

District I
1625 N French Dr., Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144 CLEZ
July 21, 2008

For closed-loop systems that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, submit to the appropriate NMOCD District Office

Closed-Loop System Permit or Closure Plan Application

(that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

Type of action: ☒ Permit ☐ Closure

Instructions: Please submit one application (Form C-144 CLEZ) per individual closed-loop system request. For any application request other than for a closed-loop system that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, please submit a Form C-144.

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1
Operator **COG OPERATING LLC** OGRID # **229137**
Address **550 WEST TEXAS, SUITE 100 MIDLAND, TX 79701**
Facility or well name **PINTO "36" FEE #7H**
API Number **30-015-39973** OCD Permit Number **212582**
U/L or Qtr/Qtr **UL O** Section **36** Township **18S** Range **25E** County **Eddy**
Center of Proposed Design Latitude **N/A** Longitude **N/A** NAD ☐ 1927 ☐ 1983
Surface Owner ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment

2
☒ **Closed-loop System:** Subsection H of 19 15 17 11 NMAC
Operation ☒ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) ☐ P&A
☐ Above Ground Steel Tanks or ☒ Haul-off Bins

3
Signs: Subsection C of 19 15 17 11 NMAC
☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
☒ Signed in compliance with 19 15 3 103 NMAC

RECEIVED

FEB 24 2012

NMOCD ARTESIA

4
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19 15 17 9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.
☒ Design Plan - based upon the appropriate requirements of 19 15 17 11 NMAC
☒ Operating and Maintenance Plan - based upon the appropriate requirements of 19 15 17 12 NMAC
☒ Closure Plan (Please complete Box 5) - based upon the appropriate requirements of Subsection C of 19 15 17 9 NMAC and 19 15 17 13 NMAC
☐ Previously Approved Design (attach copy of design) API Number _____
☐ Previously Approved Operating and Maintenance Plan API Number _____

5
Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19 15 17 13 D NMAC)
Instructions: Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.
Disposal Facility Name **CRI** Disposal Facility Permit Number **R1966**
Disposal Facility Name **GM INC** Disposal Facility Permit Number **711-019-001**
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service and operations?
☐ Yes (If yes, please provide the information below) ☒ No
Required for impacted areas which will not be used for future service and operations
☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19 15 17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19 15 17 13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19 15 17 13 NMAC

Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief

Name (Print) **KACIE CONNALLY** Title **PERMITTING TECH**
Signature *Kacie Connally* Date **12/09/2011**
e-mail address **kconnally@concho.com** Telephone **432-685-4304**

7
OCD Approval: ☒ Permit Application (including closure plan) ☐ Closure Plan (only)

OCD Representative Signature: _____

Approval Date: _____

Title: _____

OCD Permit Number: _____

8
Closure Report (required within 60 days of closure completion): Subsection K of 19 15 17 13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☐ Closure Completion Date: _____

9
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:

Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name _____

Disposal Facility Permit Number _____

Disposal Facility Name _____

Disposal Facility Permit Number _____

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations

☐ Site Reclamation (Photo Documentation)

☐ Soil Backfilling and Cover Installation

☐ Re-vegetation Application Rates and Seeding Technique

10
Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print) _____

Title _____

Signature _____

Date _____

e-mail address _____

Telephone _____

Closed Loop Operation & Maintenance Procedure

All drilling fluid circulated over shaker(s) with cuttings discharged into roll off container.

Fluid and fines below shaker(s) are circulated with transfer pump through centrifuge(s) or solids separator with cuttings and fines discharged into roll off container.

Fluid is continuously re-circulated through equipment with polymer added to aid separation of cutting fines.

Roll off containers are lined and de-watered with fluids re-circulated into system.

Additional tank is used to capture unused drilling fluid or cement returns from casing jobs.

This equipment will be maintained 24 hrs./day by solids control personnel and or rig crews that stay on location.

Cuttings will be hauled to either:

CRI (permit number R9166)

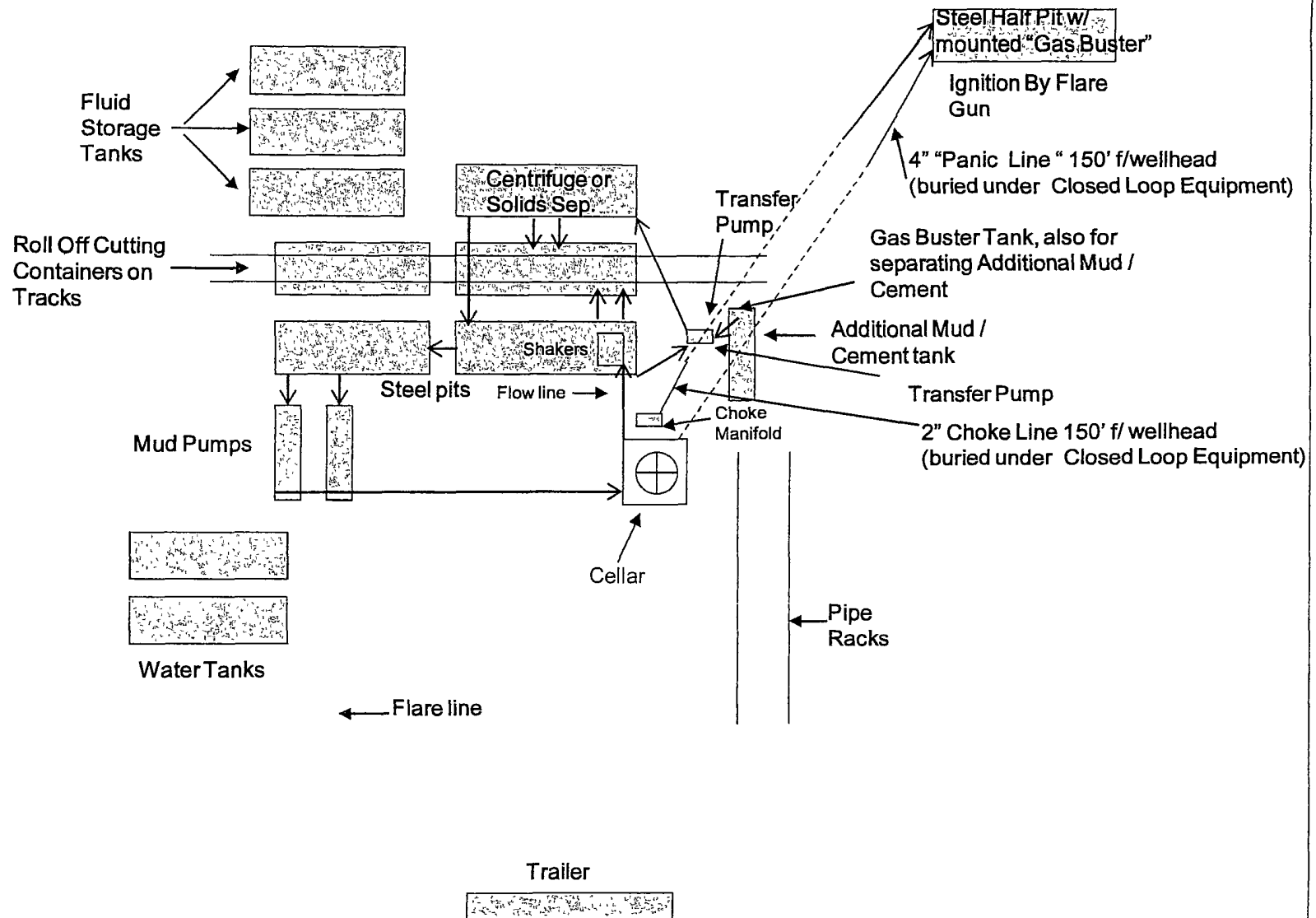
or

GMI (permit number 711-019-001)

dependent upon which rig is available to drill this well.

COG Operating LLC

Closed Loop Equipment Diagram





COG Operating LLC

Eddy County, NM (NAN27 NME)

Pinto 36 State Com #7H

Pinto 36 State Com #7H

OH

Plan: Plan #1 8-3/4" Hole

SHL = 150' FSL & 1700' FEL

PP = 330' FSL & 1700' FEL

BHL = 330' FNL & 1700' FEL

Standard Planning Report

16 February, 2012



Scientific Drilling
Directional Drilling Operations



Database:	EDM 5000 1-Single User.Db	Local Co-ordinate Reference:	Site Pinto 36 State Com #7H
Company:	COG Operating LLC	TVD Reference:	GL @ 3473 00usft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL @ 3473 00usft
Site:	Pinto 36 State Com #7H	North Reference:	Gnd
Well:	Pinto 36 State Com #7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 8-3/4" Hole		

Project:	Eddy County, NM (NAN27 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 #7H		
Site Position:		Northing:	617,403 80 usft
From:	Map	Easting:	468,855 40 usft
Position Uncertainty:	0 00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 41' 50 282 N
		Longitude:	104° 26' 4 471 W
		Grid Convergence:	-0 05 °

Well:	Pinto 36 State Com #7H		
Well Position	+N/-S	0 00 usft	Northing:
	+E/-W	0 00 usft	Easting:
Position Uncertainty	0 00 usft	Wellhead Elevation:	Ground Level:
			3,473 00 usft

Wellbore:	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	02/16/12	7 93	60 46	48,736

Design:	Plan #1 8-3/4" Hole			
Audit Notes:				
Version:	Phase	PLAN	Tie On Depth.	0 00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0 00	0 00	0 00	0 16

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	(°)	
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
2,272 54	0 00	0 00	2,272 54	0 00	0 00	0 00	0 00	0 00	0 00	
3,022 54	90 00	0 16	2,750 00	477 46	1 31	12 00	12 00	0 00	0 16	
7,356 79	90 00	0 16	2,750 00	4,811 70	13 20	0 00	0 00	0 00	0 00	PBHL-Pinto 36 #7H



Database:	EDM-5000-1 Single User Db	Local Co-ordinate Reference:	Site Pinto 36 State Com #7H
Company:	COG Operating LLC	TVD Reference:	GL @ 3473 00usft
Project:	Eddy County, NM (NAN27'NME)	MD Reference:	GL @ 3473 00usft
Site:	Pinto 36 State Com #7H	North Reference:	Grid
Well:	Pinto 36 State Com #7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1, 8-3/4" Hole		

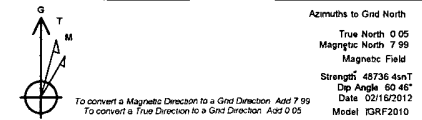
Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2,272 54	0 00	0 00	2,272 54	0 00	0 00	0 00	0 00	0 00	0 00
KOP Start Build 12.00°/100'									
2,300 00	3 30	0 16	2,299 98	0 79	0 00	0 79	12 00	12 00	0 00
2,400 00	15 30	0 16	2,398 49	16 91	0 05	16 91	12 00	12 00	0 00
2,500 00	27 30	0 16	2,491 49	53 17	0 15	53 17	12 00	12 00	0 00
2,600 00	39 30	0 16	2,574 93	107 96	0 30	107 96	12 00	12 00	0 00
2,700 00	51 30	0 16	2,645 14	178 91	0 49	178 91	12 00	12 00	0 00
2,701 40	51 46	0 16	2,646 01	180 00	0 49	180 00	12 00	12 00	0 00
PP=330° FNL Pinto 36 #7H									
2,800 00	63 30	0 16	2,699 07	262 90	0 72	262 90	12 00	12 00	0 00
2,900 00	75 30	0 16	2,734 36	356 27	0 98	356 27	12 00	12 00	0 00
3,000 00	87 30	0 16	2,749 47	454 94	1 25	454 94	12 00	12 00	0 00
3,022 54	90 00	0 16	2,750 00	477 47	1 31	477 47	12 00	12 00	0 00
Land EOC hold 90.00°									
3,100 00	90 00	0 16	2,750 00	554 93	1 52	554 93	0 00	0 00	0 00
3,200 00	90 00	0 16	2,750 00	654 93	1 80	654 93	0 00	0 00	0 00
3,300 00	90 00	0 16	2,750 00	754 93	2 07	754 93	0 00	0 00	0 00
3,400 00	90 00	0 16	2,750 00	854 93	2 35	854 93	0 00	0 00	0 00
3,500 00	90 00	0 16	2,750 00	954 93	2 62	954 93	0 00	0 00	0 00
3,600 00	90 00	0 16	2,750 00	1,054 93	2 89	1,054 93	0 00	0 00	0 00
3,700 00	90 00	0 16	2,750 00	1,154 93	3 17	1,154 93	0 00	0 00	0 00
3,800 00	90 00	0 16	2,750 00	1,254 92	3 44	1,254 93	0 00	0 00	0 00
3,900 00	90 00	0 16	2,750 00	1,354 92	3 72	1,354 93	0 00	0 00	0 00
4,000 00	90 00	0 16	2,750 00	1,454 92	3 99	1,454 93	0 00	0 00	0 00
4,100 00	90 00	0 16	2,750 00	1,554 92	4 27	1,554 93	0 00	0 00	0 00
4,200 00	90 00	0 16	2,750 00	1,654 92	4 54	1,654 93	0 00	0 00	0 00
4,300 00	90 00	0 16	2,750 00	1,754 92	4 81	1,754 93	0 00	0 00	0 00
4,400 00	90 00	0 16	2,750 00	1,854 92	5 09	1,854 93	0 00	0 00	0 00
4,500 00	90 00	0 16	2,750 00	1,954 92	5 36	1,954 93	0 00	0 00	0 00
4,600 00	90 00	0 16	2,750 00	2,054 92	5 64	2,054 93	0 00	0 00	0 00
4,700 00	90 00	0 16	2,750 00	2,154 92	5 91	2,154 93	0 00	0 00	0 00
4,800 00	90 00	0 16	2,750 00	2,254 92	6 19	2,254 93	0 00	0 00	0 00
4,900 00	90 00	0 16	2,750 00	2,354 92	6 46	2,354 93	0 00	0 00	0 00
5,000 00	90 00	0 16	2,750 00	2,454 92	6 73	2,454 93	0 00	0 00	0 00
5,100 00	90 00	0 16	2,750 00	2,554 92	7 01	2,554 93	0 00	0 00	0 00
5,200 00	90 00	0 16	2,750 00	2,654 92	7 28	2,654 93	0 00	0 00	0 00
5,300 00	90 00	0 16	2,750 00	2,754 92	7 56	2,754 93	0 00	0 00	0 00
5,400 00	90 00	0 16	2,750 00	2,854 92	7 83	2,854 93	0 00	0 00	0 00
5,500 00	90 00	0 16	2,750 00	2,954 92	8 11	2,954 93	0 00	0 00	0 00
5,600 00	90 00	0 16	2,750 00	3,054 92	8 38	3,054 93	0 00	0 00	0 00
5,700 00	90 00	0 16	2,750 00	3,154 92	8 65	3,154 93	0 00	0 00	0 00
5,800 00	90 00	0 16	2,750 00	3,254 92	8 93	3,254 93	0 00	0 00	0 00
5,900 00	90 00	0 16	2,750 00	3,354 92	9 20	3,354 93	0 00	0 00	0 00
6,000 00	90 00	0 16	2,750 00	3,454 92	9 48	3,454 93	0 00	0 00	0 00
6,100 00	90 00	0 16	2,750 00	3,554 92	9 75	3,554 93	0 00	0 00	0 00
6,200 00	90 00	0 16	2,750 00	3,654 92	10 03	3,654 93	0 00	0 00	0 00
6,300 00	90 00	0 16	2,750 00	3,754 92	10 30	3,754 93	0 00	0 00	0 00
6,400 00	90 00	0 16	2,750 00	3,854 92	10 58	3,854 93	0 00	0 00	0 00
6,500 00	90 00	0 16	2,750 00	3,954 91	10 85	3,954 93	0 00	0 00	0 00
6,600 00	90 00	0 16	2,750 00	4,054 91	11 12	4,054 93	0 00	0 00	0 00
6,700 00	90 00	0 16	2,750 00	4,154 91	11 40	4,154 93	0 00	0 00	0 00
6,800 00	90 00	0 16	2,750 00	4,254 91	11 67	4,254 93	0 00	0 00	0 00

Database:	EDM 5000 1 Single User Db.	Local Co-ordinate Reference:	Site Pinto 36 State Com #7H
Company:	COG Operating LLC	TVD Reference:	GL @ 3473 00usft
Project:	Eddy County NM (NAN27 NME)	MD Reference:	GL @ 3473 00usft
Site:	Pinto 36 State Com #7H	North Reference:	Grid
Well:	Pinto 36 State Com #7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 8-3/4" Hole		

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)
6,900 00	90 00	0 16	2,750 00	4,354 91	11 95	4,354 93	0 00	0 00	0 00
7,000 00	90 00	0 16	2,750 00	4,454 91	12 22	4,454 93	0 00	0 00	0 00
7,100 00	90 00	0 16	2,750 00	4,554 91	12 50	4,554 93	0 00	0 00	0 00
7,200 00	90 00	0 16	2,750 00	4,654 91	12 77	4,654 93	0 00	0 00	0 00
7,300 00	90 00	0 16	2,750 00	4,754 91	13 04	4,754 93	0 00	0 00	0 00
7,356 79	90 00	0 16	2,750 00	4,811 70	13 20	4,811 72	0 00	0 00	0 00
PBHL-Pinto 36 #7H									

Design Targets									
Target Name	hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude Longitude
PP=330' FNL Pinto 36 #	- plan hits target center	0 00	0 00	2,646 02	180 00	0 49	617,583 80	463,855 89	32° 41' 52 063 N 104° 26' 4 467 W
	- Point								
PBHL-Pinto 36 #7H	- plan hits target center	0 00	0 00	2,750 00	4,811 70	13 20	622,215 50	468,868 60	32° 42' 37 897 N 104° 26' 4 370 W
	- Point								

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,272 54	2,272 54	0 00	0 00	KOP Start Build 12 00°/100'
3,022 54	2,750 00	477 47	1 31	Land EOC hold 90 00°



Pinto 36 State Com #7H
Eddy County, NM (NAN27 NME)
Northing (Y) 617403 80
Easting (X) 468855 40
Plan #1 8-3/4" Hole

WELL DETAILS Pinto 36 State Com #7H									
+N/ S	+E/W	Northing	Ground Level	Easting	Latitude	Longitude	Slot		
0 00	0 00	617403 80	3473 00	468855 40	32 41' 50 282 N	104 26' 4 471 W			

SECTION DETAILS									
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V/Sect
1	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2	2272 54	0 00	0 00	2272 54	0 00	0 00	0 00	0 00	0 00
3	3022 54	90 00	0 16	2750 00	477 46	1 31	12 00	0 16	477 46
4	7356 79	90 00	0 16	2750 00	4811 70	13 20	0 00	0 00	4811 72

DESIGN TARGET DETAILS									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape	
PP=330 FNL Pinto 36 #7H	2646 02	180 00	0 49	617583 80	468855 8932	41 52 063 N04	26 4 467 W	Point	
plan hits target center									
PBHL-Pinto 36 #7H	2750 00	4811 70	13 20	622215 50	468868 6032	42 37 897 N04	26 4 370 W	Point	
plan hits target center									

PROJECT DETAILS Eddy County, NM (NAN27 NME)
Geocentric 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

Map System US State Plane 1927 (Exact solution)
Datum NAD 1927 (NADCON CONUS)
Ellipsoid Clarke 1866
Zone Name New Mexico East 3001
Local Origin Site Pinto 36 State Com #7H Grid North
Latitude 32 41 50 282 N
Longitude 104 26 4 471 W
Grid East 468855 40
Grid North 617403 80
Scale Factor 1 000
Geomagnetic Model IGRF2010
Sample Date 16-Feb-12
Magnetic Declination 7 99°
Dip Angle from Horizontal 60 46
Magnetic Field Strength 48736
To convert a Magnetic Direction to a Grid Direction Add 7 99°
To convert a True Direction to a Grid Direction Add 0 05°

SITE DETAILS Pinto 36 State Com #7H
Site Centre Northing 617403 80
Easting 468855 40
Positional Uncertainty 0 00
Convergence 0 05
Local North Grid

LEGEND

- Pinto 36 State Com #3H OH Plan #1 8-3/4" Hole V0
- Pinto 36 State Com #4H OH Plan #1 8-3/4" Hole V0
- Plan #1 8-3/4" Hole

