

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: **BIG GIRL 31 STATE #9H**
API Number: **30-015-40409** OCD Permit Number: **213104**
U/L or Qtr/Qtr: **UL L** Section: **31** Township: **17S** Range: **28 E** 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

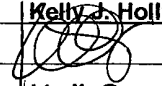
RECEIVED

JUN 21 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

6. **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): **Kelly J. Holly** Title: **Permitting Tech**
Signature:  Date: **06/20/2012**
e-mail address: **kholly@concho.com** Telephone: **432-685-4384**

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

OCD Representative Signature: RDade

Approval Date: 6/25/2012

Title: DIST II Supervisor

OCD Permit Number: 213104

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)

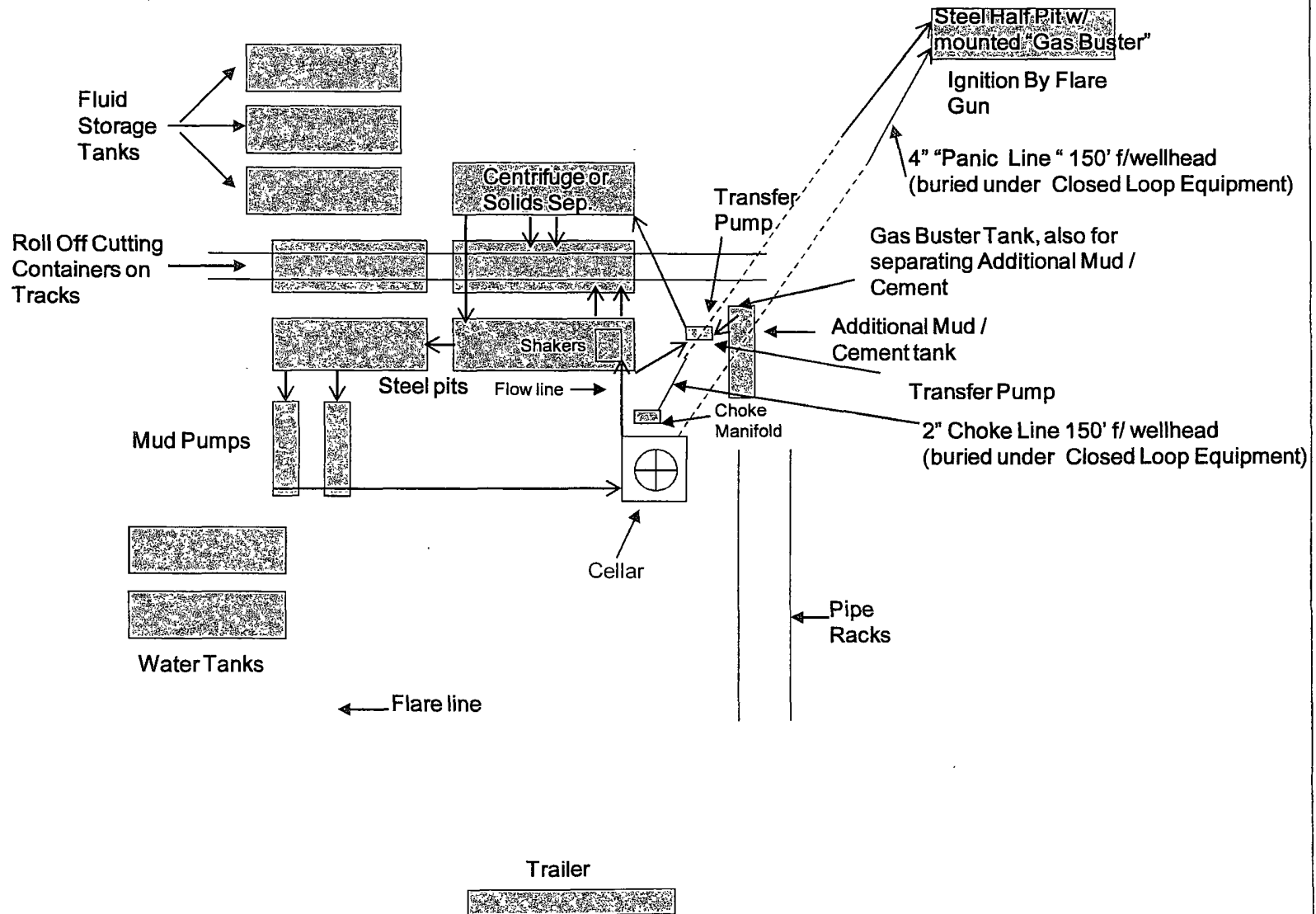
or

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

Big Girl 31 State 9H

Big Girl 31 State 9H

Wellbore #1

Plan: Plan #1

Surface: 1920' FSL, 330' FWL, Sec 31, T17S, R28E, Lot #3

BHL: 1650' FSL, 330' FEL, Sec 31, T17S, R28E, Unit I

Standard Planning Report

14 June, 2012

Planning Report

Database:	Houston R5000 Database	Local Co-ordinate Reference:	Site Big Girl 31 State 9H
Company:	COG Operating LLC	TVD Reference:	WELL @ 3696 00ft (Original Well Elev)
Project:	Eddy County, NM	MD Reference:	WELL @ 3696 00ft (Original Well Elev)
Site:	Big Girl 31 State 9H	North Reference:	Grid
Well:	Big Girl 31 State 9H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Project	Eddy County, NM		
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	Big Girl 31 State 9H		
Site Position:	From: Map	Northing:	650,563 20 ft
		Easting:	534,229 40 ft
Position Uncertainty:	0 00 ft	Slot Radius:	13 200 in
		Latitude:	32 78843568
		Longitude:	-104 22195393
		Grid Convergence:	0 06 °

Well	Big Girl 31 State 9H		
Well Position	+N/-S	0 00 ft	Northing:
	+E/-W	0 00 ft	Easting:
Position Uncertainty	0 00 ft	Wellhead Elevation:	Ground Level:

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
	IGRF2010	6/14/2012	7 81
			Dip Angle
			60 57
			Field Strength
			48,782

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0 00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0 00	0 00	0 00
			Direction
			(°)
			92 19

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
3,522 54	0 00	0 00	3,522 54	0 00	0 00	0 00	0 00	0 00	0 00	
4,272 54	90 00	92 19	4,000 00	-18 24	477 12	12 00	12 00	0 00	92 19	
8,447 37	90 00	92 19	4,000 00	-177 70	4,648 90	0 00	0 00	0 00	0.00 PBHL (Big Girl 31 Sta	

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
3,522.54	0 00	0.00	3,522.54	0 00	0 00	0 00	0 00	0 00	0 00	
KOP - Start Build @ 12.00°/100'										
4,272 54	90 00	92.19	4,000 00	-18 24	477 12	477 46	12 00	12 00	0 00	
Landing Point - Hold @ 90.00° INC, 92.19° AZ										
8,447 37	90 00	92 19	4,000 00	-177 70	4,648 90	4,652 30	0 00	0.00	0 00	
TD @ 8447.37' MD, 4000.00' TVD - PBHL (Big Girl 31 State 9H Plan 1)										

Planning Report

Database:	Houston R5000 Database	Local Co-ordinate Reference:	Site Big Girl 31 State 9H
Company:	COG Operating LLC	TVD Reference:	WELL @ 3696.00ft (Original Well Elev)
Project:	Eddy County, NM	MD Reference:	WELL @ 3696.00ft (Original Well Elev)
Site:	Big Girl 31 State 9H	North Reference:	Grid
Well:	Big Girl 31 State 9H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Design Targets

Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
PBHL (Big Girl 31 State	0.00	0 00	4,000 00	-177.70	4,648 90	650,385 50	538,878.30	32 78793286	-104 20682710
- plan hits target center									
- Point									

Plan Annotations

Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S	+E/-W	
(ft)	(ft)	(ft)	(ft)	
3,522 54	3,522 54	0.00	0.00	KOP - Start Build @ 12 00"/100'
4,272 54	4,000.00	-18 24	477 12	Landing Point - Hold @ 90 00° INC, 92 19° AZ
8,447 37	4,000 00	-177 70	4,648 90	TD @ 8447.37' MD, 4000 00' TVD



COG Operating LLC
Big Girl 31 State 9H
Eddy County, NM
Plan #1

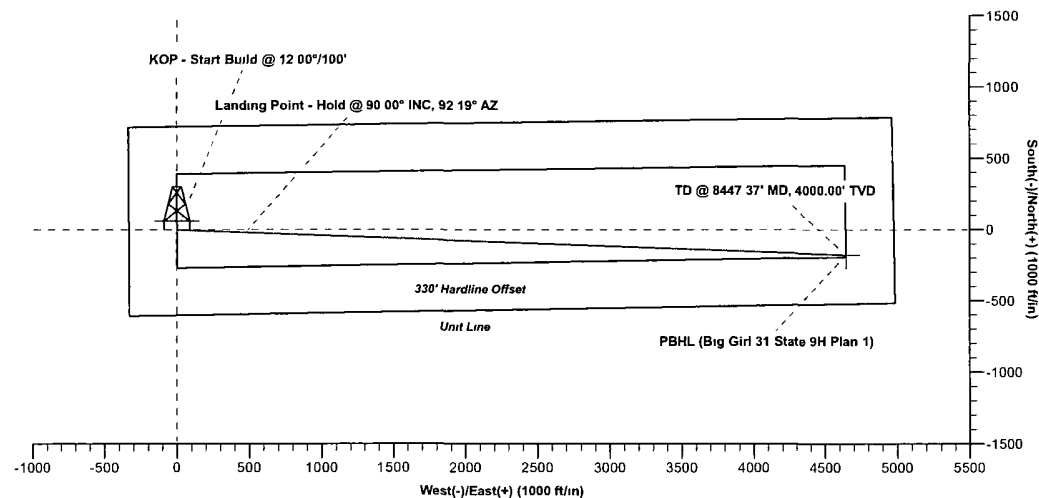
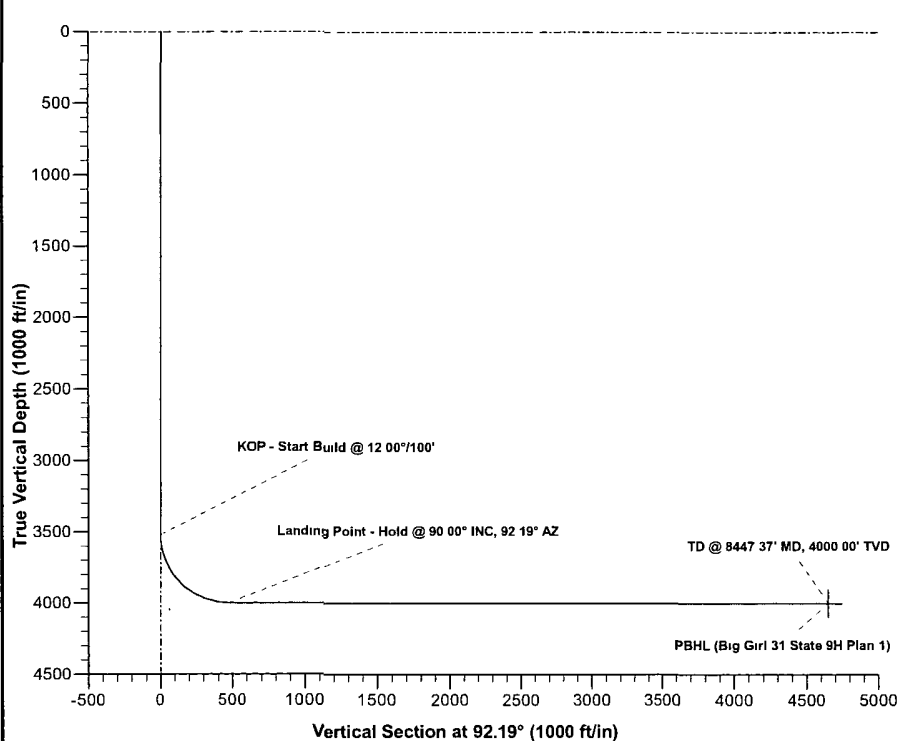


Azimuths to Grid North
True North: -0 06°
Magnetic North 7 75°

Magnetic Field
Strength: 48781 7snT
Dip Angle: 60 57°
Date 6/14/2012
Model IGRF2010

Surface Location		Ground Elev: 3678.00 WELL @ 3696.00ft (Original Well Elev)			
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	650563.20	534229.40	32.78843568	-104.22195392

TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL (Big Girl 31 State 9H Plan 1)	4000.00	-177.70	4648.90	650385.50	538878.30	32.78793286	-104.20682710



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	3522.54	0.00	0.00	3522.54	0.00	0.00	0.00	0.00	0.00	KOP - Start Build @ 12.00°/100°
3	4272.54	90.00	92.19	4000.00	-18.24	477.12	12.00	92.19	477.46	Landing Point - Hold @ 90.00° INC, 92 19° AZ
4	8447.37	90.00	92.19	4000.00	-177.70	4648.90	0.00	0.00	4652.29	TD @ 8447.37' MD, 4000.00' TVD