0.00  | 0.00    | 0.00                                |
| 3               | 2977.20 | 91.20 | 1.44 | 2658.87 | 531.61  | 13.34  | 11.00 | 1.44  | 531.78  | LP Start 4262.46 hold at 2977.20 MD |
| 4               | 7239.66 | 91.20 | 1.44 | 2579.60 | 4791.80 | 120.20 | 0.00  | 0.00  | 4793.31 | PBHL-Pinto 36 State #6H             |

| DESIGN TARGET DETAILS   |                        |         |        |           |           |                    |                     |       |  |
|-------------------------|------------------------|---------|--------|-----------|-----------|--------------------|---------------------|-------|--|
| Name                    | TVD                    | +N/-S   | +E/-W  | North     | Easting   | Latitude           | Longitude           | Shape |  |
| PP-Pinto 36 State #6H   | 2542.00                | 180.00  | 4.52   | 617615.10 | 467423.62 | 32° 41' 52.35887 N | 104° 26' 21.22845 W | Point |  |
|                         | plan has target center |         |        |           |           |                    |                     |       |  |
| PBHL-Pinto 36 State #6H | 2579.60                | 4791.80 | 120.20 | 622226.90 | 467539.30 | 32° 42' 37.99655 N | 104° 26' 19.92835 W | Point |  |
|                         | plan has target center |         |        |           |           |                    |                     |       |  |

**PROJECT DETAILS:** Eddy County, New Mexico (NAD 27 NME)  
Geodetic System: US State Plane 1927 (Exact solution)  
Datum: NAD 1927 (NADCON CONUS)  
Ellipsoid: Clarke 1866  
Zone: New Mexico East 3001  
System Datum: Mean Sea Level

**SITE DETAILS:** Pinto 36 State Com  
Site Centre Northing: 617373.90  
Easting: 470225.00  
Positional Uncertainty: 0.00  
Convergence: -0.05  
Local North: Grid

**LEGEND**  
— Plan #1 09-05-13

Map System: US State Plane 1927 (Exact solution)  
Datum: NAD 1927 (NADCON CONUS)  
Ellipsoid: Clarke 1866  
Zone Name: New Mexico East 3001  
Local Origin: Well #6H, Grid North  
Latitude: 32° 41' 50.57762 N  
Longitude: 104° 26' 21.27918 W  
Grid East: 467419.10  
Grid North: 617435.10  
Scale Factor: 1.000  
Geomagnetic Model: IGRF2010\_14  
Sample Date: 05-Sep-13  
Magnetic Declination: 7.75°  
Dip Angle from Horizontal: 60.42°  
Magnetic Field Strength: 48582  
To convert a Magnetic Direction to a Grid Direction, Add 7.80°  
To convert a Magnetic Direction to a True Direction, Add 7.75° East  
To convert a True Direction to a Grid Direction, Add 0.06°

| FORMATION TOP DETAILS |         |                                |          |        |
|-----------------------|---------|--------------------------------|----------|--------|
| TVDPath               | MDPath  | Formation                      | DipAngle | DipDir |
| 2668.91               | 2974.91 | TL 2680° TVD @ 0 VZ, 91.2° Inc | -1.20    | 1.44   |

