

30-025-40886

Plan Proposal

FOR

COG Operating, LLC
Pan Head Fee #1H
Lea Co., NM

Design #1

Presented By:

Aaron Böger
Account Manager

Dusty Moyer
Well Planner

SHL
330' FNL & 330' FWL
Penetration Point
330' FNL 330' FWL
PBHL
2308' FNL & 330' FWL

Attcher

Archer

COG Operating, LLC

Lea County(NM27E)

Sec.11-T17S-R32E

Pan Head Fee #1H

Wellbore #1

Plan: Design #1

Standard Planning Report

28 November, 2012

HOBBS OCD

DEC 17 2012

RECEIVED



Database:	EDMDBBW	Local Co-ordinate Reference:	Well Pan Head Fee #1H
Company:	COG Operating, LLC	TVD Reference:	WELL @ 4199.00usft (Original Well Elev)
Project:	Lea County(NM27E)	MD Reference:	WELL @ 4199.00usft (Original Well Elev)
Site:	Sec.11-T17S-R32E	North Reference:	Grid
Well:	Pan Head Fee #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Lea 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.11-T17S-R32E		
Site Position:		Northing:	675,378.000 usft
From:	Map	Easting:	680,940.300 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"
		Latitude:	32° 51' 19.118 N
		Longitude:	103° 44' 38.811 W
		Grid Convergence:	0.32 °

Well	Pan Head Fee #1H		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32° 51' 19.118 N
		Longitude:	103° 44' 38.811 W
		Ground Level:	4,182.00 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
	IGRF2010	11/26/12	7.53
			Dip Angle
			60.70
			Field Strength
			48,827

Design	Design #1		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction
			(°)
			179.66

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(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	
6,322.61	0.00	0.00	6,322.61	0.00	0.00	0.00	0.00	0.00	0.00	
7,080.94	91.00	179.66	6,800.00	-485.79	2.85	12.00	12.00	0.00	179.66	Pan Head Fee 1H PB
13,848.80	91.00	179.66	6,681.89	-7,252.50	42.60	0.00	0.00	0.00	0.00	Pan Head Fee 1H PB

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Wellbore:	Wellbore #1		
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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

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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	
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
KOP Build 12°/100'										
6,322.61	0.00	0.00	6,322.61	0.00	0.00	0.00	0.00	0.00	0.00	
6,325.00	0.29	179.66	6,325.00	-0.01	0.00	0.01	12.00	12.00	0.00	
6,350.00	3.29	179.66	6,349.98	-0.79	0.00	0.79	12.00	12.00	0.00	
6,375.00	6.29	179.66	6,374.89	-2.87	0.02	2.87	12.00	12.00	0.00	
6,400.00	9.29	179.66	6,399.66	-6.26	0.04	6.26	12.00	12.00	0.00	
6,425.00	12.29	179.66	6,424.22	-10.94	0.06	10.94	12.00	12.00	0.00	
6,450.00	15.29	179.66	6,448.49	-16.89	0.10	16.89	12.00	12.00	0.00	
6,475.00	18.29	179.66	6,472.43	-24.11	0.14	24.11	12.00	12.00	0.00	
6,500.00	21.29	179.66	6,495.95	-32.57	0.19	32.58	12.00	12.00	0.00	
6,525.00	24.29	179.66	6,518.99	-42.26	0.25	42.26	12.00	12.00	0.00	
6,550.00	27.29	179.66	6,541.50	-53.13	0.31	53.13	12.00	12.00	0.00	
6,575.00	30.29	179.66	6,563.41	-65.17	0.38	65.17	12.00	12.00	0.00	
6,600.00	33.29	179.66	6,584.66	-78.33	0.46	78.34	12.00	12.00	0.00	
6,625.00	36.29	179.66	6,605.19	-92.60	0.54	92.60	12.00	12.00	0.00	
6,650.00	39.29	179.66	6,624.94	-107.91	0.63	107.91	12.00	12.00	0.00	
6,675.00	42.29	179.66	6,643.87	-124.24	0.73	124.24	12.00	12.00	0.00	
6,700.00	45.29	179.66	6,661.91	-141.54	0.83	141.54	12.00	12.00	0.00	
6,725.00	48.29	179.66	6,679.03	-159.76	0.94	159.76	12.00	12.00	0.00	
6,750.00	51.29	179.66	6,695.17	-178.84	1.05	178.85	12.00	12.00	0.00	
6,775.00	54.29	179.66	6,710.29	-198.75	1.17	198.76	12.00	12.00	0.00	
6,800.00	57.29	179.66	6,724.34	-219.42	1.29	219.43	12.00	12.00	0.00	
6,825.00	60.29	179.66	6,737.30	-240.80	1.41	240.81	12.00	12.00	0.00	
6,850.00	63.29	179.66	6,749.11	-262.83	1.54	262.83	12.00	12.00	0.00	
6,875.00	66.29	179.66	6,759.76	-285.44	1.68	285.45	12.00	12.00	0.00	
6,900.00	69.29	179.66	6,769.21	-308.58	1.81	308.59	12.00	12.00	0.00	
6,925.00	72.29	179.66	6,777.44	-332.19	1.95	332.19	12.00	12.00	0.00	
6,950.00	75.29	179.66	6,784.42	-356.19	2.09	356.20	12.00	12.00	0.00	
6,975.00	78.29	179.66	6,790.13	-380.53	2.24	380.53	12.00	12.00	0.00	
7,000.00	81.29	179.66	6,794.56	-405.13	2.38	405.13	12.00	12.00	0.00	
7,025.00	84.29	179.66	6,797.70	-429.93	2.53	429.93	12.00	12.00	0.00	
7,050.00	87.29	179.66	6,799.54	-454.86	2.67	454.86	12.00	12.00	0.00	
7,075.00	90.29	179.66	6,800.07	-479.85	2.82	479.85	12.00	12.00	0.00	
EOC Hold to TD										
7,080.94	91.00	179.66	6,800.00	-485.79	2.85	485.80	12.00	12.00	0.00	
7,100.00	91.00	179.66	6,799.67	-504.84	2.97	504.85	0.00	0.00	0.00	
7,200.00	91.00	179.66	6,797.92	-604.83	3.55	604.84	0.00	0.00	0.00	
7,300.00	91.00	179.66	6,796.18	-704.81	4.14	704.82	0.00	0.00	0.00	
7,400.00	91.00	179.66	6,794.43	-804.79	4.73	804.81	0.00	0.00	0.00	
7,500.00	91.00	179.66	6,792.69	-904.77	5.31	904.79	0.00	0.00	0.00	
7,600.00	91.00	179.66	6,790.94	-1,004.76	5.90	1,004.78	0.00	0.00	0.00	
7,700.00	91.00	179.66	6,789.20	-1,104.74	6.49	1,104.76	0.00	0.00	0.00	
7,800.00	91.00	179.66	6,787.45	-1,204.72	7.08	1,204.74	0.00	0.00	0.00	

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7,900.00	91.00	179.66	6,785.71	-1,304.71	7.66	1,304.73	0.00	0.00	0.00	
8,000.00	91.00	179.66	6,783.96	-1,404.69	8.25	1,404.71	0.00	0.00	0.00	
8,100.00	91.00	179.66	6,782.22	-1,504.67	8.84	1,504.70	0.00	0.00	0.00	
8,200.00	91.00	179.66	6,780.47	-1,604.66	9.43	1,604.68	0.00	0.00	0.00	
8,300.00	91.00	179.66	6,778.73	-1,704.64	10.01	1,704.67	0.00	0.00	0.00	
8,400.00	91.00	179.66	6,776.98	-1,804.62	10.60	1,804.65	0.00	0.00	0.00	
8,500.00	91.00	179.66	6,775.24	-1,904.61	11.19	1,904.64	0.00	0.00	0.00	
8,600.00	91.00	179.66	6,773.49	-2,004.59	11.77	2,004.62	0.00	0.00	0.00	
8,700.00	91.00	179.66	6,771.75	-2,104.57	12.36	2,104.61	0.00	0.00	0.00	
8,800.00	91.00	179.66	6,770.00	-2,204.55	12.95	2,204.59	0.00	0.00	0.00	
8,900.00	91.00	179.66	6,768.26	-2,304.54	13.54	2,304.58	0.00	0.00	0.00	
9,000.00	91.00	179.66	6,766.51	-2,404.52	14.12	2,404.56	0.00	0.00	0.00	
9,100.00	91.00	179.66	6,764.76	-2,504.50	14.71	2,504.55	0.00	0.00	0.00	
9,200.00	91.00	179.66	6,763.02	-2,604.49	15.30	2,604.53	0.00	0.00	0.00	
9,300.00	91.00	179.66	6,761.27	-2,704.47	15.89	2,704.52	0.00	0.00	0.00	
9,400.00	91.00	179.66	6,759.53	-2,804.45	16.47	2,804.50	0.00	0.00	0.00	
9,500.00	91.00	179.66	6,757.78	-2,904.44	17.06	2,904.49	0.00	0.00	0.00	
9,600.00	91.00	179.66	6,756.04	-3,004.42	17.65	3,004.47	0.00	0.00	0.00	
9,700.00	91.00	179.66	6,754.29	-3,104.40	18.23	3,104.46	0.00	0.00	0.00	
9,800.00	91.00	179.66	6,752.55	-3,204.39	18.82	3,204.44	0.00	0.00	0.00	
9,900.00	91.00	179.66	6,750.80	-3,304.37	19.41	3,304.43	0.00	0.00	0.00	
10,000.00	91.00	179.66	6,749.06	-3,404.35	20.00	3,404.41	0.00	0.00	0.00	
10,100.00	91.00	179.66	6,747.31	-3,504.33	20.58	3,504.39	0.00	0.00	0.00	
10,200.00	91.00	179.66	6,745.57	-3,604.32	21.17	3,604.38	0.00	0.00	0.00	
10,300.00	91.00	179.66	6,743.82	-3,704.30	21.76	3,704.36	0.00	0.00	0.00	
10,400.00	91.00	179.66	6,742.08	-3,804.28	22.35	3,804.35	0.00	0.00	0.00	
10,500.00	91.00	179.66	6,740.33	-3,904.27	22.93	3,904.33	0.00	0.00	0.00	
10,600.00	91.00	179.66	6,738.59	-4,004.25	23.52	4,004.32	0.00	0.00	0.00	
10,700.00	91.00	179.66	6,736.84	-4,104.23	24.11	4,104.30	0.00	0.00	0.00	
10,800.00	91.00	179.66	6,735.10	-4,204.22	24.69	4,204.29	0.00	0.00	0.00	
10,900.00	91.00	179.66	6,733.35	-4,304.20	25.28	4,304.27	0.00	0.00	0.00	
11,000.00	91.00	179.66	6,731.61	-4,404.18	25.87	4,404.26	0.00	0.00	0.00	
11,100.00	91.00	179.66	6,729.86	-4,504.16	26.46	4,504.24	0.00	0.00	0.00	
11,200.00	91.00	179.66	6,728.11	-4,604.15	27.04	4,604.23	0.00	0.00	0.00	
11,300.00	91.00	179.66	6,726.37	-4,704.13	27.63	4,704.21	0.00	0.00	0.00	
11,400.00	91.00	179.66	6,724.62	-4,804.11	28.22	4,804.20	0.00	0.00	0.00	
11,500.00	91.00	179.66	6,722.88	-4,904.10	28.81	4,904.18	0.00	0.00	0.00	
11,600.00	91.00	179.66	6,721.13	-5,004.08	29.39	5,004.17	0.00	0.00	0.00	
11,700.00	91.00	179.66	6,719.39	-5,104.06	29.98	5,104.15	0.00	0.00	0.00	
11,800.00	91.00	179.66	6,717.64	-5,204.05	30.57	5,204.14	0.00	0.00	0.00	
11,900.00	91.00	179.66	6,715.90	-5,304.03	31.15	5,304.12	0.00	0.00	0.00	
12,000.00	91.00	179.66	6,714.15	-5,404.01	31.74	5,404.11	0.00	0.00	0.00	
12,100.00	91.00	179.66	6,712.41	-5,504.00	32.33	5,504.09	0.00	0.00	0.00	
12,200.00	91.00	179.66	6,710.66	-5,603.98	32.92	5,604.07	0.00	0.00	0.00	
12,300.00	91.00	179.66	6,708.92	-5,703.96	33.50	5,704.06	0.00	0.00	0.00	
12,400.00	91.00	179.66	6,707.17	-5,803.94	34.09	5,804.04	0.00	0.00	0.00	
12,500.00	91.00	179.66	6,705.43	-5,903.93	34.68	5,904.03	0.00	0.00	0.00	
12,600.00	91.00	179.66	6,703.68	-6,003.91	35.27	6,004.01	0.00	0.00	0.00	
12,700.00	91.00	179.66	6,701.94	-6,103.89	35.85	6,104.00	0.00	0.00	0.00	
12,800.00	91.00	179.66	6,700.19	-6,203.88	36.44	6,203.98	0.00	0.00	0.00	
12,900.00	91.00	179.66	6,698.45	-6,303.86	37.03	6,303.97	0.00	0.00	0.00	
13,000.00	91.00	179.66	6,696.70	-6,403.84	37.62	6,403.95	0.00	0.00	0.00	
13,100.00	91.00	179.66	6,694.96	-6,503.83	38.20	6,503.94	0.00	0.00	0.00	
13,200.00	91.00	179.66	6,693.21	-6,603.81	38.79	6,603.92	0.00	0.00	0.00	

Database:	EDMDBBW	Local Co-ordinate Reference:	Well Pan Head Fee #1H
Company:	COG Operating, LLC	TVD Reference:	WELL @ 4199.00usft (Original Well Elev)
Project:	Lea County(NM27E)	MD Reference:	WELL @ 4199.00usft (Original Well Elev)
Site:	Sec.11-T17S-R32E	North Reference:	Grid
Well:	Pan Head Fee #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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)	
13,300.00	91.00	179.66	6,691.46	-6,703.79	39.38	6,703.91	0.00	0.00	0.00	
13,400.00	91.00	179.66	6,689.72	-6,803.77	39.96	6,803.89	0.00	0.00	0.00	
13,500.00	91.00	179.66	6,687.97	-6,903.76	40.55	6,903.88	0.00	0.00	0.00	
13,600.00	91.00	179.66	6,686.23	-7,003.74	41.14	7,003.86	0.00	0.00	0.00	
13,700.00	91.00	179.66	6,684.48	-7,103.72	41.73	7,103.85	0.00	0.00	0.00	
13,800.00	91.00	179.66	6,682.74	-7,203.71	42.31	7,203.83	0.00	0.00	0.00	
TD at 13848.80										
13,848.80	91.00	179.66	6,681.89	-7,252.50	42.60	7,252.63	0.00	0.00	0.00	

Design Targets										
Target Name	hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Pan Head Fee 1H PBHL	- plan hits target center - Point	0.00	0.00	6,681.89	-7,252.50	42.60	668,125.500	680,982.900	32° 50' 7.353 N	103° 44' 38.786 W

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
6,322.61	6,322.61	0.00	0.00	KOP Build 12°/100'	
7,080.94	6,800.00	-485.79	2.85	EOC Hold to TD	
13,848.80	6,681.89	-7,252.50	42.60	TD at 13848.80	



Project: Lea County(NM27E)
Site: Sec.11-T17S-R32E
Well: Pan Head Fee #1H
Wellbore: Wellbore #1
Design: Design #1
Lat: 32° 51' 19.118 N
Long: 103° 44' 38.811 W
GL: 4182.00
KB: WELL @ 4199.00usft (Original Well Elev)

Archer

SECTION DETAILS

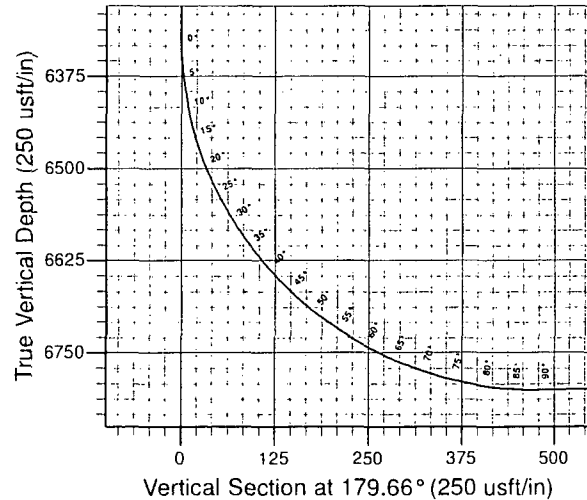
MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6322.61	0.00	0.00	6322.61	0.00	0.00	0.00	0.00	0.00	KOP Build 12°/100'
7080.94	91.00	179.66	6800.00	-485.79	2.85	12.00	179.66	485.80	EOC Hold to TD
13848.80	91.00	179.66	6681.89	-7252.50	42.60	0.00	0.00	7252.63	TD at 13848.80

WELL DETAILS: Pan Head Fee #1H

+N-S	+E-W	Northing	Ground Level: Easting	4182.00 Latitude	Longitude	Slot
0.00	0.00	675378.000	680940.300	32° 51' 19.118 N	103° 44' 38.811 W	

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N-S	+E-W	Latitude	Longitude	Shape Point
Pan Head Fee 1H PBHL	6681.89	-7252.50	42.60	32° 50' 7.353 N	103° 44' 38.786 W	



PROJECT DETAILS: Lea 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.11-T17S-R32E

Site Centre Latitude: 32° 51' 19.118 N
Longitude: 103° 44' 38.811 W
Positional Uncertainty: 0.00
Convergence: 0.32
Local North: Grid

