



CONCHO

COG PRODUCTION LLC

**LEA COUNTY, NM
BULLDOG
AZORES FED COM #10H**

OWB

Plan: PWP1

Survey Report - Geographic

28 February, 2017



COG PRODUCTION LLC

Survey Report - Geographic

Company:	COG PRODUCTION LLC	Local Co-ordinate Reference:	Well AZORES FED COM #10H
Project:	LEA COUNTY, NM	TVD Reference:	RKB=3508.2+26 @ 3534.2usft (MCVAY 8)
Site:	BULLDOG	MD Reference:	RKB=3508.2+26 @ 3534.2usft (MCVAY 8)
Well:	AZORES FED COM #10H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	Database:	EDM_Users

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	BULLDOG		
Site Position:		Northing:	398,637.10 usft
From:	Map	Easting:	741,887.40 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 5' 36.820 N
		Longitude:	103° 33' 8.116 W
		Grid Convergence:	0.42 "

Well	AZORES FED COM #10H		
Well Position	+N/-S	0.0 usft	Northing: 430,403.90 usf
	+E/-W	0.0 usft	Easting: 699,336.80 usf
Position Uncertainty	3.0 usft	Wellhead Elevation:	usf
		Latitude:	32° 10' 53.963 N
		Longitude:	103° 41' 20.518 W
		Ground Level:	3,508.2 usf

Wellbore	OWB		
Magnetics	Model Name	Sample Date	Declination (°)
	WMM2015	2/27/2017	7.06
			Dip Angle (°)
			60.00
			Field Strength (nT)
			47,920.33901280

Design	PWP1		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.0	0.0	0.0
			Direction (°)
			352.90

Survey Tool Program	Date 2/28/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
0.0	8,800.0	PWP1 (OWB)	Standard Keeper 104
8,800.0	14,111.4	PWP1 (OWB)	MWD
			Description
			Standard Wireline Keeper ver 1.0.4
			OWSG MWD - Standard

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
100.0	0.00	0.00	100.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
200.0	0.00	0.00	200.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
300.0	0.00	0.00	300.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
400.0	0.00	0.00	400.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
500.0	0.00	0.00	500.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
600.0	0.00	0.00	600.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
700.0	0.00	0.00	700.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
800.0	0.00	0.00	800.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
900.0	0.00	0.00	900.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W



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Survey Report - Geographic

Company: COG PRODUCTION LLC
Project: LEA COUNTY, NM
Site: BULLDOG
Well: AZORES FED COM #10H
Wellbore: OWB
Design: PWP1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well AZORES FED COM #10H
RKB=3508.2+26 @ 3534 2usft (MCVAY 8)
RKB=3508.2+26 @ 3534 2usft (MCVAY 8)
Grid
Minimum Curvature
EDM_Users

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,100.0	0.00	0.00	1,100.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
1,200.0	0.00	0.00	1,200.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
1,300.0	0.00	0.00	1,300.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
1,400.0	0.00	0.00	1,400.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
1,500.0	0.00	0.00	1,500.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
1,600.0	0.00	0.00	1,600.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
1,700.0	0.00	0.00	1,700.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
1,800.0	0.00	0.00	1,800.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
1,900.0	0.00	0.00	1,900.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
2,000.0	0.00	0.00	2,000.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
2,100.0	0.00	0.00	2,100.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
2,200.0	0.00	0.00	2,200.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
2,300.0	0.00	0.00	2,300.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
2,400.0	0.00	0.00	2,400.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
2,500.0	0.00	0.00	2,500.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
2,600.0	0.00	0.00	2,600.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
2,700.0	0.00	0.00	2,700.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
2,800.0	0.00	0.00	2,800.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
2,900.0	0.00	0.00	2,900.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
3,000.0	0.00	0.00	3,000.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
3,100.0	0.00	0.00	3,100.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
3,200.0	0.00	0.00	3,200.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
3,300.0	0.00	0.00	3,300.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
3,400.0	0.00	0.00	3,400.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
3,500.0	0.00	0.00	3,500.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
3,600.0	0.00	0.00	3,600.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
3,700.0	0.00	0.00	3,700.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
3,800.0	0.00	0.00	3,800.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
3,900.0	0.00	0.00	3,900.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
4,000.0	0.00	0.00	4,000.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
4,100.0	0.00	0.00	4,100.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
4,200.0	0.00	0.00	4,200.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
4,300.0	0.00	0.00	4,300.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
4,400.0	0.00	0.00	4,400.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
4,500.0	0.00	0.00	4,500.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
4,600.0	0.00	0.00	4,600.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
4,700.0	0.00	0.00	4,700.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
4,800.0	0.00	0.00	4,800.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
4,900.0	0.00	0.00	4,900.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
5,000.0	0.00	0.00	5,000.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
5,100.0	0.00	0.00	5,100.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
5,200.0	0.00	0.00	5,200.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
5,300.0	0.00	0.00	5,300.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
5,400.0	0.00	0.00	5,400.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
5,500.0	0.00	0.00	5,500.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
5,600.0	0.00	0.00	5,600.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
5,700.0	0.00	0.00	5,700.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
5,800.0	0.00	0.00	5,800.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
5,900.0	0.00	0.00	5,900.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
6,000.0	0.00	0.00	6,000.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
6,100.0	0.00	0.00	6,100.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
6,200.0	0.00	0.00	6,200.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
6,300.0	0.00	0.00	6,300.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
6,400.0	0.00	0.00	6,400.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
6,500.0	0.00	0.00	6,500.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W



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Design: PWP1

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Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,600.0	0.00	0.00	6,600.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
6,700.0	0.00	0.00	6,700.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
6,800.0	0.00	0.00	6,800.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
6,900.0	0.00	0.00	6,900.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
7,000.0	0.00	0.00	7,000.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
7,100.0	0.00	0.00	7,100.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
7,200.0	0.00	0.00	7,200.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
7,300.0	0.00	0.00	7,300.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
7,400.0	0.00	0.00	7,400.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
7,500.0	0.00	0.00	7,500.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
7,600.0	0.00	0.00	7,600.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
7,700.0	0.00	0.00	7,700.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
7,800.0	0.00	0.00	7,800.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
7,900.0	0.00	0.00	7,900.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
8,000.0	0.00	0.00	8,000.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
8,100.0	0.00	0.00	8,100.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
8,200.0	0.00	0.00	8,200.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
8,300.0	0.00	0.00	8,300.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
8,400.0	0.00	0.00	8,400.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
8,500.0	0.00	0.00	8,500.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
8,600.0	0.00	0.00	8,600.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
8,700.0	0.00	0.00	8,700.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
8,800.0	0.00	0.00	8,800.0	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
8,812.5	0.00	0.00	8,812.5	0.0	0.0	430,403.90	699,336.80	32° 10' 53.963 N	103° 41' 20.518 W
8,900.0	10.50	322.90	8,899.5	6.4	-4.8	430,410.28	699,331.97	32° 10' 54.026 N	103° 41' 20.574 W
9,000.0	22.50	322.90	8,995.2	29.0	-21.9	430,432.89	699,314.87	32° 10' 54.251 N	103° 41' 20.771 W
9,100.0	34.50	322.90	9,082.9	67.0	-50.7	430,470.87	699,286.15	32° 10' 54.628 N	103° 41' 21.103 W
9,200.0	46.50	322.90	9,158.8	118.7	-89.8	430,522.57	699,247.04	32° 10' 55.142 N	103° 41' 21.554 W
9,300.0	58.50	322.90	9,219.6	181.8	-137.5	430,585.73	699,199.28	32° 10' 55.770 N	103° 41' 22.105 W
9,400.0	70.49	322.90	9,262.6	253.7	-191.9	430,657.58	699,144.94	32° 10' 56.485 N	103° 41' 22.733 W
9,500.0	82.49	322.90	9,285.9	331.1	-250.4	430,735.00	699,086.39	32° 10' 57.254 N	103° 41' 23.409 W
9,562.6	90.00	322.90	9,290.0	380.8	-288.0	430,784.75	699,048.76	32° 10' 57.749 N	103° 41' 23.843 W
9,600.0	90.00	324.40	9,290.0	411.0	-310.2	430,814.90	699,026.57	32° 10' 58.048 N	103° 41' 24.099 W
9,700.0	90.00	328.40	9,290.0	494.3	-365.6	430,898.18	698,971.24	32° 10' 58.876 N	103° 41' 24.737 W
9,800.0	90.00	332.40	9,290.0	581.2	-414.9	430,985.11	698,921.85	32° 10' 59.739 N	103° 41' 25.306 W
9,900.0	90.00	336.40	9,290.0	671.4	-458.1	431,075.27	698,878.65	32° 11' 0.634 N	103° 41' 25.802 W
10,000.0	90.00	340.40	9,290.0	764.3	-495.0	431,168.23	698,841.84	32° 11' 1.556 N	103° 41' 26.224 W
10,100.0	90.00	344.40	9,290.0	859.6	-525.2	431,263.53	698,811.60	32° 11' 2.501 N	103° 41' 26.569 W
10,200.0	90.00	348.40	9,290.0	956.8	-548.7	431,360.70	698,788.09	32° 11' 3.464 N	103° 41' 26.836 W
10,300.0	90.00	352.40	9,290.0	1,055.4	-565.4	431,459.28	698,771.41	32° 11' 4.440 N	103° 41' 27.023 W
10,400.0	90.00	356.40	9,290.0	1,154.9	-575.1	431,558.78	698,761.65	32° 11' 5.425 N	103° 41' 27.130 W
10,479.0	90.00	359.56	9,290.0	1,233.8	-577.9	431,637.75	698,758.87	32° 11' 6.207 N	103° 41' 27.157 W
10,500.0	90.00	359.56	9,290.0	1,254.8	-578.1	431,658.72	698,758.71	32° 11' 6.414 N	103° 41' 27.157 W
10,600.0	90.00	359.56	9,290.0	1,354.8	-578.9	431,758.72	698,757.94	32° 11' 7.404 N	103° 41' 27.159 W
10,700.0	90.00	359.56	9,290.0	1,454.8	-579.6	431,858.72	698,757.16	32° 11' 8.394 N	103° 41' 27.161 W
10,800.0	90.00	359.56	9,290.0	1,554.8	-580.4	431,958.71	698,756.39	32° 11' 9.383 N	103° 41' 27.163 W
10,900.0	90.00	359.56	9,290.0	1,654.8	-581.2	432,058.71	698,755.62	32° 11' 10.373 N	103° 41' 27.165 W
11,000.0	90.00	359.56	9,290.0	1,754.8	-581.9	432,158.71	698,754.85	32° 11' 11.362 N	103° 41' 27.167 W
11,100.0	90.00	359.56	9,290.0	1,854.8	-582.7	432,258.70	698,754.08	32° 11' 12.352 N	103° 41' 27.169 W
11,200.0	90.00	359.56	9,290.0	1,954.8	-583.5	432,358.70	698,753.31	32° 11' 13.342 N	103° 41' 27.171 W
11,300.0	90.00	359.56	9,290.0	2,054.8	-584.3	432,458.70	698,752.54	32° 11' 14.331 N	103° 41' 27.173 W
11,400.0	90.00	359.56	9,290.0	2,154.8	-585.0	432,558.70	698,751.77	32° 11' 15.321 N	103° 41' 27.175 W
11,500.0	90.00	359.56	9,290.0	2,254.8	-585.8	432,658.69	698,751.00	32° 11' 16.310 N	103° 41' 27.177 W
11,600.0	90.00	359.56	9,290.0	2,354.8	-586.6	432,758.69	698,750.23	32° 11' 17.300 N	103° 41' 27.179 W
11,700.0	90.00	359.56	9,290.0	2,454.8	-587.3	432,858.69	698,749.46	32° 11' 18.290 N	103° 41' 27.181 W



COG PRODUCTION LLC

Survey Report - Geographic

Company: COG PRODUCTION LLC
Project: LEA COUNTY, NM
Site: BULLDOG
Well: AZORES FED COM #10H
Wellbore: OWB
Design: PWP1

Local Co-ordinate Reference: Well AZORES FED COM #10H
TVD Reference: RKB=3508 2+26 @ 3534.2usft (MCVAY 8)
MD Reference: RKB=3508 2+26 @ 3534.2usft (MCVAY 8)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM_Users

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
11,800.0	90.00	359.56	9,290.0	2,554.8	-588.1	432,958.68	698,748.69	32° 11' 19.279 N	103° 41' 27.183 W
11,900.0	90.00	359.56	9,290.0	2,654.8	-588.9	433,058.68	698,747.92	32° 11' 20.269 N	103° 41' 27.185 W
12,000.0	90.00	359.56	9,290.0	2,754.8	-589.6	433,158.68	698,747.15	32° 11' 21.258 N	103° 41' 27.187 W
12,100.0	90.00	359.56	9,290.0	2,854.8	-590.4	433,258.67	698,746.38	32° 11' 22.248 N	103° 41' 27.189 W
12,200.0	90.00	359.56	9,290.0	2,954.8	-591.2	433,358.67	698,745.61	32° 11' 23.238 N	103° 41' 27.191 W
12,300.0	90.00	359.56	9,290.0	3,054.8	-592.0	433,458.67	698,744.84	32° 11' 24.227 N	103° 41' 27.193 W
12,400.0	90.00	359.56	9,290.0	3,154.8	-592.7	433,558.67	698,744.07	32° 11' 25.217 N	103° 41' 27.195 W
12,500.0	90.00	359.56	9,290.0	3,254.8	-593.5	433,658.66	698,743.30	32° 11' 26.206 N	103° 41' 27.197 W
12,600.0	90.00	359.56	9,290.0	3,354.8	-594.3	433,758.66	698,742.53	32° 11' 27.196 N	103° 41' 27.199 W
12,700.0	90.00	359.56	9,290.0	3,454.8	-595.0	433,858.66	698,741.76	32° 11' 28.186 N	103° 41' 27.201 W
12,800.0	90.00	359.56	9,290.0	3,554.8	-595.8	433,958.65	698,740.99	32° 11' 29.175 N	103° 41' 27.203 W
12,900.0	90.00	359.56	9,290.0	3,654.8	-596.6	434,058.65	698,740.22	32° 11' 30.165 N	103° 41' 27.205 W
13,000.0	90.00	359.56	9,290.0	3,754.7	-597.3	434,158.65	698,739.45	32° 11' 31.154 N	103° 41' 27.207 W
13,100.0	90.00	359.56	9,290.0	3,854.7	-598.1	434,258.64	698,738.68	32° 11' 32.144 N	103° 41' 27.209 W
13,200.0	90.00	359.56	9,290.0	3,954.7	-598.9	434,358.64	698,737.91	32° 11' 33.134 N	103° 41' 27.211 W
13,300.0	90.00	359.56	9,290.0	4,054.7	-599.7	434,458.64	698,737.14	32° 11' 34.123 N	103° 41' 27.213 W
13,400.0	90.00	359.56	9,290.0	4,154.7	-600.4	434,558.64	698,736.37	32° 11' 35.113 N	103° 41' 27.215 W
13,500.0	90.00	359.56	9,290.0	4,254.7	-601.2	434,658.63	698,735.60	32° 11' 36.102 N	103° 41' 27.217 W
13,600.0	90.00	359.56	9,290.0	4,354.7	-602.0	434,758.63	698,734.83	32° 11' 37.092 N	103° 41' 27.219 W
13,700.0	90.00	359.56	9,290.0	4,454.7	-602.7	434,858.63	698,734.06	32° 11' 38.082 N	103° 41' 27.221 W
13,800.0	90.00	359.56	9,290.0	4,554.7	-603.5	434,958.62	698,733.29	32° 11' 39.071 N	103° 41' 27.223 W
13,900.0	90.00	359.56	9,290.0	4,654.7	-604.3	435,058.62	698,732.52	32° 11' 40.061 N	103° 41' 27.225 W
14,000.0	90.00	359.56	9,290.0	4,754.7	-605.0	435,158.62	698,731.75	32° 11' 41.050 N	103° 41' 27.228 W
14,100.0	90.00	359.56	9,290.0	4,854.7	-605.8	435,258.62	698,730.98	32° 11' 42.040 N	103° 41' 27.230 W
14,111.4	90.00	359.56	9,290.0	4,866.1	-605.9	435,270.00	698,730.90	32° 11' 42.153 N	103° 41' 27.230 W

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									
PBHL-Azores Fed	0.00	0.00	9,290.0	4,866.1	-605.9	435,270.00	698,730.90	32° 11' 42.153 N	103° 41' 27.230 W
- plan hits target center									
- Point									

Checked By: _____ Approved By: _____ Date: _____



CONCHCO

Project: LEA COUNTY NM
Site BUILDDOG
Well AZORES FED COM #10H
Wellbore: OWB
Design PWP1

WELL DETAILS AZORES FED COM #10H

North 3508.2 Easting 430403.90
Latitude 32° 10' 53.863 N Longitude 103° 41' 20.518 W

Sec	MD	Inc	Asi	TD	SECTION DETAILS	+N/S	+E/W	Dlog	Tface	VSect	Association
1	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.0	
2	8812.5	0.00	0.00	8812.5	0.0	0.0	0.0	0.00	0.00	0.0	
3	8962.6	80.00	322.90	8962.6	380.8	-288.0	12.00	322.90	413.5	1295.8	
4	10479.0	90.00	359.56	9250.0	1233.8	-577.9	4.00	90.00	4903.7		
5	14111.4	90.00	359.56	9250.0	4866.1	.505.9	0.00	0.00			

LEGEND

- AZORES FED COM #1H, OWB, PWP1 V0
- AZORES FED COM #5H, OWB, PWP1 V0
- PWP1

