

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. 30-015-40413
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Hogan State Com
8. Well Number 1H
9. OGRID Number 229137
10. Pool name or Wildcat Empire; Glorieta Yeso East 96610
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3666'

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 **I**: **2010** feet from the **SOUTH** line and **220** feet from the **EAST** line

Section **2** Township **17S** Range **29E** NMPM County **EDDY**

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3666'

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 ☐

SUBSEQUENT REPORT OF:

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

OTHER: **Change TVD**



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 change the TVD:

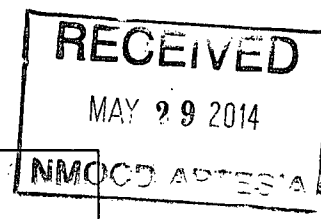
FROM: 4226' TVD ; 8833' MD

TO: 4276' TVD ; 8883' MD

A revised directional plan is 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 **05/28/2014**

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 **5-29-2014**

Conditions of Approval (if any):

COG OPERATING, LLC

Eddy County, NM

Hogan State Com 1H

1H

Lateral

Plan: Plan #2

Standard Planning Report

13 May, 2014

Section Distances
Sec2,T17S,R29E
SHL - Unit I
2009'FSL, 220'FEL
PP
2017'FSL, 330'FEL
PBHL - Unit L
2309'FSL, 330'FWL

Archer

Planning Report

Database:	EDMR5000.1-MULTI	Local Co-ordinate Reference:	Well: 1H
Company:	COG OPERATING, LLC	TVD Reference:	3666'GL+14'KB @ 3680.00usft (Planning)
Project:	Eddy County, NM	MD Reference:	3666'GL+14'KB @ 3680.00usft (Planning)
Site:	Hogan State Com 1H	North Reference:	Grid
Well:	1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #2		

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: Hogan State Com 1H					
Site Position:		Northing:	677,332.00 usft	Latitude:	32° 51' 42.19 N
From:	Map	Easting:	590,979.30 usft	Longitude:	104° 2' 13.35 W
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.16 °

Well	1H					
Well Position	+N/-S	0.00 usft	Northing:	677,332.00 usft	Latitude:	32° 51' 42.19 N
	+E/-W	0.00 usft	Easting:	590,979.30 usft	Longitude:	104° 2' 13.35 W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,666.00 usft

Wellbore:	Lateral
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/13/2014	7.49	60.62	48,656

Design:	Plan #2
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Audit Notes:					
Version:	Phase:	PROTOTYPE		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.00	0.00	0.00	273.69	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,829.21	0.00	0.00	3,829.21	0.00	0.00	0.00	0.00	0.00	0.00	
4,656.48	91.00	273.69	4,350.00	34.14	-528.86	11.00	11.00	0.00	273.69	
8,883.44	91.00	273.69	4,276.23	306.40	-4,746.40	0.00	0.00	0.00	0.00	Hogan 1H PBHL

Archer

Planning Report

Database:	EDMR5000.1 MULTI	Local Co-ordinate Reference:	Well: 1H
Company:	COG OPERATING, LLC	TVD Reference:	3666'GL+14'KB @ 3680.00usft (Planning)
Project:	Eddy County, NM	MD Reference:	3666'GL+14'KB @ 3680.00usft (Planning)
Site:	Hogan State Com 1H	North Reference:	Grid
Well:	1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #2		

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
3,829.21	0.00	0.00	3,829.21	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 11:00									
3,850.00	2.29	273.69	3,849.99	0.03	-0.41	0.41	11.00	11.00	0.00
3,900.00	7.79	273.69	3,899.78	0.31	-4.79	4.80	11.00	11.00	0.00
3,950.00	13.29	273.69	3,948.92	0.90	-13.91	13.94	11.00	11.00	0.00
4,000.00	18.79	273.69	3,996.96	1.79	-27.69	27.75	11.00	11.00	0.00
4,050.00	24.29	273.69	4,043.45	2.97	-46.00	46.10	11.00	11.00	0.00
4,100.00	29.79	273.69	4,087.97	4.43	-68.68	68.82	11.00	11.00	0.00
4,150.00	35.29	273.69	4,130.10	6.17	-95.50	95.70	11.00	11.00	0.00
4,200.00	40.79	273.69	4,169.47	8.15	-126.23	126.50	11.00	11.00	0.00
4,250.00	46.29	273.69	4,205.70	10.37	-160.59	160.92	11.00	11.00	0.00
4,300.00	51.79	273.69	4,238.47	12.80	-198.25	198.67	11.00	11.00	0.00
4,350.00	57.29	273.69	4,267.46	15.42	-238.88	239.38	11.00	11.00	0.00
4,400.00	62.79	273.69	4,292.43	18.21	-282.09	282.68	11.00	11.00	0.00
4,450.00	68.29	273.69	4,313.12	21.14	-327.49	328.17	11.00	11.00	0.00

Archer

Planning Report

Database:	EDM:R5000.1.MULTI	Local Co-ordinate Reference:	Well: 1H
Company:	COG OPERATING-LLC	TVD Reference:	3666 GL+14 KB @ 3680.00usft (Planning)
Project:	Eddy County, NM	MD Reference:	3666 GL+14 KB @ 3680.00usft (Planning)
Site:	Hogan State Com 1H	North Reference:	Grid
Well:	1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #2		

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)
4,500.00	73.79	273.69	4,329.37	24.19	-374.66	375.44	11.00	11.00	0.00
4,550.00	79.29	273.69	4,341.00	27.32	-423.17	424.05	11.00	11.00	0.00
4,600.00	84.79	273.69	4,347.93	30.51	-472.56	473.55	11.00	11.00	0.00
4,650.00	90.29	273.69	4,350.07	33.72	-522.39	523.48	11.00	11.00	0.00
4,656.48	91.00	273.69	4,350.00	34.14	-528.86	529.96	11.00	11.00	0.00
Start 4226.96 hold at 4656.48 MD									
4,700.00	91.00	273.69	4,349.24	36.94	-572.28	573.47	0.00	0.00	0.00
4,800.00	91.00	273.69	4,347.50	43.38	-672.06	673.46	0.00	0.00	0.00
4,900.00	91.00	273.69	4,345.75	49.83	-771.84	773.44	0.00	0.00	0.00
5,000.00	91.00	273.69	4,344.01	56.27	-871.61	873.43	0.00	0.00	0.00
5,100.00	91.00	273.69	4,342.26	62.71	-971.39	973.41	0.00	0.00	0.00
5,200.00	91.00	273.69	4,340.52	69.15	-1,071.17	1,073.40	0.00	0.00	0.00
5,300.00	91.00	273.69	4,338.77	75.59	-1,170.94	1,173.38	0.00	0.00	0.00
5,400.00	91.00	273.69	4,337.02	82.03	-1,270.72	1,273.37	0.00	0.00	0.00
5,500.00	91.00	273.69	4,335.28	88.47	-1,370.50	1,373.35	0.00	0.00	0.00
5,600.00	91.00	273.69	4,333.53	94.91	-1,470.28	1,473.34	0.00	0.00	0.00
5,700.00	91.00	273.69	4,331.79	101.35	-1,570.05	1,573.32	0.00	0.00	0.00
5,800.00	91.00	273.69	4,330.04	107.79	-1,669.83	1,673.31	0.00	0.00	0.00
5,900.00	91.00	273.69	4,328.30	114.24	-1,769.61	1,773.29	0.00	0.00	0.00
6,000.00	91.00	273.69	4,326.55	120.68	-1,869.38	1,873.27	0.00	0.00	0.00
6,100.00	91.00	273.69	4,324.81	127.12	-1,969.16	1,973.26	0.00	0.00	0.00
6,200.00	91.00	273.69	4,323.06	133.56	-2,068.94	2,073.24	0.00	0.00	0.00
6,300.00	91.00	273.69	4,321.32	140.00	-2,168.71	2,173.23	0.00	0.00	0.00
6,400.00	91.00	273.69	4,319.57	146.44	-2,268.49	2,273.21	0.00	0.00	0.00
6,500.00	91.00	273.69	4,317.83	152.88	-2,368.27	2,373.20	0.00	0.00	0.00
6,600.00	91.00	273.69	4,316.08	159.32	-2,468.05	2,473.18	0.00	0.00	0.00
6,700.00	91.00	273.69	4,314.34	165.76	-2,567.82	2,573.17	0.00	0.00	0.00
6,800.00	91.00	273.69	4,312.59	172.20	-2,667.60	2,673.15	0.00	0.00	0.00
6,900.00	91.00	273.69	4,310.85	178.65	-2,767.38	2,773.14	0.00	0.00	0.00
7,000.00	91.00	273.69	4,309.10	185.09	-2,867.15	2,873.12	0.00	0.00	0.00
7,100.00	91.00	273.69	4,307.36	191.53	-2,966.93	2,973.11	0.00	0.00	0.00
7,200.00	91.00	273.69	4,305.61	197.97	-3,066.71	3,073.09	0.00	0.00	0.00
7,300.00	91.00	273.69	4,303.87	204.41	-3,166.49	3,173.08	0.00	0.00	0.00
7,400.00	91.00	273.69	4,302.12	210.85	-3,266.26	3,273.06	0.00	0.00	0.00
7,500.00	91.00	273.69	4,300.37	217.29	-3,366.04	3,373.05	0.00	0.00	0.00
7,600.00	91.00	273.69	4,298.63	223.73	-3,465.82	3,473.03	0.00	0.00	0.00
7,700.00	91.00	273.69	4,296.88	230.17	-3,565.59	3,573.02	0.00	0.00	0.00
7,800.00	91.00	273.69	4,295.14	236.62	-3,665.37	3,673.00	0.00	0.00	0.00
7,900.00	91.00	273.69	4,293.39	243.06	-3,765.15	3,772.99	0.00	0.00	0.00
8,000.00	91.00	273.69	4,291.65	249.50	-3,864.93	3,872.97	0.00	0.00	0.00
8,100.00	91.00	273.69	4,289.90	255.94	-3,964.70	3,972.95	0.00	0.00	0.00
8,200.00	91.00	273.69	4,288.16	262.38	-4,064.48	4,072.94	0.00	0.00	0.00
8,300.00	91.00	273.69	4,286.41	268.82	-4,164.26	4,172.92	0.00	0.00	0.00
8,400.00	91.00	273.69	4,284.67	275.26	-4,264.03	4,272.91	0.00	0.00	0.00
8,500.00	91.00	273.69	4,282.92	281.70	-4,363.81	4,372.89	0.00	0.00	0.00
8,600.00	91.00	273.69	4,281.18	288.14	-4,463.59	4,472.88	0.00	0.00	0.00
8,700.00	91.00	273.69	4,279.43	294.58	-4,563.36	4,572.86	0.00	0.00	0.00
8,800.00	91.00	273.69	4,277.69	301.03	-4,663.14	4,672.85	0.00	0.00	0.00
8,883.44	91.00	273.69	4,276.23	306.40	-4,746.40	4,756.28	0.00	0.00	0.00
TD at 8883.44									

Archer

Planning Report

Database:	EDM:R5000.1 MULTI	Local Co-ordinate Reference:	Well: 1H
Company:	COG OPERATING, LLC	TVD Reference:	3666'GL+14'KB @ 3680.00usft (Planning)
Project:	Eddy County, NM	MD Reference:	3666'GL+14'KB @ 3680.00usft (Planning)
Site:	Hogan State Com 1H	North Reference:	Grid
Well:	1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #2		

Design Targets									
Target Name	hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	
Shape		(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	
									Latitude Longitude
Hogan 1H Surface		0.00	0.00	0.00	0.00	0.00	677,332.00	590,979.30	32° 51' 42.19 N 104° 2' 13.35 W
- plan hits target center									
- Point									
Hogan 1H PBHL		0.00	0.00	4,276.23	306.40	-4,746.40	677,638.40	586,232.90	32° 51' 45.35 N 104° 3' 8.99 W
- plan hits target center									
- Point									

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
3,829.21	3,829.21	0.00	0.00	Start Build 11.00
4,656.48	4,350.00	34.14	-528.86	Start 4226.96 hold at 4656.48 MD
8,883.44	4,276.23	306.40	-4,746.40	TD at 8883.44

COG OPERATING, LLC

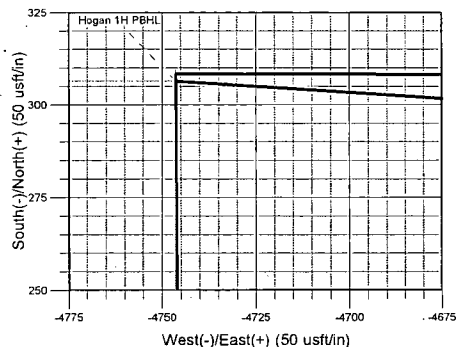
Field: Eddy County, NM
Site: Hogan State Com 1H
Well: 1H
Wellbore: Lateral
Plan: Plan #2

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	3829.21	0.00	0.00	3829.21	0.00	0.00	0.00	0.00	0.00	
3	4656.48	91.00	273.69	4350.00	34.14	-528.86	11.00	273.69	529.96	Hogan 1H PBHL
4	8883.44	91.00	273.69	4276.23	306.40	-4746.40	0.00	0.00	4756.28	

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Hogan 1H Surface	0.00	0.00	0.00	677332.00	590979.30	32° 51' 42.19 N	104° 2' 13.35 W	Point
Hogan 1H PBHL	4276.23	306.40	-4746.40	677638.40	586232.90	32° 51' 45.35 N	104° 3' 8.99 W	Point



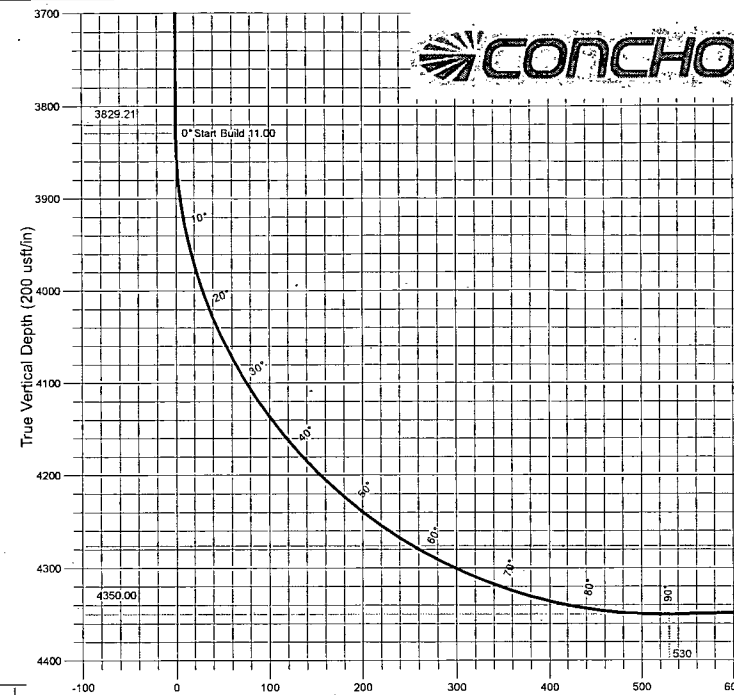
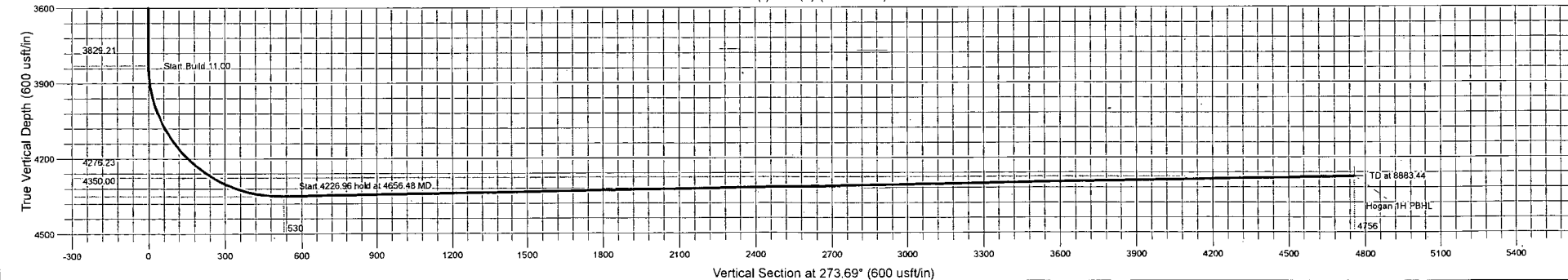
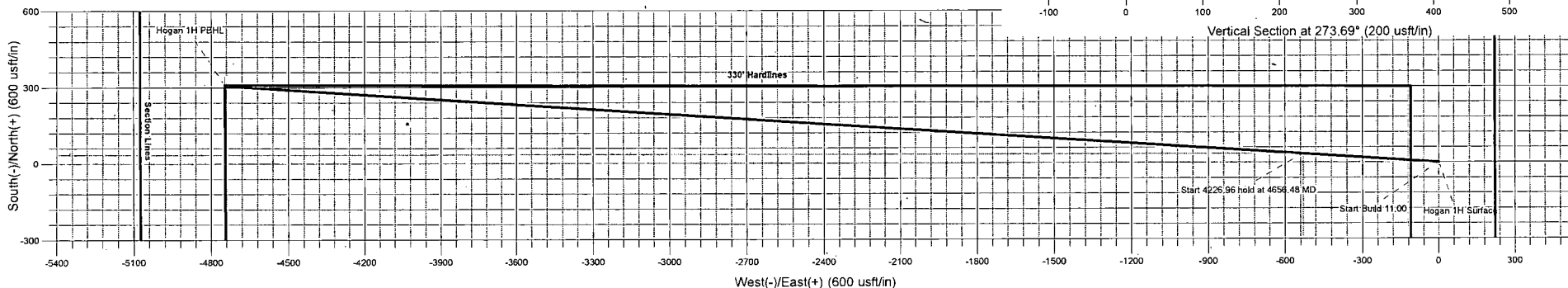
Section Distances

Sec2,T17S,R29E
SHL - Unit I
2009°FSL, 220°FEL
PP
2017°FSL, 330°FEL
PBHL - Unit L
2309°FSL, 330°FEL



Azimuths to Grid North
True North: -0.16°
Magnetic North: 7.33°

Magnetic Field
Strength: 48655.5nT
Dip Angle: 60.62°
Date: 5/13/2014
Model: IGRF2010



Archer

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Design: Plan #2 (1H/Lateral)
Created By: Ivonne Gonzalez
Date: 13:50, May 13 2014