

BC Operating, Inc.

Lea Co, NM (Nad-83_2010)

Blue Quail 7 Fed Com #2H

Blue Quail 7 Fed Com #2H

Lateral #1

Plan: Design #1

Standard Planning Report

21 April, 2015

HOBBS OCD
FEB 27 2017
RECEIVED

M3P
DIRECTIONAL
SERVICES

M3P Directional Services
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Blue Quail 7 Fed Com #2H
Company:	BC Operating, Inc.	TVD Reference:	WELL @ 3558.00usft (Original Well Elev)
Project:	Lea Co, NM (Nad-83_2010)	MD Reference:	WELL @ 3558.00usft (Original Well Elev)
Site:	Blue Quail 7 Fed Com #2H	North Reference:	Grid
Well:	Blue Quail 7 Fed Com #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral #1		
Design:	Design #1		

Project	Lea Co, NM (Nad-83_2010)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Blue Quail 7 Fed Com #2H, Sec 6, T-23S, R-32E				
Site Position:	Northing:	483,222.55 usft	Latitude:	32° 19' 36.910 N	
From: Map	Easting:	733,368.06 usft	Longitude:	103° 42' 41.923 W	
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.33 °

Well	Blue Quail 7 Fed Com #2H					
Well Position	+N/-S	0.00 usft	Northing:	483,222.55 usft	Latitude:	32° 19' 36.910 N
	+E/-W	0.00 usft	Easting:	733,368.06 usft	Longitude:	103° 42' 41.923 W
Position Uncertainty	0.00 usft	Wellhead Elevation:	3,558.00 usft	Ground Level:	3,533.00 usft	

Wellbore	Lateral #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/21/2015	7.18	60.16	48,277

Design	Design #1			
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	179.61

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		
11,227.04	0.00	0.00	11,227.04	0.00	0.00	0.00	0.00	0.00	0.00		
12,127.04	90.00	179.61	11,800.00	-572.94	3.86	10.00	10.00	0.00	179.61		
16,834.21	90.00	179.61	11,800.00	-5,280.01	35.55	0.00	0.00	0.00	0.00	PBHL - TD(BQ7FC2H)	

M3P Directional Services
Planning Report



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 Company: BC Operating, Inc.
 Project: Lea Co, NM (Nad-83_2010)
 Site: Blue Quail 7 Fed Com #2H
 Well: Blue Quail 7 Fed Com #2H
 Wellbore: Lateral #1
 Design: Design #1

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

Site Blue Quail 7 Fed Com #2H
 WELL @ 3558.00usft (Original Well Elev)
 WELL @ 3558.00usft (Original Well Elev)
 Grid
 Minimum Curvature

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	

M3P Directional Services

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5,400.00	0.00	0.00	5,400.00	0.00	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	0.00
5,600.00	0.00	0.00	5,600.00	0.00	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	0.00
5,800.00	0.00	0.00	5,800.00	0.00	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	0.00
6,000.00	0.00	0.00	6,000.00	0.00	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	0.00
6,200.00	0.00	0.00	6,200.00	0.00	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	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,100.00	0.00	0.00	8,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,200.00	0.00	0.00	8,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,300.00	0.00	0.00	8,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,400.00	0.00	0.00	8,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,500.00	0.00	0.00	8,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,600.00	0.00	0.00	8,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,700.00	0.00	0.00	8,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,800.00	0.00	0.00	8,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,900.00	0.00	0.00	8,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,000.00	0.00	0.00	9,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,100.00	0.00	0.00	9,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,200.00	0.00	0.00	9,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,300.00	0.00	0.00	9,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,400.00	0.00	0.00	9,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,500.00	0.00	0.00	9,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,600.00	0.00	0.00	9,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,700.00	0.00	0.00	9,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,800.00	0.00	0.00	9,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,900.00	0.00	0.00	9,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10,000.00	0.00	0.00	10,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10,100.00	0.00	0.00	10,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10,200.00	0.00	0.00	10,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10,300.00	0.00	0.00	10,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10,400.00	0.00	0.00	10,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10,500.00	0.00	0.00	10,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10,600.00	0.00	0.00	10,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10,700.00	0.00	0.00	10,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Well:	Blue Quail 7 Fed Com #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral #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)	
10,800.00	0.00	0.00	10,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10,900.00	0.00	0.00	10,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11,000.00	0.00	0.00	11,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11,100.00	0.00	0.00	11,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11,200.00	0.00	0.00	11,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11,227.04	0.00	0.00	11,227.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP - Build 10°/100'										
11,250.00	2.30	179.61	11,249.99	-0.46	0.00	0.46	10.00	10.00	10.00	0.00
11,300.00	7.30	179.61	11,299.80	-4.64	0.03	4.64	10.00	10.00	10.00	0.00
11,350.00	12.30	179.61	11,349.06	-13.14	0.09	13.14	10.00	10.00	10.00	0.00
11,400.00	17.30	179.61	11,397.39	-25.91	0.17	25.91	10.00	10.00	10.00	0.00
11,450.00	22.30	179.61	11,444.42	-42.83	0.29	42.84	10.00	10.00	10.00	0.00
11,500.00	27.30	179.61	11,489.79	-63.80	0.43	63.80	10.00	10.00	10.00	0.00
11,550.00	32.30	179.61	11,533.17	-88.63	0.60	88.64	10.00	10.00	10.00	0.00
11,600.00	37.30	179.61	11,574.21	-117.16	0.79	117.16	10.00	10.00	10.00	0.00
11,650.00	42.30	179.61	11,612.62	-149.15	1.00	149.15	10.00	10.00	10.00	0.00
11,700.00	47.30	179.61	11,648.09	-184.37	1.24	184.37	10.00	10.00	10.00	0.00
11,750.00	52.30	179.61	11,680.35	-222.54	1.50	222.55	10.00	10.00	10.00	0.00
11,800.00	57.30	179.61	11,709.17	-263.38	1.77	263.39	10.00	10.00	10.00	0.00
11,850.00	62.30	179.61	11,734.32	-306.58	2.06	306.59	10.00	10.00	10.00	0.00
11,900.00	67.30	179.61	11,755.60	-351.80	2.37	351.81	10.00	10.00	10.00	0.00
11,950.00	72.30	179.61	11,772.86	-398.71	2.68	398.72	10.00	10.00	10.00	0.00
12,000.00	77.30	179.61	11,785.97	-446.94	3.01	446.95	10.00	10.00	10.00	0.00
12,050.00	82.30	179.61	11,794.83	-496.14	3.34	496.15	10.00	10.00	10.00	0.00
12,100.00	87.30	179.61	11,799.36	-545.91	3.68	545.93	10.00	10.00	10.00	0.00
12,124.21	89.72	179.61	11,799.99	-570.12	3.84	570.13	10.00	10.00	10.00	0.00
FTP (BQ7FC2H)										
12,127.04	90.00	179.61	11,800.00	-572.94	3.86	572.96	10.00	10.00	10.00	0.00
EOC - Hold 90°										
12,200.00	90.00	179.61	11,800.00	-645.90	4.35	645.92	0.00	0.00	0.00	0.00
12,300.00	90.00	179.61	11,800.00	-745.90	5.02	745.92	0.00	0.00	0.00	0.00
12,400.00	90.00	179.61	11,800.00	-845.90	5.70	845.92	0.00	0.00	0.00	0.00
12,500.00	90.00	179.61	11,800.00	-945.89	6.37	945.92	0.00	0.00	0.00	0.00
12,600.00	90.00	179.61	11,800.00	-1,045.89	7.04	1,045.92	0.00	0.00	0.00	0.00
12,700.00	90.00	179.61	11,800.00	-1,145.89	7.72	1,145.92	0.00	0.00	0.00	0.00
12,800.00	90.00	179.61	11,800.00	-1,245.89	8.39	1,245.92	0.00	0.00	0.00	0.00
12,900.00	90.00	179.61	11,800.00	-1,345.89	9.06	1,345.92	0.00	0.00	0.00	0.00
13,000.00	90.00	179.61	11,800.00	-1,445.88	9.74	1,445.92	0.00	0.00	0.00	0.00
13,100.00	90.00	179.61	11,800.00	-1,545.88	10.41	1,545.92	0.00	0.00	0.00	0.00
13,200.00	90.00	179.61	11,800.00	-1,645.88	11.08	1,645.92	0.00	0.00	0.00	0.00
13,300.00	90.00	179.61	11,800.00	-1,745.88	11.75	1,745.92	0.00	0.00	0.00	0.00
13,400.00	90.00	179.61	11,800.00	-1,845.87	12.43	1,845.92	0.00	0.00	0.00	0.00
13,500.00	90.00	179.61	11,800.00	-1,945.87	13.10	1,945.92	0.00	0.00	0.00	0.00
13,600.00	90.00	179.61	11,800.00	-2,045.87	13.77	2,045.92	0.00	0.00	0.00	0.00
13,700.00	90.00	179.61	11,800.00	-2,145.87	14.45	2,145.92	0.00	0.00	0.00	0.00
13,800.00	90.00	179.61	11,800.00	-2,245.86	15.12	2,245.92	0.00	0.00	0.00	0.00
13,900.00	90.00	179.61	11,800.00	-2,345.86	15.79	2,345.92	0.00	0.00	0.00	0.00
14,000.00	90.00	179.61	11,800.00	-2,445.86	16.47	2,445.92	0.00	0.00	0.00	0.00
14,100.00	90.00	179.61	11,800.00	-2,545.86	17.14	2,545.92	0.00	0.00	0.00	0.00
14,200.00	90.00	179.61	11,800.00	-2,645.86	17.81	2,645.92	0.00	0.00	0.00	0.00
14,300.00	90.00	179.61	11,800.00	-2,745.85	18.49	2,745.92	0.00	0.00	0.00	0.00
14,400.00	90.00	179.61	11,800.00	-2,845.85	19.16	2,845.92	0.00	0.00	0.00	0.00
14,500.00	90.00	179.61	11,800.00	-2,945.85	19.83	2,945.92	0.00	0.00	0.00	0.00

M3P Directional Services
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Blue Quail 7 Fed Com #2H
Company:	BC Operating, Inc.	TVD Reference:	WELL @ 3558.00usft (Original Well Elev)
Project:	Lea Co, NM (Nad-83_2010)	MD Reference:	WELL @ 3558.00usft (Original Well Elev)
Site:	Blue Quail 7 Fed Com #2H	North Reference:	Grid
Well:	Blue Quail 7 Fed Com #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral #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)	
14,600.00	90.00	179.61	11,800.00	-3,045.85	20.51	3,045.92	0.00	0.00	0.00	
14,700.00	90.00	179.61	11,800.00	-3,145.84	21.18	3,145.92	0.00	0.00	0.00	
14,800.00	90.00	179.61	11,800.00	-3,245.84	21.85	3,245.92	0.00	0.00	0.00	
14,900.00	90.00	179.61	11,800.00	-3,345.84	22.53	3,345.92	0.00	0.00	0.00	
15,000.00	90.00	179.61	11,800.00	-3,445.84	23.20	3,445.92	0.00	0.00	0.00	
15,100.00	90.00	179.61	11,800.00	-3,545.84	23.87	3,545.92	0.00	0.00	0.00	
15,200.00	90.00	179.61	11,800.00	-3,645.83	24.55	3,645.92	0.00	0.00	0.00	
15,300.00	90.00	179.61	11,800.00	-3,745.83	25.22	3,745.92	0.00	0.00	0.00	
15,400.00	90.00	179.61	11,800.00	-3,845.83	25.89	3,845.92	0.00	0.00	0.00	
15,500.00	90.00	179.61	11,800.00	-3,945.83	26.57	3,945.92	0.00	0.00	0.00	
15,600.00	90.00	179.61	11,800.00	-4,045.82	27.24	4,045.92	0.00	0.00	0.00	
15,700.00	90.00	179.61	11,800.00	-4,145.82	27.91	4,145.92	0.00	0.00	0.00	
15,800.00	90.00	179.61	11,800.00	-4,245.82	28.59	4,245.92	0.00	0.00	0.00	
15,900.00	90.00	179.61	11,800.00	-4,345.82	29.26	4,345.92	0.00	0.00	0.00	
16,000.00	90.00	179.61	11,800.00	-4,445.81	29.93	4,445.92	0.00	0.00	0.00	
16,100.00	90.00	179.61	11,800.00	-4,545.81	30.61	4,545.92	0.00	0.00	0.00	
16,200.00	90.00	179.61	11,800.00	-4,645.81	31.28	4,645.92	0.00	0.00	0.00	
16,300.00	90.00	179.61	11,800.00	-4,745.81	31.95	4,745.92	0.00	0.00	0.00	
16,400.00	90.00	179.61	11,800.00	-4,845.81	32.63	4,845.92	0.00	0.00	0.00	
16,500.00	90.00	179.61	11,800.00	-4,945.80	33.30	4,945.92	0.00	0.00	0.00	
16,600.00	90.00	179.61	11,800.00	-5,045.80	33.97	5,045.92	0.00	0.00	0.00	
16,700.00	90.00	179.61	11,800.00	-5,145.80	34.65	5,145.92	0.00	0.00	0.00	
16,744.21	90.00	179.61	11,800.00	-5,190.01	34.94	5,190.13	0.00	0.00	0.00	
LTP (BQ7FC2H)										
16,800.00	90.00	179.61	11,800.00	-5,245.80	35.32	5,245.92	0.00	0.00	0.00	
16,834.21	90.00	179.61	11,800.00	-5,280.01	35.55	5,280.13	0.00	0.00	0.00	
PBHL - TD(BQ7FC2H)										

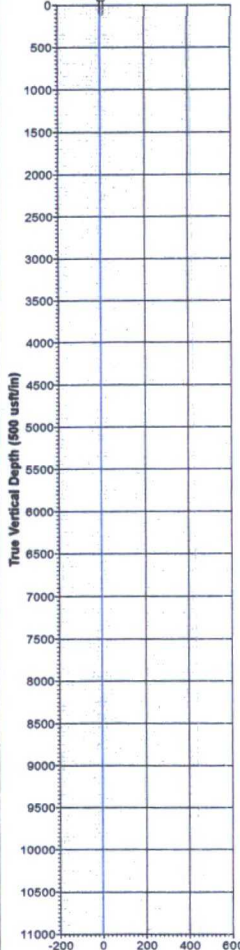
Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
FTP (BQ7FC2H)	0.00	0.00	11,800.00	-570.11	4.82	482,652.44	733,372.88	32° 19' 31.268 N	103° 42' 41.906 W	
- plan misses target center by 0.98usft at 12124.21usft MD (11799.99 TVD, -570.12 N, 3.84 E)										
- Point										
LTP (BQ7FC2H)	0.00	0.00	11,800.00	-5,190.01	35.15	478,032.54	733,403.21	32° 18' 45.551 N	103° 42' 41.864 W	
- plan misses target center by 0.21usft at 16744.21usft MD (11800.00 TVD, -5190.01 N, 34.94 E)										
- Point										
PBHL - TD(BQ7FC2H)	0.00	0.00	11,800.00	-5,280.01	35.55	477,942.54	733,403.61	32° 18' 44.660 N	103° 42' 41.866 W	
- plan hits target center										
- Point										

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
11,227.04	11,227.04	0.00	0.00	KOP - Build 10°/100'	
12,127.04	11,800.00	-572.94	3.86	EOC - Hold 90°	



BC Operating, Inc.

Project: Lea Co, NM (Nad-83_2010)
 Well: Blue Quail 7 Fed Com #2H
 Wellbore: Lateral #1
 Design: Design #1
 Original Well Elev



WELL DETAILS						
			Ground Level:	3533.00		
+N-S	+E-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	483222.55	733368.06	32° 19' 36.910 N	103° 42' 41.923 W	

SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSec	Target	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	11227.04	0.00	0.00	11227.04	0.00	0.00	0.00	0.00	0.00		KOP - Build 10°/100'
3	12127.04	90.00	179.61	11800.00	-572.94	3.86	10.00	179.61	572.96		EOC - Hold 90°
4	16834.21	90.00	179.61	11800.00	-5280.01	35.55	0.00	0.00	5280.13	PBHL - TD(BQ7FC2H)	

DESIGN TARGET DETAILS										
Name	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude	Shape		
FTP (BQ7FC2H)	11800.00	-570.11	4.82	482852.44	733372.88	32° 19' 31.268 N	103° 42' 41.906 W	Point	- plan misses target center by 0.98usft at 12124.21usft MD (11799.99 TVD, -570.12 N, 3.84 E)	
LTP (BQ7FC2H)	11800.00	-5190.01	35.15	478032.54	733403.21	32° 18' 45.551 N	103° 42' 41.864 W	Point	- plan misses target center by 0.21usft at 16744.21usft MD (11800.00 TVD, -5190.01 N, 34.94 E)	
PBHL - TD(BQ7FC2H)	11800.00	-5280.01	35.55	477942.54	733403.61	32° 18' 44.660 N	103° 42' 41.866 W	Point	- plan hits target center	

Map System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone Name: New Mexico Eastern Zone
 Local Origin: Site Blue Quail 7 Fed Com #2H, Grid North
 Latitude: 32° 19' 36.910 N
 Longitude: 103° 42' 41.923 W
 Grid East: 733368.06
 Grid North: 483222.55
 Scale Factor: 1.000
 Geomagnetic Model: IGRF2010
 Sample Date: 21-Apr-15
 Magnetic Declination: 7.18°
 Dip Angle from Horizontal: 60.16°
 Magnetic Field Strength: 48277
 To convert a Magnetic Direction to a Grid Direction, Add 6.85°
 To convert a Magnetic Direction to a True Direction, Add 7.18° East
 To convert a True Direction to a Grid Direction, Subtract 0.33°

LEGEND
 — Design #1

