

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. 30-015-40419
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Quimet State Com
8. Well Number 4H
9. OGRID Number 229137
10. Pool name or Wildcat Empire; Glorieta Yeso East 96610
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3663'

SUNDRY NOTICES AND REPORTS ON WELLS

(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 ☒ Gas Well ☐ Other

2. Name of Operator

COG Operating LLC

3. Address of Operator

One Concho Center - 600 W Illinois Ave Midland, TX 79701

4. Well Location

Unit Letter **H**: **2420** feet from the **NORTH** line and **330** feet from the **EAST** line
Section **2** Township **17S** Range **29E** NMPM County **EDDY**

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3663'

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 ☐

OTHER: **Change Directional Plan, Estimated Completed Interval and TVD** ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

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 Operating LLC respectfully requests permission to update the Directional Plan, correct the Estimated Completed Interval and change the TVD to 5300' for this well.

A revised C-102 and directional plan are attached for your review.

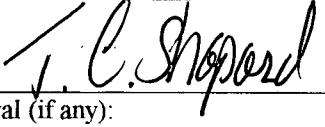
Spud Date:

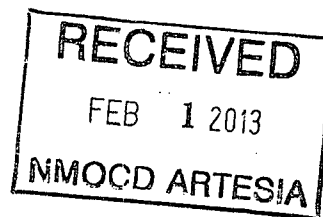
Rig Release Date:

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

SIGNATURE  TITLE Permitting Tech DATE 01/30/2013

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 2/1/2013
Conditions of Approval (if any):



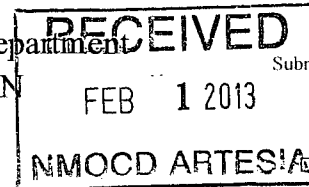
DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505



Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-40419	Pool Code 96610	Pool Name Empire; Glorieta Yeso, East
Property Code	Property Name OUMET STATE COM	Well Number 4H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3663'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	2	17-S	29-E		2420	NORTH	330	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	2	17-S	29-E		2300	NORTH	330	WEST	EDDY

Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.
-------------------------------	-----------------	--------------------	-----------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

PROJECT AREA PRODUCING AREA GRID: AZ = 271°28'38" HORIZ. DIST. = 4639.8' Estimated Completed Interval: 2306 FNL 833 FEL	OPERATOR CERTIFICATION I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. 1-29-13 Signature Date Kelly J. Holly Printed Name kholly@concho.com E-mail Address				
CORNER COORDINATES TABLE <table border="1"> <tr> <td>A - Y=679289.4 N, X=585902.7 E</td> </tr> <tr> <td>B - Y=679280.0 N, X=591197.8 E</td> </tr> <tr> <td>C - Y=677961.5 N, X=591198.9 E</td> </tr> <tr> <td>D - Y=677970.9 N, X=585901.4 E</td> </tr> </table> GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y=678180.6 N X=590868.8 E LAT.=32.864051° N LONG.=104.037395° W BOTTOM HOLE LOCATION Y=678300.2 N X=586231.7 E	A - Y=679289.4 N, X=585902.7 E	B - Y=679280.0 N, X=591197.8 E	C - Y=677961.5 N, X=591198.9 E	D - Y=677970.9 N, X=585901.4 E	SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. APRIL 27, 2012 Date of Survey Gary G. Eidson Signature & Seal of Professional Surveyor 12641 Certificate Number: Gary G. Eidson 12641 Ronald L. Eidson 3239 BKL Rel. W.O. #12,157,2020 SWSC W.O.: 13.13.0096
A - Y=679289.4 N, X=585902.7 E					
B - Y=679280.0 N, X=591197.8 E					
C - Y=677961.5 N, X=591198.9 E					
D - Y=677970.9 N, X=585901.4 E					

RECEIVED

FEB 1 2013

MOC D ARTESIA

Plan Proposal

FOR

COG Operating, LLC
Ouimet State Com #4H
Eddy Co., NM

Design #4

Presented By:

Aaron Boger
Account Manager

Dusty Moyer
Well Planner

SHL
2420' FNL & 330' FEL
Penetration Point
2306' FNL & 833' FEL
PBHL
2300' FNL & 330' FWL
SEC-2-T17S-R29E

ATTACHED

Archer

COG Operating, LLC

Eddy County(NM27E)

Sec.2-T17S-R29E

Ouimet State Com #4H

Wellbore #1

Plan: Design #4

Standard Planning Report

30 January, 2013



Database:	EDMDBBW	Local Co-ordinate Reference:	Well Ouimet State Com #4H
Company:	COG Operating, LLC	TVD Reference:	WELL @ 3677.00usft (Original Well Elev)
Project:	Eddy County (NM27E)	MD Reference:	WELL @ 3677.00usft (Original Well Elev)
Site:	Sec 2-T17S-R29E	North Reference:	Grid
Well:	Ouimet State Com #4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #4		

Project	Eddy County (NM27E)		
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		Sec.2-T17S-R29E			
Site Position:		Northing:	678,180.600 usft	Latitude:	32° 51' 50.585 N
From:	Map	Easting:	590,868.800 usft	Longitude:	104° 2' 14.622 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.16 °

Well	Ouimet State Com #4H					
Well Position	+N/-S	0.00 usft	Northing:	678,180.600 usft	Latitude:	32° 51' 50.585 N
	+E/-W	0.00 usft	Easting:	590,868.800 usft	Longitude:	104° 2' 14.622 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,663.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/14/12	7.67	60.66	48,798

Design:	Design #4		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	+N/S (usft)	+E/W (usft) Direction (°)
	0.00	0.00	0.00 271.49

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	
4,779.21	0.00	0.00	4,779.21	0.00	0.00	0.00	0.00	0.00	0.00	
5,606.48	91.00	282.60	5,300.00	115.61	-517.20	11.00	11.00	0.00	282.60	
6,289.46	91.00	268.94	5,288.02	184.09	-1,195.00	2.00	0.00	-2.00	-89.88	Ouimet State Com #4
9,732.67	91.00	268.94	5,227.93	120.30	-4,637.10	0.00	0.00	0.00	0.00	Ouimet State Com #4

Database:	EDMDBBW	Local Co-ordinate Reference:	Well Ouimet State Com #4H
Company:	COG Operating LLC	TVD Reference:	WELL @ 3677.00usft (Original Well Elev)
Project:	Eddy County (NM27E)	MD Reference:	WELL @ 3677.00usft (Original Well Elev)
Site:	Sec 2-117S-R29E	North Reference:	Grid
Well:	Ouimet State Com #4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #4		

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
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP - Build 11°/100'									
4,779.21	0.00	0.00	4,779.21	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	2.29	282.60	4,799.99	0.09	-0.40	0.41	11.00	11.00	0.00
4,850.00	7.79	282.60	4,849.78	1.05	-4.69	4.71	11.00	11.00	0.00
4,900.00	13.29	282.60	4,898.92	3.04	-13.61	13.68	11.00	11.00	0.00
4,950.00	18.79	282.60	4,946.96	6.05	-27.08	27.23	11.00	11.00	0.00

Database:	EDMDBBW	Local Co-ordinate Reference:	Well Ouimet State Com #4H
Company:	COG Operating LLC	TVD Reference:	WELL @ 3677.00usft (Original Well Elev)
Project:	Eddy County(NM27E)	MD Reference:	WELL @ 3677.00usft (Original Well Elev)
Site:	Sec 2-T17S-R29E	North Reference:	Grid
Well:	Ouimet State Com #4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #4		

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)	
5,000.00	24.29	282.60	4,993.45	10.06	-44.99	45.23	11.00	11.00	0.00	
5,050.00	29.79	282.60	5,037.97	15.01	-67.16	67.53	11.00	11.00	0.00	
5,100.00	35.29	282.60	5,080.10	20.88	-93.39	93.90	11.00	11.00	0.00	
5,150.00	40.79	282.60	5,119.47	27.59	-123.45	124.12	11.00	11.00	0.00	
5,200.00	46.29	282.60	5,155.70	35.10	-157.05	157.91	11.00	11.00	0.00	
5,250.00	51.79	282.60	5,188.47	43.34	-193.88	194.94	11.00	11.00	0.00	
5,300.00	57.29	282.60	5,217.46	52.22	-233.61	234.89	11.00	11.00	0.00	
5,350.00	62.79	282.60	5,242.43	61.66	-275.87	277.37	11.00	11.00	0.00	
5,400.00	68.29	282.60	5,263.12	71.59	-320.27	322.02	11.00	11.00	0.00	
5,450.00	73.79	282.60	5,279.37	81.90	-366.40	368.40	11.00	11.00	0.00	
5,500.00	79.29	282.60	5,291.00	92.50	-413.83	416.09	11.00	11.00	0.00	
5,550.00	84.79	282.60	5,297.93	103.30	-462.14	464.66	11.00	11.00	0.00	
5,600.00	90.29	282.60	5,300.07	114.19	-510.87	513.66	11.00	11.00	0.00	
EOC - Turn 2°/100'										
5,606.48	91.00	282.60	5,300.00	115.61	-517.20	520.02	11.00	11.00	0.00	
5,700.00	91.00	280.73	5,298.37	134.51	-608.77	612.05	2.00	0.00	-2.00	
5,800.00	91.01	278.73	5,296.61	151.41	-707.31	711.00	2.00	0.00	-2.00	
5,900.00	91.01	276.73	5,294.86	164.85	-806.38	810.38	2.00	0.00	-2.00	
6,000.00	91.01	274.73	5,293.10	174.83	-905.86	910.09	2.00	0.00	-2.00	
6,100.00	91.01	272.73	5,291.34	181.33	-1,005.63	1,009.99	2.00	0.00	-2.00	
6,200.00	91.00	270.73	5,289.59	184.35	-1,105.56	1,109.97	2.00	0.00	-2.00	
EOT - Hold to TD										
6,289.46	91.00	268.94	5,288.02	184.09	-1,195.00	1,199.38	2.00	0.00	-2.00	
6,300.00	91.00	268.94	5,287.84	183.89	-1,205.54	1,209.90	0.00	0.00	0.00	
6,400.00	91.00	268.94	5,286.10	182.04	-1,305.51	1,309.79	0.00	0.00	0.00	
6,500.00	91.00	268.94	5,284.35	180.19	-1,405.47	1,409.68	0.00	0.00	0.00	
6,600.00	91.00	268.94	5,282.61	178.34	-1,505.44	1,509.56	0.00	0.00	0.00	
6,700.00	91.00	268.94	5,280.86	176.48	-1,605.41	1,609.45	0.00	0.00	0.00	
6,800.00	91.00	268.94	5,279.11	174.63	-1,705.38	1,709.33	0.00	0.00	0.00	
6,900.00	91.00	268.94	5,277.37	172.78	-1,805.35	1,809.22	0.00	0.00	0.00	
7,000.00	91.00	268.94	5,275.62	170.92	-1,905.31	1,909.10	0.00	0.00	0.00	
7,100.00	91.00	268.94	5,273.88	169.07	-2,005.28	2,008.99	0.00	0.00	0.00	
7,200.00	91.00	268.94	5,272.13	167.22	-2,105.25	2,108.88	0.00	0.00	0.00	
7,300.00	91.00	268.94	5,270.39	165.37	-2,205.22	2,208.76	0.00	0.00	0.00	
7,400.00	91.00	268.94	5,268.64	163.51	-2,305.18	2,308.65	0.00	0.00	0.00	
7,500.00	91.00	268.94	5,266.90	161.66	-2,405.15	2,408.53	0.00	0.00	0.00	
7,600.00	91.00	268.94	5,265.15	159.81	-2,505.12	2,508.42	0.00	0.00	0.00	
7,700.00	91.00	268.94	5,263.41	157.96	-2,605.09	2,608.31	0.00	0.00	0.00	
7,800.00	91.00	268.94	5,261.66	156.10	-2,705.05	2,708.19	0.00	0.00	0.00	
7,900.00	91.00	268.94	5,259.92	154.25	-2,805.02	2,808.08	0.00	0.00	0.00	
8,000.00	91.00	268.94	5,258.17	152.40	-2,904.99	2,907.96	0.00	0.00	0.00	
8,100.00	91.00	268.94	5,256.43	150.55	-3,004.96	3,007.85	0.00	0.00	0.00	
8,200.00	91.00	268.94	5,254.68	148.69	-3,104.92	3,107.74	0.00	0.00	0.00	
8,300.00	91.00	268.94	5,252.94	146.84	-3,204.89	3,207.62	0.00	0.00	0.00	
8,400.00	91.00	268.94	5,251.19	144.99	-3,304.86	3,307.51	0.00	0.00	0.00	
8,500.00	91.00	268.94	5,249.45	143.14	-3,404.83	3,407.39	0.00	0.00	0.00	
8,600.00	91.00	268.94	5,247.70	141.28	-3,504.79	3,507.28	0.00	0.00	0.00	
8,700.00	91.00	268.94	5,245.96	139.43	-3,604.76	3,607.17	0.00	0.00	0.00	
8,800.00	91.00	268.94	5,244.21	137.58	-3,704.73	3,707.05	0.00	0.00	0.00	
8,900.00	91.00	268.94	5,242.46	135.73	-3,804.70	3,806.94	0.00	0.00	0.00	
9,000.00	91.00	268.94	5,240.72	133.87	-3,904.67	3,906.82	0.00	0.00	0.00	
9,100.00	91.00	268.94	5,238.97	132.02	-4,004.63	4,006.71	0.00	0.00	0.00	
9,200.00	91.00	268.94	5,237.23	130.17	-4,104.60	4,106.60	0.00	0.00	0.00	
9,300.00	91.00	268.94	5,235.48	128.32	-4,204.57	4,206.48	0.00	0.00	0.00	

Database:	EDMDBBW	Local Co-ordinate Reference:	Well Ouimet State Com #4H
Company:	COG Operating, LLC	TVD Reference:	WELL @ 3677.00usft (Original Well Elev)
Project:	Eddy County (NM27E)	MD Reference:	WELL @ 3677.00usft (Original Well Elev)
Site:	Sec 2-T17S-R29E	North Reference:	Grid
Well:	Ouimet State Com #4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #4		

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)
9,400.00	91.00	268.94	5,233.74	126.46	-4,304.54	4,306.37	0.00	0.00	0.00
9,500.00	91.00	268.94	5,231.99	124.61	-4,404.50	4,406.25	0.00	0.00	0.00
9,600.00	91.00	268.94	5,230.25	122.76	-4,504.47	4,506.14	0.00	0.00	0.00
9,700.00	91.00	268.94	5,228.50	120.91	-4,604.44	4,606.03	0.00	0.00	0.00
TD at 9732.67									
9,732.67	91.00	268.94	5,227.93	120.30	-4,637.10	4,638.66	0.00	0.00	0.00

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									
Ouimet State Com #4H	0.00	0.00	5,227.93	120.30	-4,637.10	678,300.900	586,231.700	32° 51' 51.901 N	104° 3' 8.985 W
- plan hits target center									
- Point									

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
4,779.21	4,779.21	0.00	0.00	KOP - Build 11°/100'
5,606.48	5,300.00	115.61	-517.20	EOC - Turn 2°/100'
6,289.46	5,288.02	184.09	-1,195.00	EOT - Hold to TD
9,732.67	5,227.93	120.30	-4,637.10	TD at 9732.67



Project: Eddy County(NM27E)
Site: Sec.2-T17S-R29E
Well: Ouimet State Com #4H
Wellbore: Wellbore #1
Design: Design #4
Lat: 32° 51' 50.585 N
Long: 104° 2' 14.622 W
GL: 3663.00
KB: WELL @ 3677.00usft (Original Well Elev)

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4779.21	0.00	0.00	4779.21	0.00	0.00	0.00	0.00	0.00	KOP - Build 11°/100'
5608.48	91.00	282.60	5300.00	115.61	-517.20	11.00	282.60	520.02	EOC - Turn 2°/100'
6289.46	91.00	268.94	5288.02	184.09	-1195.00	2.00	-89.88	1199.38	EOT - Hold to TD
9732.67	91.00	268.94	5227.93	120.30	-4637.10	0.00	0.00	4638.66	TD at 9732.67

WELL DETAILS: Ouimet State Com #4H

+N/-S	+E/-W	Northing	Ground Level:	3663.00	Longitude	Slot
0.00	0.00	678180.600	Easting	590868.800	32° 51' 50.585 N	104° 2' 14.622 W

PROJECT DETAILS: Eddy County(NM27E)

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: Sec.2-T17S-R29E

Site Centre Latitude: 32° 51' 50.585 N
Longitude: 104° 2' 14.622 W

Positional Uncertainty: 0.00
Convergence: 0.16
Local North: Grid

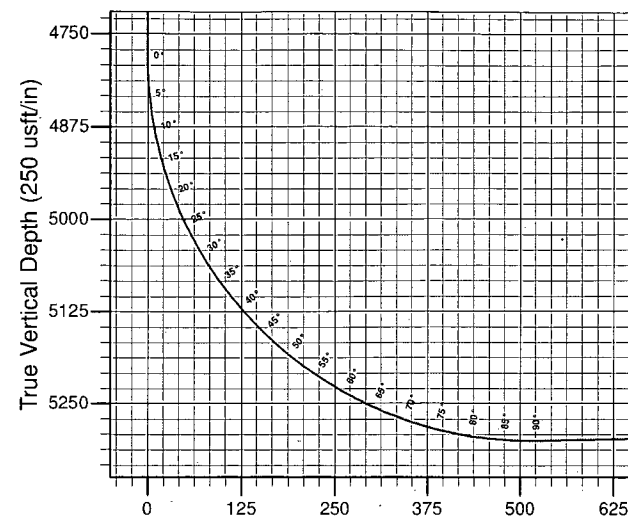
WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Ouimet State Com #4H	5227.93	120.30	-4637.10	32° 51' 51.901 N	104° 3' 8.985 W	Point

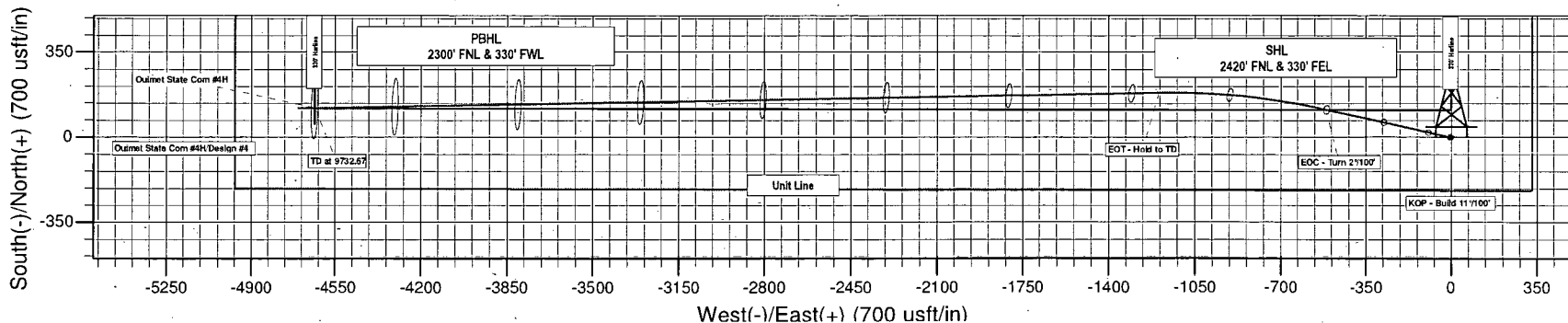
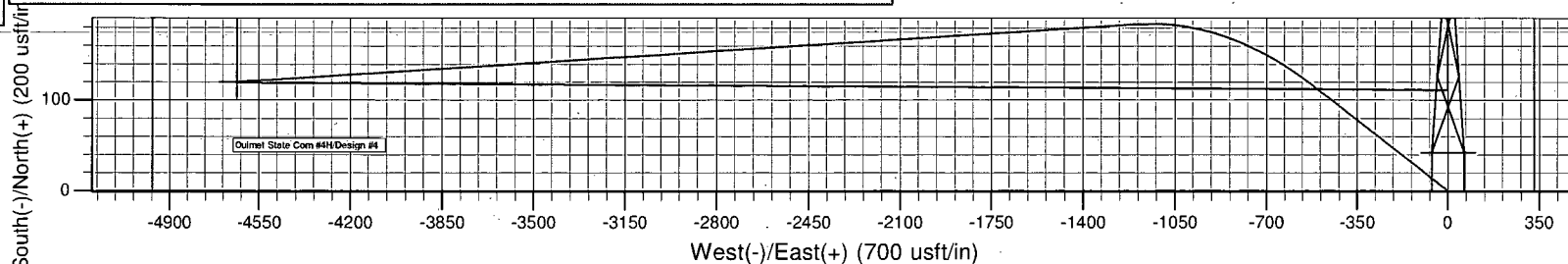


Azimuths to Grid North
True North: -0.16°
Magnetic North: 7.51°

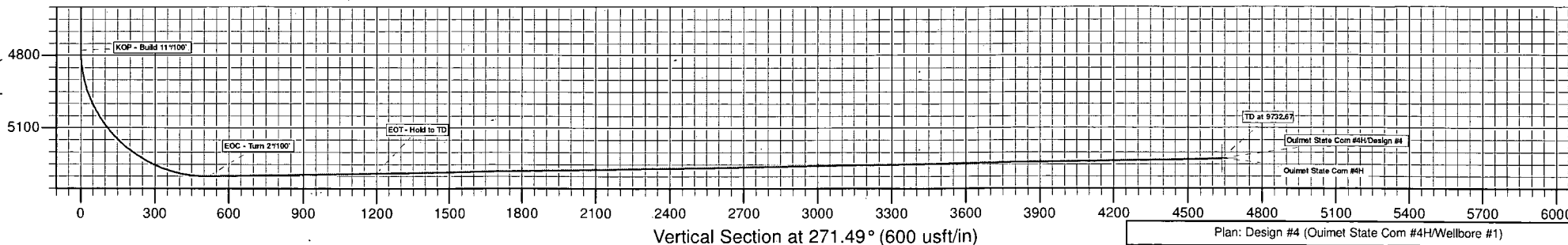
Magnetic Field
Strength: 48798.1snT
Dip Angle: 60.66°
Date: 12/14/2012
Model: IGRF2010



Vertical Section at 271.49° (250 usft/in)



True Vertical Depth (600 usft/in)



Plan: Design #4 (Ouimet State Com #4H/Wellbore #1)

Created By: Dusty Moyer Date: 14:09, January 30 2013