

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

HOBBS OCO

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

MAY 29 2014

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.)		WELL API NO. 30-025-40886
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☐ FEE ☒
2. Name of Operator COG Operating LLC		6. State Oil & Gas Lease No.
3. Address of Operator One Concho Center - 600 W Illinois Ave Midland, TX 79701		7. Lease Name or Unit Agreement Name Pan Head Fee
4. Well Location Unit Letter D : 330 feet from the NORTH line and 330 feet from the WEST line Section 11 Township 17S Range 32E NMPM County LEA		8. Well Number 1H
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 4182'		9. OGRID Number 229137
10. Pool name or Wildcat Maljamar; Yeso West 44500		

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: 6706' TVD ; 12511' MD
TO: 6300' TVD ; 12010' 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 **Petroleum Engineer** DATE **06/04/14**

Conditions of Approval (if any):

JUN 04 2014

COG OPERATING, LLC

Lea County, NM
Pan Head Fee 1H
1H

HOBBS OCD

Lateral

MAY 29 2014

RECEIVED

Plan: Plan #4

Standard Planning Report

20 May, 2014

Section Distances
Sec11,T17S,R32E
SHL - Unit D
330'FNL, 330'FWL
Sec14,T17S,R32E
PBHL - Unit E
988'FNL, 330'FWL

Archer

Planning Report

Database:	EDM R5000.1 MULTI	Local Co-ordinate Reference:	Well 1H
Company:	COG OPERATING, LLC	TVD Reference:	4182'GL+17'KB @ 4199.00usft (Planning)
Project:	Lea County, NM	MD Reference:	4182'GL+17'KB @ 4199.00usft (Planning)
Site:	Pan Head Fee 1H	North Reference:	Grid
Well:	1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #4		

Project:	Lea 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:	Pan Head Fee 1H		
Site Position:		Northing:	675,378.00 usft
From:	Map	Easting:	680,940.30 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in
		Latitude:	32° 51' 19.12 N
		Longitude:	103° 44' 38.81 W
		Grid Convergence:	0.32 °

Well:	1H					
Well Position	+N/-S	0.00 usft	Northing:	675,378.00 usft	Latitude:	32° 51' 19.12 N
	+E/-W	0.00 usft	Easting:	680,940.30 usft	Longitude:	103° 44' 38.81 W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	4,182.00 usft

Wellbore	Lateral				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/20/2014	7.35	60.67	48,678

Design:	Plan #4				
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	179.67	

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	
5,779.13	0.00	0.00	5,779.13	0.00	0.00	0.00	0.00	0.00	0.00	
6,597.31	90.00	178.00	6,300.00	-520.55	18.18	11.00	11.00	0.00	178.00	
6,658.57	90.00	179.84	6,300.00	-581.79	19.33	3.00	0.00	3.00	90.00	
12,009.79	90.00	179.84	6,300.00	-5,933.00	34.50	0.00	0.00	0.00	0.00	Pan Head Fee 1H PB

Archer

Planning Report

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Project:	Lea County, NM	MD Reference:	4182'GL+17'KB @ 4199.00usft (Planning)
Site:	Pan Head Fee 1H	North Reference:	Grid
Well:	1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #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
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00

Archer

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Wellbore:	Lateral		
Design:	Plan #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)
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,779.13	0.00	0.00	5,779.13	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 11.00									
5,800.00	2.30	178.00	5,799.99	-0.42	0.01	0.42	11.00	11.00	0.00
5,850.00	7.80	178.00	5,849.78	-4.81	0.17	4.81	11.00	11.00	0.00
5,900.00	13.30	178.00	5,898.92	-13.95	0.49	13.96	11.00	11.00	0.00
5,950.00	18.80	178.00	5,946.95	-27.76	0.97	27.76	11.00	11.00	0.00
6,000.00	24.30	178.00	5,993.44	-46.10	1.61	46.11	11.00	11.00	0.00
6,050.00	29.80	178.00	6,037.96	-68.82	2.40	68.83	11.00	11.00	0.00
6,100.00	35.30	178.00	6,080.09	-95.69	3.34	95.71	11.00	11.00	0.00
6,150.00	40.80	178.00	6,119.45	-126.47	4.42	126.50	11.00	11.00	0.00
6,200.00	46.30	178.00	6,155.68	-160.88	5.62	160.91	11.00	11.00	0.00
6,250.00	51.80	178.00	6,188.44	-198.61	6.94	198.65	11.00	11.00	0.00
6,300.00	57.30	178.00	6,217.43	-239.30	8.36	239.34	11.00	11.00	0.00
6,350.00	62.80	178.00	6,242.38	-282.57	9.87	282.63	11.00	11.00	0.00
6,400.00	68.30	178.00	6,263.07	-328.04	11.46	328.11	11.00	11.00	0.00
6,450.00	73.80	178.00	6,279.31	-375.29	13.11	375.36	11.00	11.00	0.00
6,500.00	79.30	178.00	6,290.94	-423.87	14.80	423.94	11.00	11.00	0.00
6,550.00	84.80	178.00	6,297.85	-473.34	16.53	473.42	11.00	11.00	0.00
6,597.31	90.00	178.00	6,300.00	-520.55	18.18	520.65	11.00	11.00	0.00
Start DLS 3.00 TFO 90.00									
6,600.00	90.00	178.08	6,300.00	-523.24	18.27	523.34	3.00	0.00	3.00
6,658.57	90.00	179.84	6,300.00	-581.79	19.33	581.90	3.00	0.00	3.00
Start 5351.23 hold at 6658.57 MD									
6,700.00	90.00	179.84	6,300.00	-623.23	19.45	623.33	0.00	0.00	0.00
6,800.00	90.00	179.84	6,300.00	-723.23	19.73	723.33	0.00	0.00	0.00
6,900.00	90.00	179.84	6,300.00	-823.23	20.02	823.33	0.00	0.00	0.00
7,000.00	90.00	179.84	6,300.00	-923.23	20.30	923.33	0.00	0.00	0.00
7,100.00	90.00	179.84	6,300.00	-1,023.23	20.58	1,023.33	0.00	0.00	0.00
7,200.00	90.00	179.84	6,300.00	-1,123.23	20.87	1,123.33	0.00	0.00	0.00
7,300.00	90.00	179.84	6,300.00	-1,223.23	21.15	1,223.33	0.00	0.00	0.00
7,400.00	90.00	179.84	6,300.00	-1,323.23	21.44	1,323.33	0.00	0.00	0.00
7,500.00	90.00	179.84	6,300.00	-1,423.22	21.72	1,423.33	0.00	0.00	0.00
7,600.00	90.00	179.84	6,300.00	-1,523.22	22.00	1,523.33	0.00	0.00	0.00
7,700.00	90.00	179.84	6,300.00	-1,623.22	22.29	1,623.33	0.00	0.00	0.00
7,800.00	90.00	179.84	6,300.00	-1,723.22	22.57	1,723.33	0.00	0.00	0.00
7,900.00	90.00	179.84	6,300.00	-1,823.22	22.85	1,823.33	0.00	0.00	0.00
8,000.00	90.00	179.84	6,300.00	-1,923.22	23.14	1,923.32	0.00	0.00	0.00
8,100.00	90.00	179.84	6,300.00	-2,023.22	23.42	2,023.32	0.00	0.00	0.00
8,200.00	90.00	179.84	6,300.00	-2,123.22	23.70	2,123.32	0.00	0.00	0.00
8,300.00	90.00	179.84	6,300.00	-2,223.22	23.99	2,223.32	0.00	0.00	0.00
8,400.00	90.00	179.84	6,300.00	-2,323.22	24.27	2,323.32	0.00	0.00	0.00
8,500.00	90.00	179.84	6,300.00	-2,423.22	24.55	2,423.32	0.00	0.00	0.00
8,600.00	90.00	179.84	6,300.00	-2,523.22	24.84	2,523.32	0.00	0.00	0.00
8,700.00	90.00	179.84	6,300.00	-2,623.22	25.12	2,623.32	0.00	0.00	0.00
8,800.00	90.00	179.84	6,300.00	-2,723.22	25.40	2,723.32	0.00	0.00	0.00
8,900.00	90.00	179.84	6,300.00	-2,823.22	25.69	2,823.32	0.00	0.00	0.00
9,000.00	90.00	179.84	6,300.00	-2,923.22	25.97	2,923.32	0.00	0.00	0.00
9,100.00	90.00	179.84	6,300.00	-3,023.22	26.25	3,023.32	0.00	0.00	0.00
9,200.00	90.00	179.84	6,300.00	-3,123.22	26.54	3,123.32	0.00	0.00	0.00

Archer

Planning Report

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Well:	1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #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)	
9,300.00	90.00	179.84	6,300.00	-3,223.22	26.82	3,223.32	0.00	0.00	0.00	
9,400.00	90.00	179.84	6,300.00	-3,323.22	27.10	3,323.32	0.00	0.00	0.00	
9,500.00	90.00	179.84	6,300.00	-3,423.22	27.39	3,423.32	0.00	0.00	0.00	
9,600.00	90.00	179.84	6,300.00	-3,523.22	27.67	3,523.32	0.00	0.00	0.00	
9,700.00	90.00	179.84	6,300.00	-3,623.22	27.95	3,623.32	0.00	0.00	0.00	
9,800.00	90.00	179.84	6,300.00	-3,723.22	28.24	3,723.32	0.00	0.00	0.00	
9,900.00	90.00	179.84	6,300.00	-3,823.22	28.52	3,823.32	0.00	0.00	0.00	
10,000.00	90.00	179.84	6,300.00	-3,923.21	28.80	3,923.32	0.00	0.00	0.00	
10,100.00	90.00	179.84	6,300.00	-4,023.21	29.09	4,023.32	0.00	0.00	0.00	
10,200.00	90.00	179.84	6,300.00	-4,123.21	29.37	4,123.32	0.00	0.00	0.00	
10,300.00	90.00	179.84	6,300.00	-4,223.21	29.65	4,223.31	0.00	0.00	0.00	
10,400.00	90.00	179.84	6,300.00	-4,323.21	29.94	4,323.31	0.00	0.00	0.00	
10,500.00	90.00	179.84	6,300.00	-4,423.21	30.22	4,423.31	0.00	0.00	0.00	
10,600.00	90.00	179.84	6,300.00	-4,523.21	30.50	4,523.31	0.00	0.00	0.00	
10,700.00	90.00	179.84	6,300.00	-4,623.21	30.79	4,623.31	0.00	0.00	0.00	
10,800.00	90.00	179.84	6,300.00	-4,723.21	31.07	4,723.31	0.00	0.00	0.00	
10,900.00	90.00	179.84	6,300.00	-4,823.21	31.35	4,823.31	0.00	0.00	0.00	
11,000.00	90.00	179.84	6,300.00	-4,923.21	31.64	4,923.31	0.00	0.00	0.00	
11,100.00	90.00	179.84	6,300.00	-5,023.21	31.92	5,023.31	0.00	0.00	0.00	
11,200.00	90.00	179.84	6,300.00	-5,123.21	32.20	5,123.31	0.00	0.00	0.00	
11,300.00	90.00	179.84	6,300.00	-5,223.21	32.49	5,223.31	0.00	0.00	0.00	
11,400.00	90.00	179.84	6,300.00	-5,323.21	32.77	5,323.31	0.00	0.00	0.00	
11,500.00	90.00	179.84	6,300.00	-5,423.21	33.06	5,423.31	0.00	0.00	0.00	
11,600.00	90.00	179.84	6,300.00	-5,523.21	33.34	5,523.31	0.00	0.00	0.00	
11,700.00	90.00	179.84	6,300.00	-5,623.21	33.62	5,623.31	0.00	0.00	0.00	
11,800.00	90.00	179.84	6,300.00	-5,723.21	33.91	5,723.31	0.00	0.00	0.00	
11,900.00	90.00	179.84	6,300.00	-5,823.21	34.19	5,823.31	0.00	0.00	0.00	
12,009.79	90.00	179.84	6,300.00	-5,933.00	34.50	5,933.10	0.00	0.00	0.00	
TD at 12009.79										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
Pan Head Fee 1H Surfa	0.00	0.00	0.00	0.00	0.00	675,378.00	680,940.30	32° 51' 19.12 N	103° 44' 38.81 W	
- plan hits target center										
- Point										
Pan Head Fee 1H PBHL	0.00	0.00	6,300.00	-5,933.00	34.50	669,445.00	680,974.80	32° 50' 20.41 N	103° 44' 38.79 W	
- plan hits target center										
- Point										

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
5,779.13	5,779.13	0.00	0.00	Start Build 11.00	
6,597.31	6,300.00	-520.55	18.18	Start DLS 3.00 TFO 90.00	
6,658.57	6,300.00	-581.79	19.33	Start 5351.23 hold at 6658.57 MD	
12,009.79	6,300.00	-5,933.00	34.50	TD at 12009.79	

COG OPERATING, LLC

Field: Lea County, NM
Site: Pan Head Fee 1H
Well: 1H
Wellbore: Lateral
Plan: Plan #4



TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Pan Head Fee 1H Surface	0.00	0.00	0.00	675378.00	680940.30	32° 51' 19.12 N	103° 44' 38.81 W	Point
Pan Head Fee 1H PBHL	6300.00	-5933.00	34.50	669445.00	680974.80	32° 50' 20.41 N	103° 44' 38.79 W	Point

Section Distances

Sec11.T17S.R32E
SHL - Unit D
330°FNL, 330°FWL

Sec14.T17S.R32E
PBHL - Unit E
988°FNL, 330°FWL

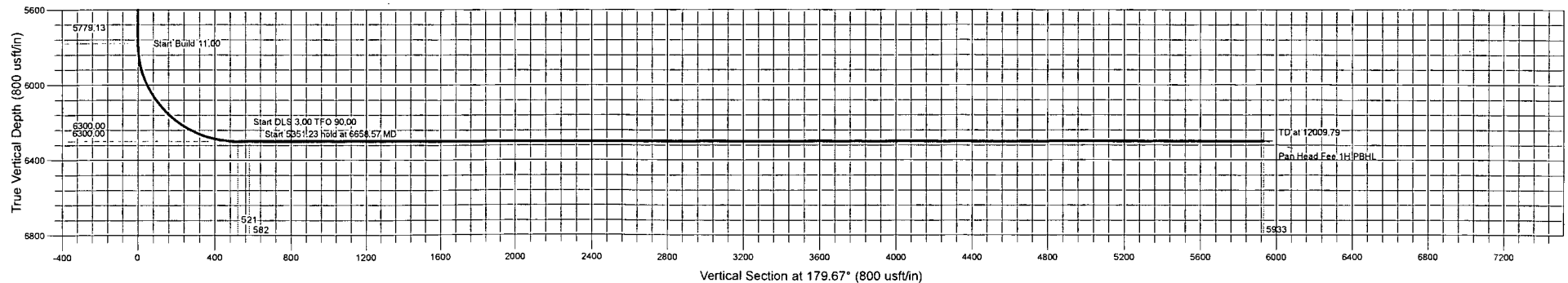
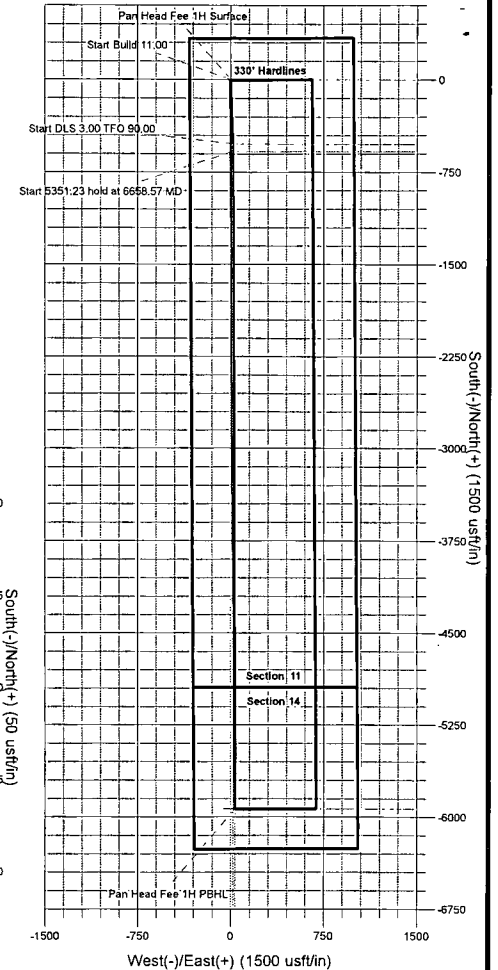
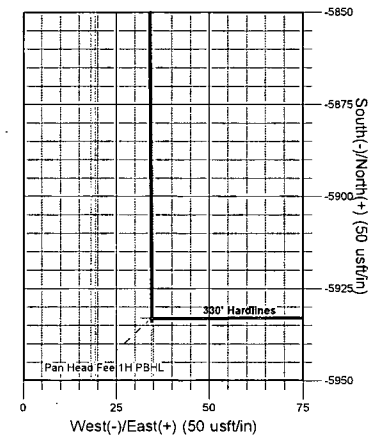
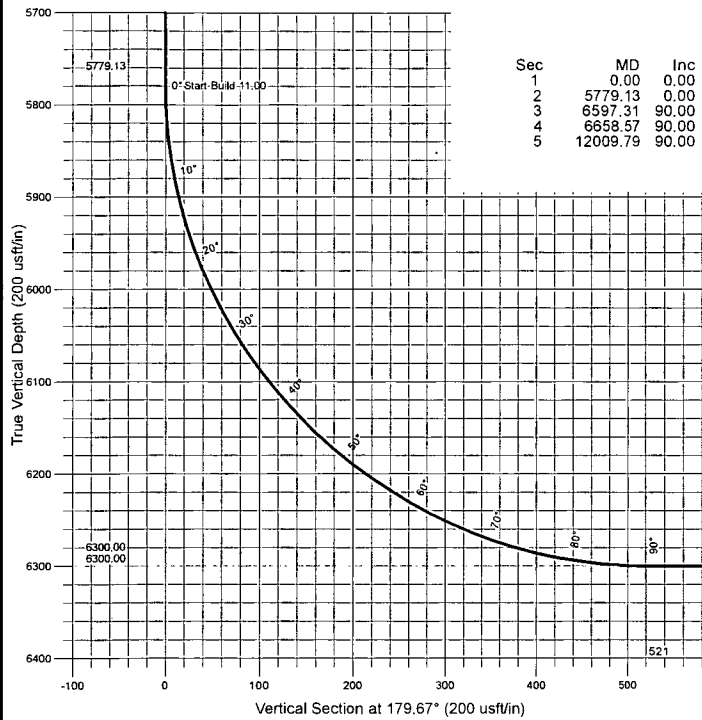
SECTION DETAILS

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	5779.13	0.00	0.00	5779.13	0.00	0.00	0.00	0.00	0.00	
3	6597.31	90.00	178.00	6300.00	-520.55	18.18	11.00	178.00	520.65	
4	6658.57	90.00	179.84	6300.00	-581.79	19.33	3.00	90.00	581.90	
5	12009.79	90.00	179.84	6300.00	-5933.00	34.50	0.00	0.00	5933.10	Pan Head Fee 1H PBHL



Azimuths to Grid North
True North: -0.32°
Magnetic North: 7.03°

Magnetic Field
Strength: 48677.8snT
Dip Angle: 60.67°
Date: 5/20/2014
Model: IGRF2010



Archer

ARCHER DIRECTIONAL DRILLING SERVICES
12101 Cutten Rd. Houston, Texas 77066
Phone: 281-301-2600 Fax: 281-301-2795

Design: Plan #4 (1H/Lateral)
Created By: Ivonne Gonzalez
Date: 9:53, May 20 2014