

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

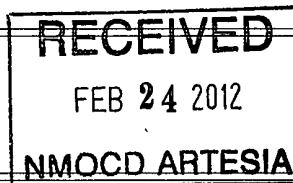
Instructions: Please submit one application (Form C-144 CLEZ) per individual closed-loop system request. For any application request other than for a closed-loop system that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, please submit a Form C-144.

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 PAINT "32" FEE #3H
API Number 30-015- 39924 OCD Permit Number 212583
U/L or Qtr/Qtr UL P Section 32 Township 18S Range 26E 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



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: AR Dade Approval Date: 03/05/2012

Title: Dis. H Supervisor OCD Permit Number: 212583

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 indentify 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)

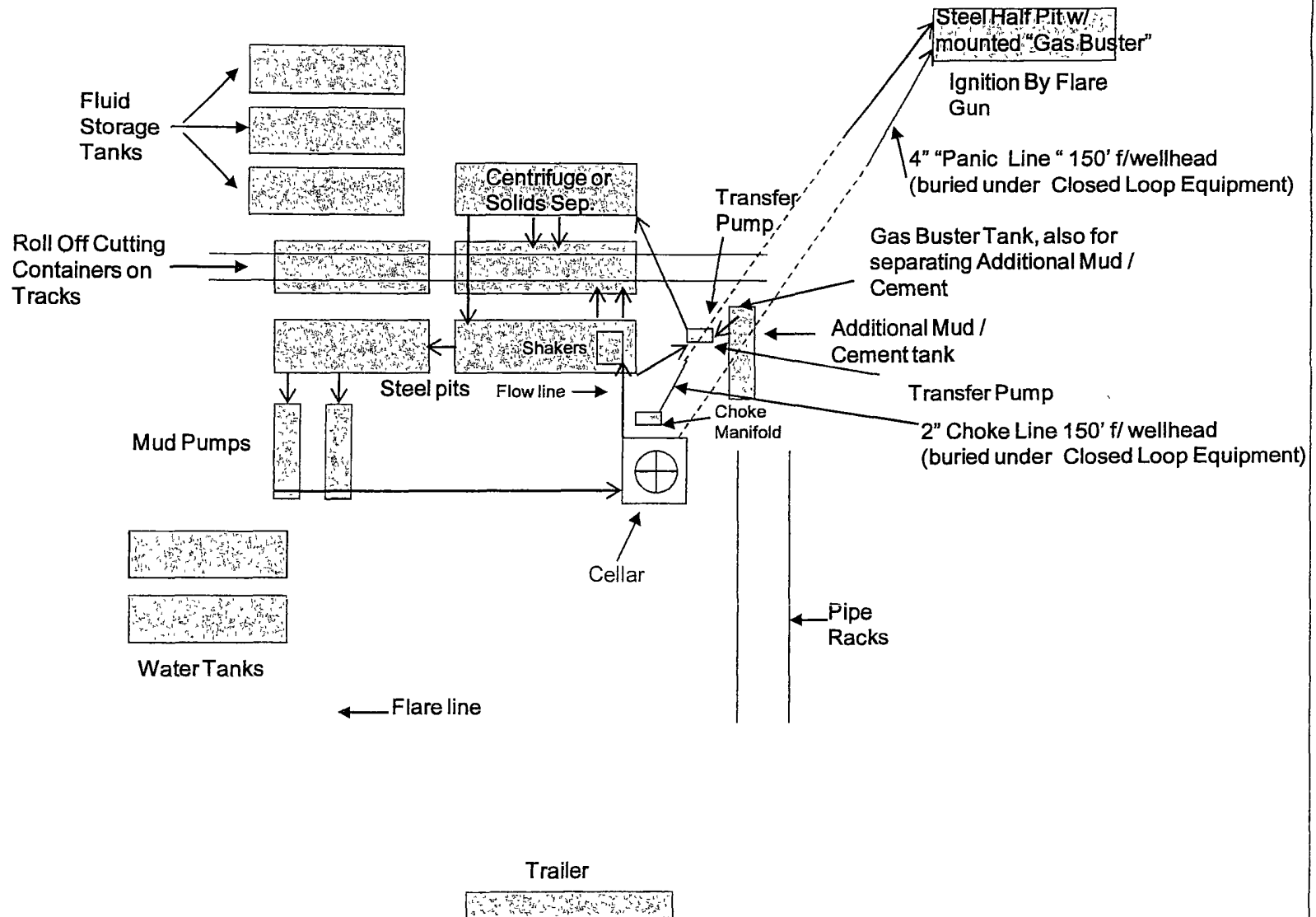
or

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)

Paint 32 Fee #3H

Paint 32 Fee #3H

OH

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

SHL = 1040' FSL & 190' FWL

PP = 1040' FSL & 330' FWL

BHL = 1040' FSL & 330' FEL

Standard Planning Report

20 February, 2012





Database:	EDM:5000 1 Single User Db.	Local Co-ordinate Reference:	Site Paint 32 Fee #3H
Company:	COG Operating LLC	TVD Reference:	GL @ 3393 00usft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL @ 3393 00usft
Site:	Paint 32 Fee #3H	North Reference:	Grid
Well:	Paint 32 Fee #3H	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:	Paint 32 Fee #3H		
Site Position:		Northing:	618,241 00 usft
From:	Map	Easting:	475,878 10 usft
Position Uncertainty:	0 00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 41' 58 625 N
		Longitude:	104° 24' 42 294 W
		Grid Convergence:	-0 04 °

Well:	Paint 32 Fee #3H		
Well Position:	+N/-S	0 00 usft	Northing:
	+E/-W	0 00 usft	Easting:
Position Uncertainty:	0 00 usft	Wellhead Elevation:	Ground Level:
			3,393 00 usft

Wellbore:	OH		
Magnetics:	Model Name	Sample Date	Declination
	IGRF2010	02/20/12	7 92
			60 46
			48,740

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
	(usft)	(usft)	(usft)
	0 00	0 00	0 00
			89 64

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(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	89 64	2,750 00	2 97	477 46	12 00	12 00	0 00	89 64	
7,308 96	90 00	89 64	2,750 00	29 60	4,763 80	0 00	0 00	0 00	0 00	PBHL-Paint 32 Fee #



SDI
Planning Report



Database:	EDM 5000-1 Single User Db	Local Co-ordinate Reference:	Site Paint 32 Fee #3H
Company:	COG Operating LLC	TVD Reference:	GL @ 3393 00usft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL @ 3393 00usft
Site:	Paint 32 Fee #3H	North Reference:	Gnd
Well:	Paint 32 Fee #3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 8-3/4" Hole		

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	89 64	2,299 98	0 00	0 79	0 79	12 00	12 00	0 00
2,400 00	15 30	89 64	2,398 49	0 11	16 91	16 91	12 00	12 00	0 00
2,500 00	27 30	89 64	2,491 49	0 33	53 16	53 17	12 00	12 00	0 00
2,600 00	39 30	89 64	2,574 93	0 67	107 96	107 96	12 00	12 00	0 00
2,647 75	45 03	89 64	2,610 30	0 87	139 99	140 00	12 00	12 00	0 00
PP=330° FWL, Paint 32 Fee #3H									
2,700 00	51 30	89 64	2,645 14	1 11	178 90	178 91	12 00	12 00	0 00
2,800 00	63 30	89 64	2,699 07	1 63	262 89	262 90	12 00	12 00	0 00
2,900 00	75 30	89 64	2,734 36	2 21	356 26	356 27	12 00	12 00	0 00
3,000 00	87 30	89 64	2,749 47	2 83	454 93	454 94	12 00	12 00	0 00
3,022 54	90 00	89 64	2,750 00	2 97	477 46	477 47	12 00	12 00	0 00
Land EOC hold 90.00°									
3,100 00	90 00	89 64	2,750 00	3 45	554 92	554 93	0 00	0 00	0 00
3,200 00	90 00	89 64	2,750 00	4 07	654 92	654 93	0 00	0 00	0 00
3,300 00	90 00	89 64	2,750 00	4 69	754 92	754 93	0 00	0 00	0 00
3,400 00	90 00	89 64	2,750 00	5 31	854 91	854 93	0 00	0 00	0 00
3,500 00	90 00	89 64	2,750 00	5 93	954 91	954 93	0 00	0 00	0 00
3,600 00	90 00	89 64	2,750 00	6 55	1,054 91	1,054 93	0 00	0 00	0 00
3,700 00	90 00	89 64	2,750 00	7 18	1,154 91	1,154 93	0 00	0 00	0 00
3,800 00	90 00	89 64	2,750 00	7 80	1,254 91	1,254 93	0 00	0 00	0 00
3,900 00	90 00	89 64	2,750 00	8 42	1,354 90	1,354 93	0 00	0 00	0 00
4,000 00	90 00	89 64	2,750 00	9 04	1,454 90	1,454 93	0 00	0 00	0 00
4,100 00	90 00	89 64	2,750 00	9 66	1,554 90	1,554 93	0 00	0 00	0 00
4,200 00	90 00	89 64	2,750 00	10 28	1,654 90	1,654 93	0 00	0 00	0 00
4,300 00	90 00	89 64	2,750 00	10 90	1,754 90	1,754 93	0 00	0 00	0 00
4,400 00	90 00	89 64	2,750 00	11 53	1,854 89	1,854 93	0 00	0 00	0 00
4,500 00	90 00	89 64	2,750 00	12 15	1,954 89	1,954 93	0 00	0 00	0 00
4,600 00	90 00	89 64	2,750 00	12 77	2,054 89	2,054 93	0 00	0 00	0 00
4,700 00	90 00	89 64	2,750 00	13 39	2,154 89	2,154 93	0 00	0 00	0 00
4,800 00	90 00	89 64	2,750 00	14 01	2,254 89	2,254 93	0 00	0 00	0 00
4,900 00	90 00	89 64	2,750 00	14 63	2,354 88	2,354 93	0 00	0 00	0 00
5,000 00	90 00	89 64	2,750 00	15 25	2,454 88	2,454 93	0 00	0 00	0 00
5,100 00	90 00	89 64	2,750 00	15 87	2,554 88	2,554 93	0 00	0 00	0 00
5,200 00	90 00	89 64	2,750 00	16 50	2,654 88	2,654 93	0 00	0 00	0 00
5,300 00	90 00	89 64	2,750 00	17 12	2,754 88	2,754 93	0 00	0 00	0 00
5,400 00	90 00	89 64	2,750 00	17 74	2,854 87	2,854 93	0 00	0 00	0 00
5,500 00	90 00	89 64	2,750 00	18 36	2,954 87	2,954 93	0 00	0 00	0 00
5,600 00	90 00	89 64	2,750 00	18 98	3,054 87	3,054 93	0 00	0 00	0 00
5,700 00	90 00	89 64	2,750 00	19 60	3,154 87	3,154 93	0 00	0 00	0 00
5,800 00	90 00	89 64	2,750 00	20 22	3,254 87	3,254 93	0 00	0 00	0 00
5,900 00	90 00	89 64	2,750 00	20 85	3,354 86	3,354 93	0 00	0 00	0 00
6,000 00	90 00	89 64	2,750 00	21 47	3,454 86	3,454 93	0 00	0 00	0 00
6,100 00	90 00	89 64	2,750 00	22 09	3,554 86	3,554 93	0 00	0 00	0 00
6,200 00	90 00	89 64	2,750 00	22 71	3,654 86	3,654 93	0 00	0 00	0 00
6,300 00	90 00	89 64	2,750 00	23 33	3,754 86	3,754 93	0 00	0 00	0 00
6,400 00	90 00	89 64	2,750 00	23 95	3,854 86	3,854 93	0 00	0 00	0 00
6,500 00	90 00	89 64	2,750 00	24 57	3,954 85	3,954 93	0 00	0 00	0 00
6,600 00	90 00	89 64	2,750 00	25 19	4,054 85	4,054 93	0 00	0 00	0 00
6,700 00	90 00	89 64	2,750 00	25 82	4,154 85	4,154 93	0 00	0 00	0 00
6,800 00	90 00	89 64	2,750 00	26 44	4,254 85	4,254 93	0 00	0 00	0 00



Database:	EDM 5000 1, Single User Db	Local Co-ordinate Reference:	Site Paint 32 Fee #3H
Company:	COG Operating LLC	TVD Reference:	GL @ 3393' 00usft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL @ 3393' 00usft
Site:	Paint 32 Fee #3H	North Reference:	Grid
Well:	Paint 32 Fee #3H	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	89 64	2,750 00	27 06	4,354 85	4,354 93	0 00	0 00	0 00
7,000 00	90 00	89 64	2,750 00	27 68	4,454 84	4,454 93	0 00	0 00	0 00
7,100 00	90 00	89 64	2,750 00	28 30	4,554 84	4,554 93	0 00	0 00	0 00
7,200 00	90 00	89 64	2,750 00	28 92	4,654 84	4,654 93	0 00	0 00	0 00
7,300 00	90 00	89 64	2,750 00	29 54	4,754 84	4,754 93	0 00	0 00	0 00
7,308 96	90 00	89 64	2,750 00	29 60	4,763 80	4,763 89	0 00	0 00	0 00
PBHL-Paint 32 Fee #3H									

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=330' FWL, Paint 32	0 00	0 00	2,610 31	0 87	140 00	618,241 87	476,018 10	32° 41' 58 635 N	104° 24' 40 656 W
- plan hits target center									
- Point									
PBHL-Paint 32 Fee #3H	0 00	0 00	2,750 00	29 60	4,763 80	618,270 60	480,641 90	32° 41' 58 950 N	104° 23' 46 545 W
- plan hits target center									
- 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	-62 60	473 35	Land EOC hold 90 00°



Azimuths to Grid North
True North 0.04°
Magnetic North 7.96°
Magnetic Field
Strength 48740 nT
Dip Angle 80.46°
Date 02/29/2012
Model IGRF2010

To convert a Magnetic Direction to a Grid Direction Add 7.97°
To convert a True Direction to a Grid Direction Add 0.04°

Paint 32 Fee #3H
Eddy County, NM (NAN27 NME)
Northing (Y) 618241 00
Easting (X) 475878 10
Plan #1 8-3/4" Hole

WELL DETAILS Paint 32 Fee #3H

	+N/-S	+E/-W	Northing	Ground Level	3393 00	Latitude	Longitude	Spot
	0 00	0 00	618241 00	475878 10	32 41 58 625 N	104° 24' 42.294 W		

PROJECT DETAILS Eddy County NM (NAN27 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

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 Paint 32 Fee #3H Grid North

Latitude 32 41 58 625 N
Longitude 104 24 42 294 W
Grid East 475878 10
Grid North 618241 00
Scale Factor 1.000

Geomagnetic Model IGRF2010
Sample Date 20-Feb-12
Magnetic Declination 7.92°
Dip Angle from Horizontal 80.46°
Magnetic Field Strength 48740

To convert a Magnetic Direction to a Grid Direction Add 7.97°
To convert a Magnetic Direction to a True Direction Add 7.92° East
To convert a True Direction to a Grid Direction Add 0.04°

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dip	TFace	Vsect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	2372.54	0.00	0.00	2372.54	0.00	0.00	0.00	0.00	0.00	
3	3022.54	90.00	89.64	2750.00	2.97	477.46	12.00	89.64	477.46	
4	7308.96	90.00	89.64	2750.00	29.60	4763.80	0.00	0.00	4763.89	PBHL-Paint 32 Fee #3H

SITE DETAILS Paint 32 Fee #3H

Site Centre Northing 618241 00
Easting 475878 10

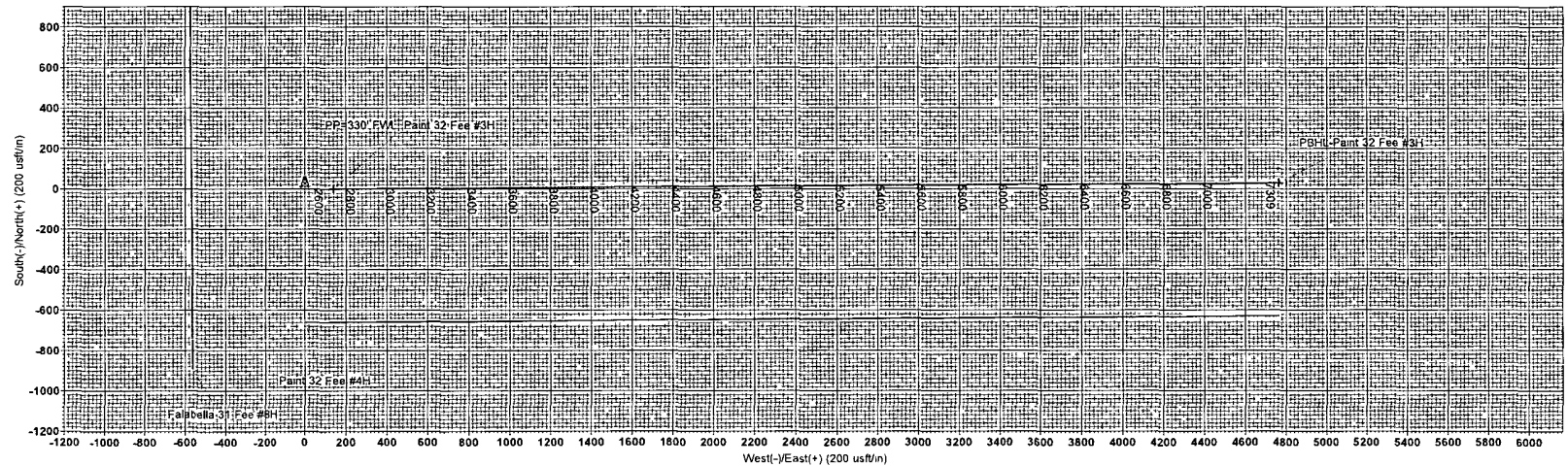
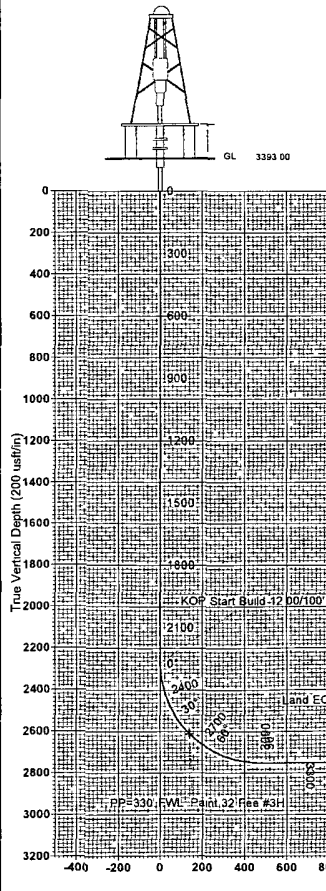
Positional Uncertainty 0.00
Convergence -0.04
Local North Grid

DESIGN TARGET DETAILS

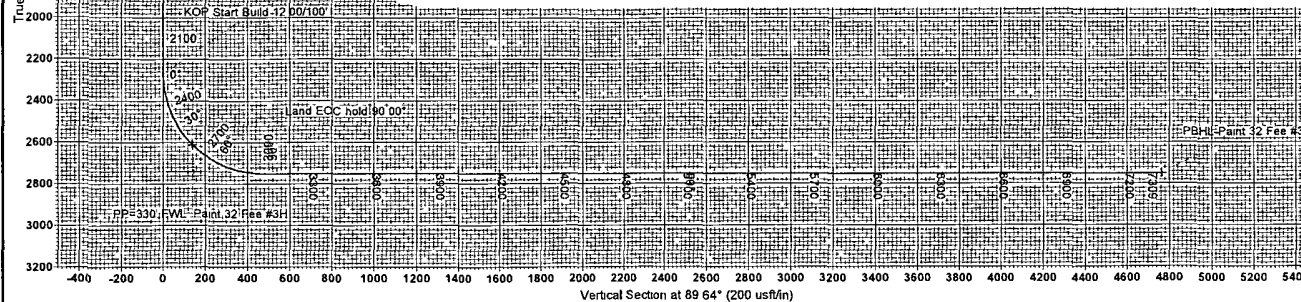
Name	MD	Inc	Azi	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PP-330' FWL Paint 32 Fee #3H					0.87	140.00	618241.87	476018.1032	41 58 635 N	104 24 40 556 W	Point
plan hit target center											
PBHL-Paint 32 Fee #3H				2750.00	29.60	4763.80	618270.60	480641.9032	41 58 950 N	104 23 46 545 W	Point
plan hit target center											

LEGEND

- Paint 32 Fee #4H OH Plan #1 8-3/4" Hole VO
- Falabella 31 Fee #8H OH Plan #1 8-3/4" Hole VO
- Plan #1 8-3/4" Hole



Vertical Section at 89.64° (100 usft/in)



Vertical Section at 89.64° (200 usft/in)