

District I
1625 N Fretch 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: **OUIMET STATE COM #1H**
API Number: **30-015-40416** OCD Permit Number: **213110**
U/L or Qtr/Qtr **UL A** Section **2** Township **17S** Range **29E** 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

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: **4-17-2012**
e-mail address: **kconnally@concho.com** Telephone: **432-221-0336**

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

OCD Representative Signature: _____

Approval Date: 6/25/2012

Title: DIST H. Supervisor

OCD Permit Number: 213110

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)

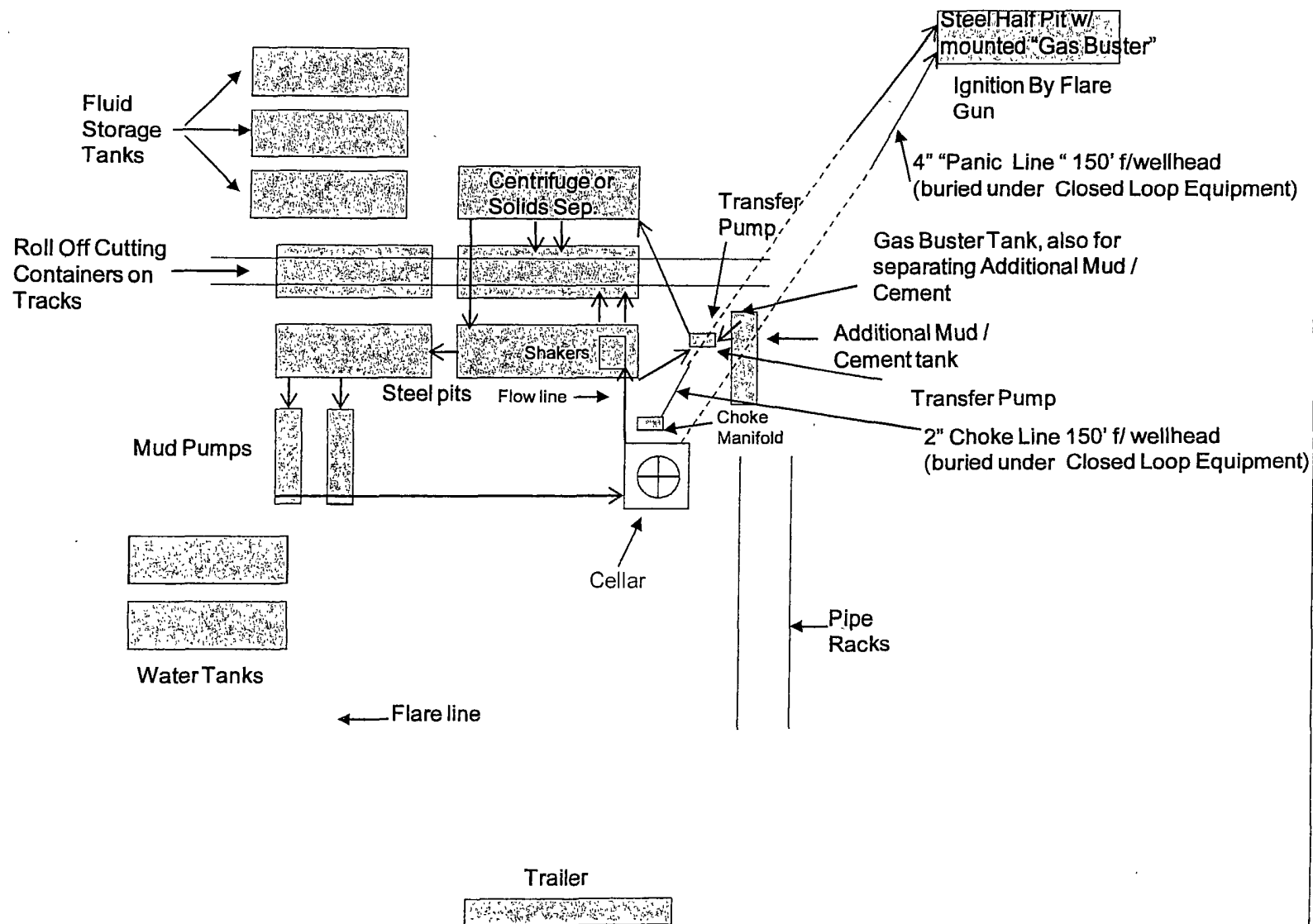
or

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

Ouimet State Com 1H

Ouimet State Com 1H

Wellbore #1

Plan: Plan #1

Surface: 330' FNL, 330' FEL, Sec 2, T17S, R29E, Unit A

BHL: 330' FNL, 330' FWL, Sec 2, T17S, R29E, Unit D

Standard Planning Report

08 June, 2012

Crescent Directional Drilling

Planning Report

Database:	Houston R5000 HISTORICAL	Local Co-ordinate Reference:	Site Ouimet State Com 1H
Company:	COG Operating LLC	TVD Reference:	WELL @ 3679.00ft (Original Well Elev)
Project:	Eddy County, NM	MD Reference:	WELL @ 3679.00ft (Original Well Elev)
Site:	Ouimet State Com 1H	North Reference:	Grid
Well:	Ouimet State Com 1H	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 Ouimet State Com 1H					
Site Position:		Northing:	680,270.00 ft	Latitude:	32.86979085
From:	Map	Easting:	590,867.10 ft	Longitude:	-104.03738529
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.16 °

Well	Ouimet State Com 1H					
Well Position	+N/-S	0 00 ft	Northing:	680,270 00 ft	Latitude:	32 86979085
	+E/-W	0 00 ft	Easting:	590,867 10 ft	Longitude:	-104 03738529
Position Uncertainty		0 00 ft	Wellhead Elevation:		Ground Level:	3,661 00 ft

Wellbore						Wellbore #1					
Magnetics		Model Name		Sample Date		Declination (°)		Dip Angle (°)		Field Strength (nT)	
		IGRF2010		6/8/2012		7 73		60 68		48,853	

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0 00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0 00	0 00	0 00	270 00

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	
3,822.61	0.00	0.00	3,822.61	0.00	0.00	0.00	0.00	0.00	0.00	
4,580.94	91.00	264.09	4,300.00	-50.02	-483.22	12.00	12.00	0.00	264.09	
4,749.49	91.00	270.83	4,297.06	-57.48	-651.47	4.00	0.00	4.00	89.95	
8,732.54	91.00	270.83	4,227.60	0.40	-4,633.50	0.00	0.00	0.00	0.00	PBHL (Ouimet State C

Crescent Directional Drilling

Planning Report

Database:	Houston R5000 HISTORICAL	Local Co-ordinate Reference:	Site Ourmet State Com 1H
Company:	COG Operating LLC	TVD Reference:	WELL @ 3679 00ft (Original Well Elev)
Project:	Eddy County, NM	MD Reference:	WELL @ 3679 00ft (Original Well Elev)
Site:	Ourmet State Com 1H	North Reference:	Grd
Well:	Ourmet State Com 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

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)
3,822 61	0 00	0 00	3,822 61	0 00	0 00	0 00	0 00	0 00	0 00
KOP - Start Build @ 12.00°/100'									
3,900 00	9 29	264 09	3,899 66	-0 64	-6 22	6 22	12 00	12 00	0 00
4,000 00	21 29	264 09	3,995 95	-3 35	-32 40	32 40	12 00	12 00	0 00
4,100 00	33 29	264 09	4,084 66	-8 07	-77 92	77 92	12 00	12 00	0 00
4,200 00	45 29	264 09	4,161 91	-14 57	-140 79	140 79	12 00	12 00	0 00
4,300 00	57 29	264 09	4,224 34	-22 59	-218 26	218 26	12 00	12 00	0 00
4,400 00	69 29	264 09	4,269 21	-31 77	-306 95	306 95	12 00	12 00	0 00
4,500 00	81 29	264 09	4,294 56	-41 72	-402 98	402 98	12 00	12 00	0 00
4,580 94	91 00	264 09	4,300 00	-50 02	-483 22	483 21	12 00	12 00	0 00
Landing Point - Start Turn @ 4.00°/100'									
4,600 00	91 00	264 85	4,299 67	-51 86	-502 18	502 18	4 00	0 00	4 00
4,700 00	91 00	268 85	4,297 92	-57 34	-601 99	601 99	4 00	0 00	4 00
4,749 49	91 00	270 83	4,297 06	-57 48	-651 47	651 47	4 00	0 00	4 00
EOT - Hold @ 270.83° AZ									
4,800 00	91 00	270 83	4,296 18	-56 75	-701 97	701 97	0 00	0 00	0 00
4,900 00	91 00	270 83	4,294 43	-55 29	-801 95	801 94	0 00	0 00	0 00
5,000 00	91 00	270 83	4,292 69	-53 84	-901 92	901 91	0 00	0 00	0 00
5,100 00	91 00	270 83	4,290 95	-52 39	-1,001 89	1,001 89	0 00	0 00	0 00
5,200 00	91 00	270 83	4,289 20	-50 93	-1,101 87	1,101 86	0 00	0 00	0 00
5,300 00	91 00	270 83	4,287 46	-49 48	-1,201 84	1,201 84	0 00	0 00	0 00
5,400 00	91 00	270 83	4,285 71	-48 03	-1,301 82	1,301 81	0 00	0 00	0 00
5,500 00	91 00	270 83	4,283 97	-46 57	-1,401 79	1,401 79	0 00	0 00	0 00
5,600 00	91 00	270 83	4,282 23	-45 12	-1,501 76	1,501 76	0 00	0 00	0 00
5,700 00	91 00	270 83	4,280 48	-43 67	-1,601 74	1,601 74	0 00	0 00	0 00
5,800 00	91 00	270 83	4,278 74	-42 21	-1,701 71	1,701 71	0 00	0 00	0 00
5,900 00	91 00	270 83	4,277 00	-40 76	-1,801 69	1,801 68	0 00	0 00	0 00
6,000 00	91 00	270 83	4,275 25	-39 31	-1,901 66	1,901 66	0 00	0 00	0 00
6,100 00	91 00	270 83	4,273 51	-37 86	-2,001 64	2,001 63	0 00	0 00	0 00
6,200 00	91 00	270 83	4,271 76	-36 40	-2,101 61	2,101 61	0 00	0 00	0 00
6,300 00	91 00	270 83	4,270 02	-34 95	-2,201 58	2,201 58	0 00	0 00	0 00
6,400 00	91 00	270 83	4,268 28	-33 50	-2,301 56	2,301 56	0 00	0 00	0 00
6,500 00	91 00	270 83	4,266 53	-32 04	-2,401 53	2,401 53	0 00	0 00	0 00
6,600 00	91 00	270 83	4,264 79	-30 59	-2,501 51	2,501 50	0 00	0 00	0 00
6,700 00	91 00	270 83	4,263 04	-29 14	-2,601 48	2,601 48	0 00	0 00	0 00
6,800 00	91 00	270 83	4,261 30	-27 68	-2,701 46	2,701 45	0 00	0 00	0 00
6,900 00	91 00	270 83	4,259 56	-26 23	-2,801 43	2,801 43	0 00	0 00	0 00
7,000 00	91 00	270 83	4,257 81	-24 78	-2,901 40	2,901 40	0 00	0 00	0 00
7,100 00	91 00	270 83	4,256 07	-23 32	-3,001 38	3,001 38	0 00	0 00	0 00
7,200 00	91 00	270 83	4,254 33	-21 87	-3,101 35	3,101 35	0 00	0 00	0 00
7,300 00	91 00	270 83	4,252 58	-20 42	-3,201 33	3,201 33	0 00	0 00	0 00
7,400 00	91 00	270 83	4,250 84	-18 96	-3,301 30	3,301 30	0 00	0 00	0 00
7,500 00	91 00	270 83	4,249 09	-17 51	-3,401 28	3,401 27	0 00	0 00	0 00
7,600 00	91 00	270 83	4,247 35	-16 06	-3,501 25	3,501 25	0 00	0 00	0 00
7,700 00	91 00	270 83	4,245 61	-14 60	-3,601 22	3,601 22	0 00	0 00	0 00
7,800 00	91 00	270 83	4,243 86	-13 15	-3,701 20	3,701 20	0 00	0 00	0 00
7,900 00	91 00	270 83	4,242 12	-11 70	-3,801 17	3,801 17	0 00	0 00	0 00
8,000 00	91 00	270 83	4,240 37	-10 25	-3,901 15	3,901 15	0 00	0 00	0 00
8,100 00	91 00	270 83	4,238 63	-8 79	-4,001 12	4,001 12	0 00	0 00	0 00
8,200 00	91 00	270 83	4,236 89	-7 34	-4,101 10	4,101 09	0 00	0 00	0 00
8,300 00	91 00	270 83	4,235 14	-5 89	-4,201 07	4,201 07	0 00	0 00	0 00
8,400 00	91 00	270 83	4,233 40	-4 43	-4,301 04	4,301 04	0 00	0 00	0 00
8,500 00	91 00	270 83	4,231 66	-2 98	-4,401 02	4,401 02	0 00	0 00	0 00

Crescent Directional Drilling

Planning Report

Database:	Houston R5000 HISTORICAL	Local Co-ordinate Reference:	Site Ouimet State Com 1H
Company:	COG Operating LLC	TVD Reference:	WELL @ 3679 00ft (Original Well Elev)
Project:	Eddy County, NM	MD Reference:	WELL @ 3679 00ft (Original Well Elev)
Site:	Ouimet State Com 1H	North Reference:	Grid
Well:	Ouimet State Com 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

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)
8,600.00	91.00	270.83	4,229.91	-1.53	-4,500.99	4,500.99	0.00	0.00	0.00
8,700.00	91.00	270.83	4,228.17	-0.07	-4,600.97	4,600.97	0.00	0.00	0.00
8,732.54	91.00	270.83	4,227.60	0.40	-4,633.50	4,633.50	0.00	0.00	0.00
TD @ 8732.54' MD, 4227.60' TVD - PBHL (Ouimet State Com 1H Plan 1)									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL (Ouimet State Com 1H)	0.00	0.00	4,227.60	0.40	-4,633.50	680,270.40	586,233.60	32.86982674	-104.05247629
- plan hits target center									
- Point									

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
3,822.61	3,822.61	0.00	0.00	KOP - Start Build @ 12.00°/100'
4,580.94	4,300.00	-50.02	-483.22	Landing Point - Start Turn @ 4.00°/100'
4,749.49	4,297.06	-57.48	-651.47	EOT - Hold @ 270.83° AZ
8,732.54	4,227.60	0.40	-4,633.50	TD @ 8732.54' MD, 4227.60' TVD



**COG Operating LLC
Ouimet State Com 1H
Eddy County, NM
Plan #1**



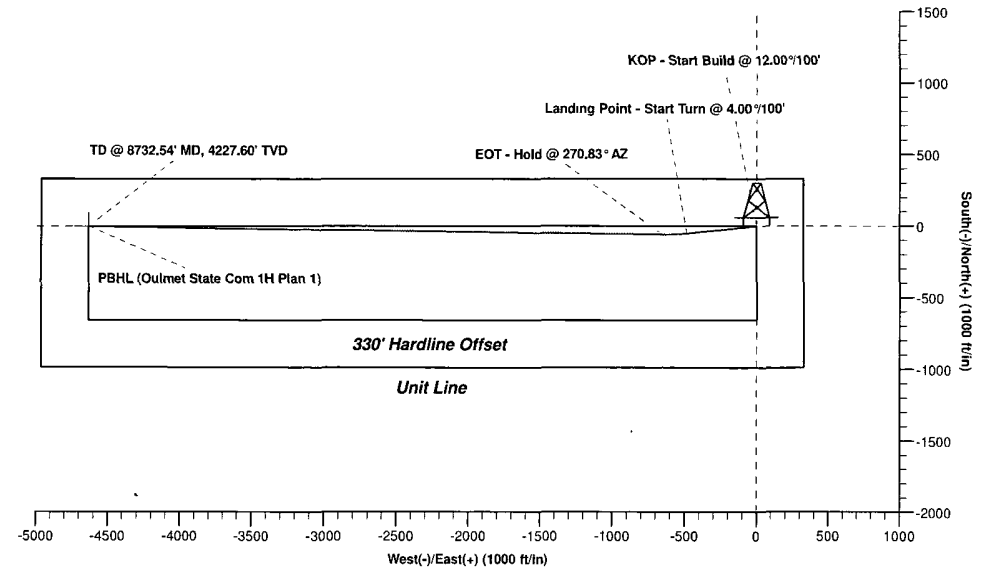
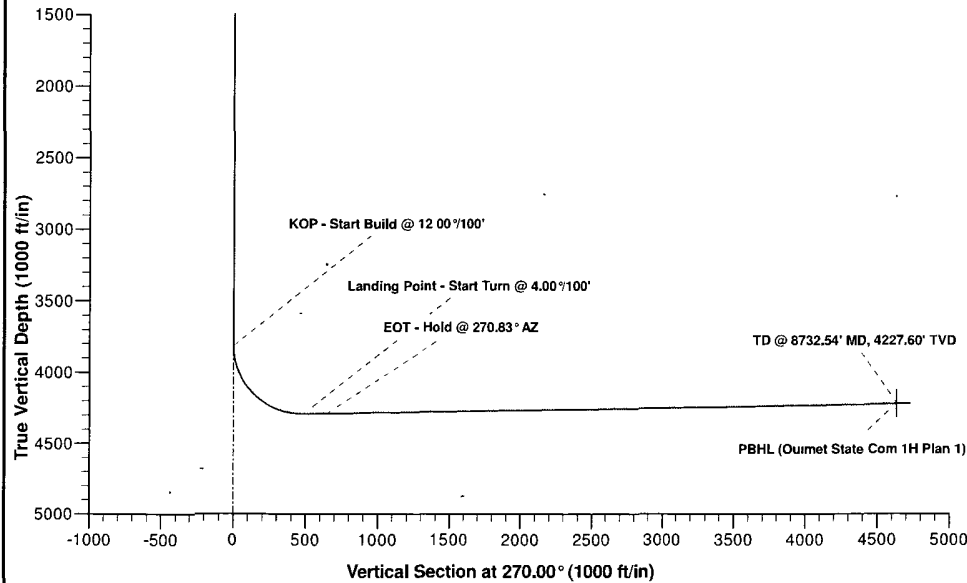
Surface Location		Ground Elev: 3661.00 WELL @ 3679.00ft (Original Well Elev)			
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	680270.00	590867.10	32.86979085	-104.03738529

TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude
PBHL (Ouimet State Com 1H Plan 1)	4227.60	0.40	-4633.50	680270.40	586233.60	32.86982674
Longitude						
-104.05247629						



Azimuths to Grid North
True North: -0.16°
Magnetic North: 7.57°

Magnetic Field
Strength 48853.2snT
Dip Angle: 60.68°
Date 6/8/2012
Model: IGRF2010



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	3822.61	0.00	0.00	3822.61	0.00	0.00	0.00	0.00	0.00	KOP - Start Build @ 12.00°/100'
3	4580.94	91.00	264.09	4300.00	-50.02	-483.22	12.00	264.09	483.21	Landing Point - Start Turn @ 4.00°/100'
4	4749.49	91.00	270.83	4297.06	-57.48	-651.47	4.00	89.95	651.47	EOT - Hold @ 270.83° AZ
5	8732.54	91.00	270.83	4227.60	0.40	-4633.50	0.00	0.00	4633.50	TD @ 8732.54' MD, 4227.60' TVD