



Berry Petroleum Company

BERRY PETROLEUM COMPANY

GARFIELD COUNTY, COLORADO

OM G03 696 PAD

GRANLEE OM02B

OM02B

Plan: PLAN #1

Standard Planning Report

08 September, 2008



Weatherford®



Berry Petroleum Company

GRANLEE OM02B
GARFIELD COUNTY, COLORADO
SECTION 3-T6S-R96W
1939 FNL, 1551 FEL
39° 33' 27.810 N
108° 5' 29.6300 W



Weatherford®

WELL DETAILS: GRANLEE OM02B

+N/-S	+E/-W	Northing	Easting	Ground Level:	Latitude	Longitude	Slot
0.00	0.00	1638451.32	2269399.92	8163.50	39° 33' 27.810 N	108° 5' 29.6300 W	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

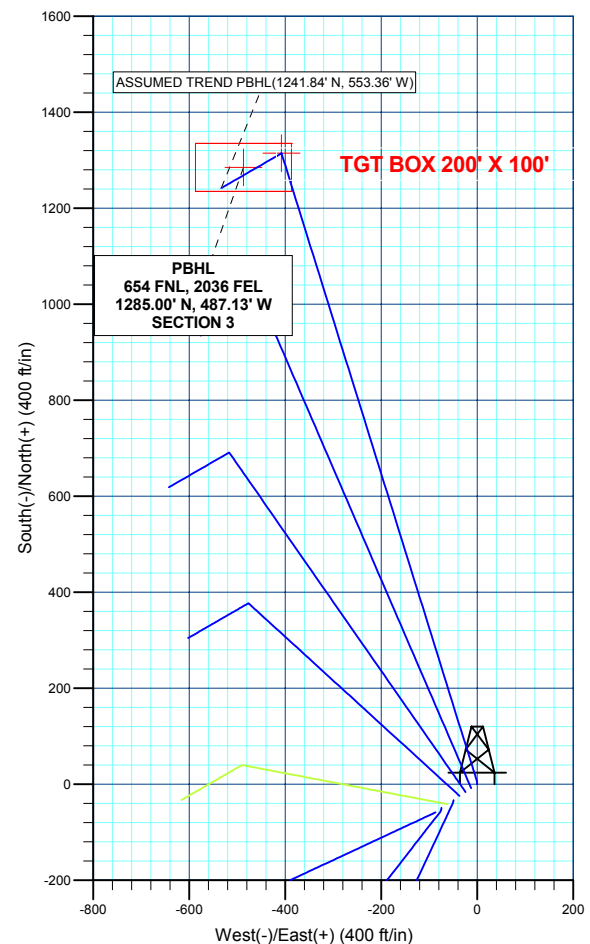
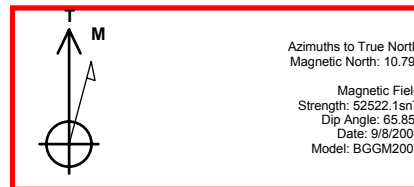
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL_OM02B-G03-695	11385.00	1285.00	-487.13	1639749.69	2268949.64	39° 33' 40.510 N	108° 5' 35.8500 W	Rectangle (Sides: L100.00 W200.00)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	160.00	0.00	0.00	160.00	0.00	0.00	0.00	0.00	0.00	
3	310.00	3.00	358.00	309.93	3.92	-0.14	2.00	358.00	3.66	
4	349.95	3.00	342.72	349.82	5.98	-0.49	2.00	-90.00	5.69	
5	815.00	3.00	342.72	814.24	29.22	-7.72	0.00	0.00	29.89	
6	1263.24	11.96	342.72	1258.21	84.90	-25.04	2.00	-0.01	87.89	
7	6874.12	11.96	342.72	6747.19	1195.57	-370.65	0.00	0.00	1244.81	
8	8070.60	0.00	0.00	7935.00	1314.42	-407.64	1.00	180.00	1368.61	
9	8320.60	2.50	240.00	8184.92	1311.70	-412.36	1.00	240.00	1367.97	
10	11523.73	2.50	240.00	11385.00	1241.84	-533.36	0.00	0.00	1351.53	PBHL_OM02B-G03-695

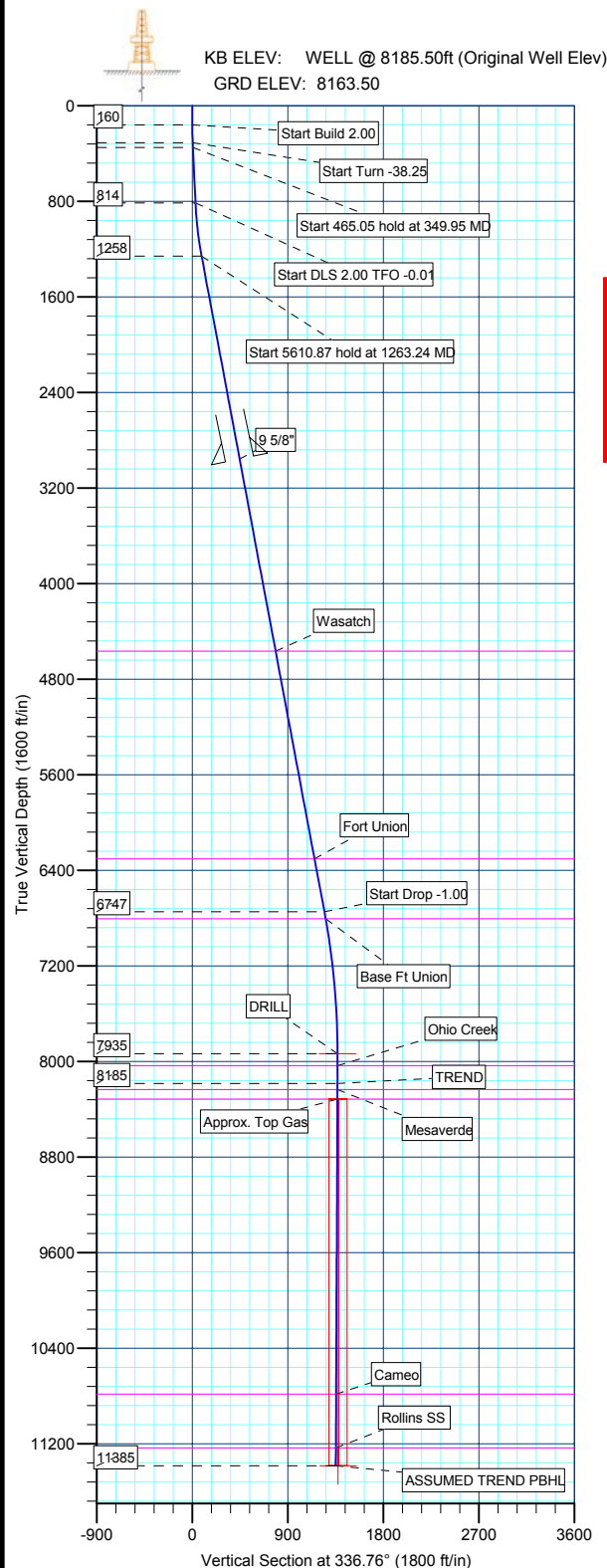
FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4565.00	4643.47	Wasatch
6305.00	6422.11	Fort Union
6805.00	6933.15	Base Ft Union
8035.00	8170.61	Ohio Creek
8235.00	8370.73	Mesaverde
8315.00	8450.81	Approx. Top Gas
10785.00	10923.16	Cameo
11235.00	11373.59	Rollins SS



Plan: PLAN #1 (GRANLEE OM02B/OM02B)

Created By: Robert H. Scott





Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well GRANLEE OM02B
Company:	BERRY PETROLEUM COMPANY	TVD Reference:	WELL @ 8185.50ft (Original Well Elev)
Project:	GARFIELD COUNTY, COLORADO	MD Reference:	WELL @ 8185.50ft (Original Well Elev)
Site:	OM G03 696 PAD	North Reference:	True
Well:	GRANLEE OM02B	Survey Calculation Method:	Minimum Curvature
Wellbore:	OM02B		
Design:	PLAN #1		

Project	GARFIELD COUNTY, COLORADO, COLORADO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site	OM G03 696 PAD, SECTION 3-T6S-R96W				
Site Position:		Northing:	1,638,395.15ft	Latitude:	39° 33' 27.230 N
From:	Lat/Long	Easting:	2,269,311.35ft	Longitude:	108° 5' 30.7400 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	-1.63 °

Well	GRANLEE OM02B					
Well Position	+N/-S	58.68 ft	Northing:	1,638,451.32 ft	Latitude:	39° 33' 27.810 N
	+E/-W	86.94 ft	Easting:	2,269,399.92 ft	Longitude:	108° 5' 29.6300 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	8,163.50 ft

Wellbore	OM02B				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2007	9/8/2008	10.79	65.85	52,522

Design	PLAN #1				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	336.76	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
160.00	0.00	0.00	160.00	0.00	0.00	0.00	0.00	0.00	0.00	
310.00	3.00	358.00	309.93	3.92	-0.14	2.00	2.00	0.00	358.00	
349.95	3.00	342.72	349.82	5.98	-0.49	2.00	0.00	-38.25	-90.00	
815.00	3.00	342.72	814.24	29.22	-7.72	0.00	0.00	0.00	0.00	
1,263.24	11.96	342.72	1,258.21	84.90	-25.04	2.00	2.00	0.00	-0.01	
6,874.12	11.96	342.72	6,747.19	1,195.57	-370.65	0.00	0.00	0.00	0.00	
8,070.60	0.00	0.00	7,935.00	1,314.42	-407.64	1.00	-1.00	0.00	180.00	
8,320.60	2.50	240.00	8,184.92	1,311.70	-412.36	1.00	1.00	0.00	240.00	
11,523.73	2.50	240.00	11,385.00	1,241.84	-533.36	0.00	0.00	0.00	0.00	PBHL_OM02B-G03



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well GRANLEE OM02B
Company:	BERRY PETROLEUM COMPANY	TVD Reference:	WELL @ 8185.50ft (Original Well Elev)
Project:	GARFIELD COUNTY, COLORADO	MD Reference:	WELL @ 8185.50ft (Original Well Elev)
Site:	OM G03 696 PAD	North Reference:	True
Well:	GRANLEE OM02B	Survey Calculation Method:	Minimum Curvature
Wellbore:	OM02B		
Design:	PLAN #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
160.00	0.00	0.00	160.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
200.00	0.80	358.00	200.00	0.28	-0.01	0.26	2.00	2.00	0.00
300.00	2.80	358.00	299.94	3.42	-0.12	3.19	2.00	2.00	0.00
310.00	3.00	358.00	309.93	3.92	-0.14	3.66	2.00	2.00	0.00
Start Turn -38.25									
349.95	3.00	342.72	349.83	5.97	-0.48	5.67	2.00	0.00	-38.25
Start 465.05 hold at 349.95 MD									
400.00	3.00	342.72	399.81	8.48	-1.26	8.29	0.00	0.00	0.00
500.00	3.00	342.72	499.67	13.48	-2.82	13.50	0.00	0.00	0.00
600.00	3.00	342.72	599.53	18.47	-4.37	18.70	0.00	0.00	0.00
700.00	3.00	342.72	699.40	23.47	-5.93	23.91	0.00	0.00	0.00
800.00	3.00	342.72	799.26	28.47	-7.48	29.11	0.00	0.00	0.00
815.00	3.00	342.72	814.24	29.22	-7.72	29.89	0.00	0.00	0.00
Start DLS 2.00 TFO -0.01									
900.00	4.70	342.72	899.04	34.67	-9.41	35.57	2.00	2.00	0.00
1,000.00	6.70	342.72	998.54	44.15	-12.36	45.45	2.00	2.00	0.00
1,100.00	8.70	342.72	1,097.64	56.94	-16.34	58.77	2.00	2.00	0.00
1,200.00	10.70	342.72	1,196.20	73.03	-21.35	75.53	2.00	2.00	0.00
1,263.24	11.96	342.72	1,258.21	84.90	-25.04	87.89	2.00	2.00	0.00
Start 5610.87 hold at 1263.24 MD									
1,300.00	11.96	342.72	1,294.17	92.17	-27.30	95.47	0.00	0.00	0.00
1,400.00	11.96	342.72	1,392.00	111.97	-33.46	116.09	0.00	0.00	0.00
1,500.00	11.96	342.72	1,489.83	131.76	-39.62	136.71	0.00	0.00	0.00
1,600.00	11.96	342.72	1,587.65	151.56	-45.78	157.33	0.00	0.00	0.00
1,700.00	11.96	342.72	1,685.48	171.35	-51.94	177.94	0.00	0.00	0.00
1,800.00	11.96	342.72	1,783.31	191.15	-58.10	198.56	0.00	0.00	0.00
1,900.00	11.96	342.72	1,881.14	210.94	-64.26	219.18	0.00	0.00	0.00
2,000.00	11.96	342.72	1,978.96	230.74	-70.42	239.80	0.00	0.00	0.00
2,100.00	11.96	342.72	2,076.79	250.53	-76.58	260.42	0.00	0.00	0.00
2,200.00	11.96	342.72	2,174.62	270.33	-82.74	281.04	0.00	0.00	0.00
2,300.00	11.96	342.72	2,272.45	290.12	-88.90	301.66	0.00	0.00	0.00
2,400.00	11.96	342.72	2,370.27	309.92	-95.06	322.28	0.00	0.00	0.00
2,500.00	11.96	342.72	2,468.10	329.71	-101.22	342.90	0.00	0.00	0.00
2,600.00	11.96	342.72	2,565.93	349.51	-107.38	363.52	0.00	0.00	0.00
2,700.00	11.96	342.72	2,663.76	369.30	-113.54	384.14	0.00	0.00	0.00
2,800.00	11.96	342.72	2,761.58	389.10	-119.70	404.76	0.00	0.00	0.00
2,900.00	11.96	342.72	2,859.41	408.89	-125.86	425.38	0.00	0.00	0.00
3,000.00	11.96	342.72	2,957.24	428.69	-132.02	445.99	0.00	0.00	0.00
9 5/8"									
3,100.00	11.96	342.72	3,055.07	448.48	-138.18	466.61	0.00	0.00	0.00
3,200.00	11.96	342.72	3,152.89	468.28	-144.34	487.23	0.00	0.00	0.00
3,300.00	11.96	342.72	3,250.72	488.07	-150.50	507.85	0.00	0.00	0.00
3,400.00	11.96	342.72	3,348.55	507.87	-156.66	528.47	0.00	0.00	0.00
3,500.00	11.96	342.72	3,446.38	527.66	-162.82	549.09	0.00	0.00	0.00
3,600.00	11.96	342.72	3,544.20	547.46	-168.98	569.71	0.00	0.00	0.00
3,700.00	11.96	342.72	3,642.03	567.25	-175.14	590.33	0.00	0.00	0.00
3,800.00	11.96	342.72	3,739.86	587.05	-181.30	610.95	0.00	0.00	0.00
3,900.00	11.96	342.72	3,837.69	606.84	-187.46	631.57	0.00	0.00	0.00
4,000.00	11.96	342.72	3,935.51	626.64	-193.62	652.19	0.00	0.00	0.00
4,100.00	11.96	342.72	4,033.34	646.43	-199.77	672.81	0.00	0.00	0.00
4,200.00	11.96	342.72	4,131.17	666.23	-205.93	693.43	0.00	0.00	0.00
4,300.00	11.96	342.72	4,229.00	686.02	-212.09	714.04	0.00	0.00	0.00



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well GRANLEE OM02B
Company:	BERRY PETROLEUM COMPANY	TVD Reference:	WELL @ 8185.50ft (Original Well Elev)
Project:	GARFIELD COUNTY, COLORADO	MD Reference:	WELL @ 8185.50ft (Original Well Elev)
Site:	OM G03 696 PAD	North Reference:	True
Well:	GRANLEE OM02B	Survey Calculation Method:	Minimum Curvature
Wellbore:	OM02B		
Design:	PLAN #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,400.00	11.96	342.72	4,326.82	705.82	-218.25	734.66	0.00	0.00	0.00
4,500.00	11.96	342.72	4,424.65	725.61	-224.41	755.28	0.00	0.00	0.00
4,600.00	11.96	342.72	4,522.48	745.41	-230.57	775.90	0.00	0.00	0.00
4,643.47	11.96	342.72	4,565.00	754.01	-233.25	784.86	0.00	0.00	0.00
Wasatch									
4,700.00	11.96	342.72	4,620.31	765.20	-236.73	796.52	0.00	0.00	0.00
4,800.00	11.96	342.72	4,718.13	785.00	-242.89	817.14	0.00	0.00	0.00
4,900.00	11.96	342.72	4,815.96	804.79	-249.05	837.76	0.00	0.00	0.00
5,000.00	11.96	342.72	4,913.79	824.59	-255.21	858.38	0.00	0.00	0.00
5,100.00	11.96	342.72	5,011.62	844.38	-261.37	879.00	0.00	0.00	0.00
5,200.00	11.96	342.72	5,109.44	864.18	-267.53	899.62	0.00	0.00	0.00
5,300.00	11.96	342.72	5,207.27	883.97	-273.69	920.24	0.00	0.00	0.00
5,400.00	11.96	342.72	5,305.10	903.77	-279.85	940.86	0.00	0.00	0.00
5,500.00	11.96	342.72	5,402.93	923.56	-286.01	961.47	0.00	0.00	0.00
5,600.00	11.96	342.72	5,500.75	943.36	-292.17	982.09	0.00	0.00	0.00
5,700.00	11.96	342.72	5,598.58	963.15	-298.33	1,002.71	0.00	0.00	0.00
5,800.00	11.96	342.72	5,696.41	982.95	-304.49	1,023.33	0.00	0.00	0.00
5,900.00	11.96	342.72	5,794.24	1,002.74	-310.65	1,043.95	0.00	0.00	0.00
6,000.00	11.96	342.72	5,892.06	1,022.54	-316.81	1,064.57	0.00	0.00	0.00
6,100.00	11.96	342.72	5,989.89	1,042.33	-322.97	1,085.19	0.00	0.00	0.00
6,200.00	11.96	342.72	6,087.72	1,062.13	-329.13	1,105.81	0.00	0.00	0.00
6,300.00	11.96	342.72	6,185.55	1,081.92	-335.29	1,126.43	0.00	0.00	0.00
6,400.00	11.96	342.72	6,283.37	1,101.72	-341.45	1,147.05	0.00	0.00	0.00
6,422.11	11.96	342.72	6,305.00	1,106.09	-342.81	1,151.61	0.00	0.00	0.00
Fort Union									
6,500.00	11.96	342.72	6,381.20	1,121.51	-347.61	1,167.67	0.00	0.00	0.00
6,600.00	11.96	342.72	6,479.03	1,141.31	-353.77	1,188.29	0.00	0.00	0.00
6,700.00	11.96	342.72	6,576.86	1,161.10	-359.93	1,208.91	0.00	0.00	0.00
6,800.00	11.96	342.72	6,674.68	1,180.90	-366.09	1,229.52	0.00	0.00	0.00
6,874.12	11.96	342.72	6,747.19	1,195.57	-370.65	1,244.81	0.00	0.00	0.00
Start Drop -1.00									
6,900.00	11.71	342.72	6,772.52	1,200.64	-372.23	1,250.09	1.00	-1.00	0.00
6,933.15	11.37	342.72	6,805.00	1,206.97	-374.20	1,256.68	1.00	-1.00	0.00
Base Ft Union									
7,000.00	10.71	342.72	6,870.61	1,219.19	-378.00	1,269.42	1.00	-1.00	0.00
7,100.00	9.71	342.72	6,969.03	1,236.11	-383.27	1,287.04	1.00	-1.00	0.00
7,200.00	8.71	342.72	7,067.74	1,251.39	-388.02	1,302.95	1.00	-1.00	0.00
7,300.00	7.71	342.72	7,166.72	1,265.02	-392.26	1,317.15	1.00	-1.00	0.00
7,400.00	6.71	342.72	7,265.93	1,276.99	-395.99	1,329.62	1.00	-1.00	0.00
7,500.00	5.71	342.72	7,365.34	1,287.32	-399.20	1,340.37	1.00	-1.00	0.00
7,600.00	4.71	342.72	7,464.92	1,295.98	-401.90	1,349.40	1.00	-1.00	0.00
7,700.00	3.71	342.72	7,564.65	1,302.98	-404.08	1,356.69	1.00	-1.00	0.00
7,800.00	2.71	342.72	7,664.50	1,308.32	-405.74	1,362.26	1.00	-1.00	0.00
7,900.00	1.71	342.72	7,764.42	1,312.00	-406.88	1,366.08	1.00	-1.00	0.00
8,000.00	0.71	342.72	7,864.40	1,314.01	-407.51	1,368.18	1.00	-1.00	0.00
8,070.60	0.00	0.00	7,935.00	1,314.42	-407.64	1,368.61	1.00	-1.00	0.00
DRILL - Plan @ 7935.00 (GRANLEE OM02B OM02B PLAN #1)									
8,100.00	0.29	240.00	7,964.39	1,314.39	-407.70	1,368.60	1.00	1.00	0.00
8,170.61	1.00	240.00	8,035.00	1,313.99	-408.39	1,368.51	1.00	1.00	0.00
Ohio Creek									
8,200.00	1.29	240.00	8,064.38	1,313.69	-408.90	1,368.44	1.00	1.00	0.00
8,300.00	2.29	240.00	8,164.33	1,312.13	-411.61	1,368.07	1.00	1.00	0.00
8,320.60	2.50	240.00	8,184.92	1,311.70	-412.36	1,367.97	1.00	1.00	0.00



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well GRANLEE OM02B
Company:	BERRY PETROLEUM COMPANY	TVD Reference:	WELL @ 8185.50ft (Original Well Elev)
Project:	GARFIELD COUNTY, COLORADO	MD Reference:	WELL @ 8185.50ft (Original Well Elev)
Site:	OM G03 696 PAD	North Reference:	True
Well:	GRANLEE OM02B	Survey Calculation Method:	Minimum Curvature
Wellbore:	OM02B		
Design:	PLAN #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
TREND									
8,370.73	2.50	240.00	8,235.00	1,310.60	-414.25	1,367.71	0.00	0.00	0.00
Mesaverde									
8,400.00	2.50	240.00	8,264.24	1,309.97	-415.36	1,367.56	0.00	0.00	0.00
8,450.81	2.50	240.00	8,315.00	1,308.86	-417.28	1,367.30	0.00	0.00	0.00
Approx. Top Gas									
8,500.00	2.50	240.00	8,364.14	1,307.78	-419.13	1,367.05	0.00	0.00	0.00
8,600.00	2.50	240.00	8,464.05	1,305.60	-422.91	1,366.53	0.00	0.00	0.00
8,700.00	2.50	240.00	8,563.95	1,303.42	-426.69	1,366.02	0.00	0.00	0.00
8,800.00	2.50	240.00	8,663.86	1,301.24	-430.47	1,365.51	0.00	0.00	0.00
8,900.00	2.50	240.00	8,763.76	1,299.06	-434.24	1,365.00	0.00	0.00	0.00
9,000.00	2.50	240.00	8,863.67	1,296.88	-438.02	1,364.48	0.00	0.00	0.00
9,100.00	2.50	240.00	8,963.57	1,294.70	-441.80	1,363.97	0.00	0.00	0.00
9,200.00	2.50	240.00	9,063.48	1,292.52	-445.58	1,363.46	0.00	0.00	0.00
9,300.00	2.50	240.00	9,163.38	1,290.34	-449.35	1,362.94	0.00	0.00	0.00
9,400.00	2.50	240.00	9,263.29	1,288.16	-453.13	1,362.43	0.00	0.00	0.00
9,500.00	2.50	240.00	9,363.19	1,285.98	-456.91	1,361.92	0.00	0.00	0.00
9,600.00	2.50	240.00	9,463.10	1,283.79	-460.69	1,361.40	0.00	0.00	0.00
9,700.00	2.50	240.00	9,563.00	1,281.61	-464.47	1,360.89	0.00	0.00	0.00
9,800.00	2.50	240.00	9,662.91	1,279.43	-468.24	1,360.38	0.00	0.00	0.00
9,900.00	2.50	240.00	9,762.81	1,277.25	-472.02	1,359.86	0.00	0.00	0.00
10,000.00	2.50	240.00	9,862.72	1,275.07	-475.80	1,359.35	0.00	0.00	0.00
10,100.00	2.50	240.00	9,962.62	1,272.89	-479.58	1,358.84	0.00	0.00	0.00
10,200.00	2.50	240.00	10,062.53	1,270.71	-483.35	1,358.32	0.00	0.00	0.00
10,300.00	2.50	240.00	10,162.43	1,268.53	-487.13	1,357.81	0.00	0.00	0.00
10,400.00	2.50	240.00	10,262.34	1,266.35	-490.91	1,357.30	0.00	0.00	0.00
10,500.00	2.50	240.00	10,362.24	1,264.17	-494.69	1,356.78	0.00	0.00	0.00
10,600.00	2.50	240.00	10,462.15	1,261.98	-498.46	1,356.27	0.00	0.00	0.00
10,700.00	2.50	240.00	10,562.05	1,259.80	-502.24	1,355.76	0.00	0.00	0.00
10,800.00	2.50	240.00	10,661.96	1,257.62	-506.02	1,355.24	0.00	0.00	0.00
10,900.00	2.50	240.00	10,761.86	1,255.44	-509.80	1,354.73	0.00	0.00	0.00
10,923.16	2.50	240.00	10,785.00	1,254.94	-510.67	1,354.61	0.00	0.00	0.00
Cameo									
11,000.00	2.50	240.00	10,861.77	1,253.26	-513.57	1,354.22	0.00	0.00	0.00
11,100.00	2.50	240.00	10,961.67	1,251.08	-517.35	1,353.70	0.00	0.00	0.00
11,200.00	2.50	240.00	11,061.58	1,248.90	-521.13	1,353.19	0.00	0.00	0.00
11,300.00	2.50	240.00	11,161.48	1,246.72	-524.91	1,352.68	0.00	0.00	0.00
11,373.59	2.50	240.00	11,235.00	1,245.11	-527.69	1,352.30	0.00	0.00	0.00
Rollins SS									
11,400.00	2.50	240.00	11,261.38	1,244.54	-528.68	1,352.16	0.00	0.00	0.00
11,500.00	2.50	240.00	11,361.29	1,242.36	-532.46	1,351.65	0.00	0.00	0.00
11,521.05	2.50	240.00	11,382.31	1,241.90	-533.26	1,351.54	0.00	0.00	0.00
PBHL_OM02B-G03-695									
11,523.73	2.50	240.00	11,385.00	1,241.84	-533.36	1,351.53	0.00	0.00	0.00
ASSUMED TREND PBHL									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
3,000.00	2,957.24	9 5/8"	9.62	12.25



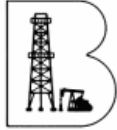
Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well GRANLEE OM02B
Company:	BERRY PETROLEUM COMPANY	TVD Reference:	WELL @ 8185.50ft (Original Well Elev)
Project:	GARFIELD COUNTY, COLORADO	MD Reference:	WELL @ 8185.50ft (Original Well Elev)
Site:	OM G03 696 PAD	North Reference:	True
Well:	GRANLEE OM02B	Survey Calculation Method:	Minimum Curvature
Wellbore:	OM02B		
Design:	PLAN #1		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,643.47	4,565.00	Wasatch		0.00	
6,422.11	6,305.00	Fort Union		0.00	
6,933.15	6,805.00	Base Ft Union		0.00	
8,170.61	8,035.00	Ohio Creek		0.00	
8,370.73	8,235.00	Mesaverde		0.00	
8,450.81	8,315.00	Approx. Top Gas		0.00	
10,923.16	10,785.00	Cameo		0.00	
11,373.59	11,235.00	Rollins SS		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
160.00	160.00	0.00	0.00	Start Build 2.00
310.00	309.93	3.92	-0.14	Start Turn -38.25
349.95	349.83	5.97	-0.48	Start 465.05 hold at 349.95 MD
815.00	814.24	29.22	-7.72	Start DLS 2.00 TFO -0.01
1,263.24	1,258.21	84.90	-25.04	Start 5610.87 hold at 1263.24 MD
6,874.12	6,747.19	1,195.57	-370.65	Start Drop -1.00
8,070.60	7,935.00	1,314.42	-407.64	DRILL
8,320.60	8,184.92	1,311.70	-412.36	TREND
11,523.73	11,385.00	1,241.84	-533.36	ASSUMED TREND PBHL



Berry Petroleum Company

BERRY PETROLEUM COMPANY

**GARFIELD COUNTY, COLORADO
OM G03 696 PAD
GRANLEE OM02B**

**OM02B
PLAN #1**

Anticollision Report

08 September, 2008



Weatherford®

Company:	BERRY PETROLEUM COMPANY	Local Co-ordinate Reference:	Well GRANLEE OM02B
Project:	GARFIELD COUNTY, COLORADO	TVD Reference:	WELL @ 8185.50ft (Original Well Elev)
Reference Site:	OM G03 696 PAD	MD Reference:	WELL @ 8185.50ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	GRANLEE OM02B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	OM02B	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Reference	PLAN #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	0.00 to 20,000.00ft	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.00ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program			Date	9/8/2008	
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.00	11,523.73	PLAN #1 (OM02B)	MWD	MWD - Standard	

Summary						
Site Name Offset Well - Wellbore - Design	Reference	Offset	Distance		Separation	Warning
	Measured Depth (ft)	Measured Depth (ft)	Between Centres (ft)	Between Ellipses (ft)		
OM G03 696 PAD						
GRANLEE OM02C - OM02C - PLAN #1	160.00	160.00	14.92	14.48	33.527	CC
GRANLEE OM02C - OM02C - PLAN #1	200.00	200.03	15.02	14.39	24.032	ES
GRANLEE OM02C - OM02C - PLAN #1	1,000.00	999.97	22.29	17.86	5.033	SF

Offset Design OM G03 696 PAD - GRANLEE OM02C - OM02C - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	-122.87	-8.10	-12.53	14.92				
100.00	100.00	100.00	100.00	0.09	0.09	-122.87	-8.10	-12.53	14.92	14.75	0.18	85.106	
160.00	160.00	160.00	160.00	0.22	0.22	-122.87	-8.10	-12.53	14.92	14.48	0.45	33.527	CC
200.00	200.00	200.03	200.03	0.31	0.31	-120.74	-7.84	-12.64	15.02	14.39	0.62	24.032	ES
310.00	309.93	310.12	310.05	0.57	0.57	-119.07	-4.49	-14.09	16.29	15.17	1.13	14.464	
349.95	349.82	350.06	349.94	0.66	0.66	-103.36	-2.57	-14.92	16.77	15.47	1.31	12.842	
400.00	399.81	400.11	399.92	0.76	0.78	-103.19	-0.16	-15.95	17.04	15.51	1.53	11.106	
500.00	499.67	500.11	499.78	1.00	1.01	-102.88	4.64	-18.03	17.59	15.58	2.01	8.748	
600.00	599.53	600.11	599.64	1.24	1.25	-102.58	9.45	-20.10	18.13	15.64	2.49	7.283	
700.00	699.40	700.11	699.50	1.48	1.49	-102.30	14.25	-22.17	18.68	15.71	2.97	6.287	
800.00	799.26	800.11	799.36	1.72	1.73	-102.03	19.06	-24.24	19.22	15.77	3.45	5.568	
815.00	814.24	815.10	814.34	1.76	1.77	-101.99	19.78	-24.56	19.30	15.78	3.53	5.476	
900.00	899.04	900.09	899.21	1.97	1.98	-105.29	23.86	-26.32	20.06	16.12	3.94	5.093	
1,000.00	998.54	999.97	998.96	2.24	2.22	-116.69	28.66	-28.39	22.29	17.86	4.43	5.033	SF
1,100.00	1,097.64	1,100.15	1,098.88	2.54	2.47	-128.59	35.08	-31.15	26.44	21.52	4.92	5.378	
1,200.00	1,196.20	1,200.54	1,198.72	2.87	2.75	-136.54	44.73	-35.32	31.66	26.25	5.42	5.845	
1,263.24	1,258.21	1,264.14	1,261.76	3.11	2.94	-140.06	52.50	-38.67	35.33	29.58	5.75	6.146	
1,300.00	1,294.17	1,301.16	1,298.36	3.25	3.05	-141.51	57.61	-40.87	37.36	31.42	5.95	6.283	
1,400.00	1,392.00	1,401.32	1,397.14	3.65	3.39	-143.38	72.80	-47.43	41.90	35.38	6.52	6.425	
1,500.00	1,489.83	1,501.22	1,495.64	4.05	3.73	-144.77	88.07	-54.01	46.37	39.26	7.10	6.528	
1,600.00	1,587.65	1,601.11	1,594.14	4.46	4.08	-145.91	103.34	-60.60	50.86	43.17	7.69	6.616	
1,700.00	1,685.48	1,701.00	1,692.64	4.88	4.43	-146.87	118.61	-67.19	55.36	47.09	8.27	6.692	
1,800.00	1,783.31	1,800.90	1,791.14	5.30	4.79	-147.68	133.89	-73.78	59.88	51.02	8.86	6.759	
1,900.00	1,881.14	1,900.79	1,889.64	5.73	5.15	-148.38	149.16	-80.36	64.41	54.97	9.45	6.819	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	BERRY PETROLEUM COMPANY	Local Co-ordinate Reference:	Well GRANLEE OM02B
Project:	GARFIELD COUNTY, COLORADO	TVD Reference:	WELL @ 8185.50ft (Original Well Elev)
Reference Site:	OM G03 696 PAD	MD Reference:	WELL @ 8185.50ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	GRANLEE OM02B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	OM02B	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design OM G03 696 PAD - GRANLEE OM02C - OM02C - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
2,000.00	1,978.96	2,000.69	1,988.14	6.16	5.52	-148.99	164.43	-86.95	68.95	58.92	10.04	6.871	
2,100.00	2,076.79	2,100.58	2,086.64	6.59	5.88	-149.52	179.70	-93.54	73.50	62.88	10.62	6.919	
2,200.00	2,174.62	2,200.48	2,185.14	7.02	6.25	-149.99	194.97	-100.13	78.05	66.84	11.21	6.961	
2,300.00	2,272.45	2,300.37	2,283.64	7.45	6.62	-150.41	210.24	-106.72	82.61	70.81	11.80	7.000	
2,400.00	2,370.27	2,400.27	2,382.14	7.88	6.98	-150.79	225.51	-113.30	87.17	74.78	12.39	7.035	
2,500.00	2,468.10	2,500.16	2,480.64	8.32	7.36	-151.12	240.78	-119.89	91.73	78.75	12.98	7.067	
2,600.00	2,565.93	2,600.05	2,579.14	8.75	7.73	-151.43	256.05	-126.48	96.30	82.73	13.57	7.096	
2,700.00	2,663.76	2,699.95	2,677.64	9.19	8.10	-151.71	271.32	-133.07	100.87	86.71	14.16	7.123	
2,800.00	2,761.58	2,799.84	2,776.14	9.63	8.47	-151.96	286.60	-139.65	105.44	90.69	14.75	7.148	
2,900.00	2,859.41	2,899.74	2,874.64	10.06	8.84	-152.19	301.87	-146.24	110.01	94.67	15.34	7.171	
3,000.00	2,957.24	2,999.63	2,973.14	10.50	9.22	-152.41	317.14	-152.83	114.58	98.65	15.93	7.193	
3,100.00	3,055.07	3,099.53	3,071.64	10.94	9.59	-152.61	332.41	-159.42	119.16	102.64	16.52	7.213	
3,200.00	3,152.89	3,199.42	3,170.14	11.38	9.97	-152.79	347.68	-166.01	123.74	106.63	17.11	7.231	
3,300.00	3,250.72	3,299.31	3,268.64	11.82	10.34	-152.96	362.95	-172.59	128.32	110.61	17.70	7.249	
3,400.00	3,348.55	3,399.21	3,367.14	12.26	10.71	-153.12	378.22	-179.18	132.90	114.60	18.29	7.265	
3,500.00	3,446.38	3,499.10	3,465.64	12.69	11.09	-153.27	393.49	-185.77	137.48	118.59	18.88	7.280	
3,600.00	3,544.20	3,599.00	3,564.14	13.13	11.47	-153.40	408.76	-192.36	142.06	122.58	19.47	7.295	
3,700.00	3,642.03	3,698.89	3,662.64	13.57	11.84	-153.53	424.04	-198.94	146.64	126.57	20.06	7.309	
3,800.00	3,739.86	3,798.79	3,761.14	14.01	12.22	-153.65	439.31	-205.53	151.22	130.57	20.65	7.321	
3,900.00	3,837.69	3,898.68	3,859.64	14.45	12.59	-153.77	454.58	-212.12	155.80	134.56	21.25	7.334	
4,000.00	3,935.51	3,998.58	3,958.14	14.89	12.97	-153.88	469.85	-218.71	160.39	138.55	21.84	7.345	
4,100.00	4,033.34	4,098.47	4,056.64	15.33	13.35	-153.98	485.12	-225.30	164.97	142.55	22.43	7.356	
4,200.00	4,131.17	4,198.36	4,155.14	15.77	13.72	-154.08	500.39	-231.88	169.56	146.54	23.02	7.366	
4,300.00	4,229.00	4,298.26	4,253.64	16.22	14.10	-154.17	515.66	-238.47	174.14	150.54	23.61	7.376	
4,400.00	4,326.82	4,398.15	4,352.14	16.66	14.48	-154.25	530.93	-245.06	178.73	154.53	24.20	7.386	
4,500.00	4,424.65	4,498.05	4,450.64	17.10	14.85	-154.34	546.20	-251.65	183.32	158.53	24.79	7.395	
4,600.00	4,522.48	4,597.94	4,549.14	17.54	15.23	-154.41	561.48	-258.23	187.90	162.52	25.38	7.403	
4,700.00	4,620.31	4,697.84	4,647.64	17.98	15.61	-154.49	576.75	-264.82	192.49	166.52	25.97	7.411	
4,800.00	4,718.13	4,797.73	4,746.14	18.42	15.98	-154.56	592.02	-271.41	197.08	170.51	26.56	7.419	
4,900.00	4,815.96	4,897.63	4,844.64	18.86	16.36	-154.63	607.29	-278.00	201.66	174.51	27.15	7.427	
5,000.00	4,913.79	4,997.52	4,943.14	19.30	16.74	-154.69	622.56	-284.59	206.25	178.51	27.74	7.434	
5,100.00	5,011.62	5,097.41	5,041.65	19.74	17.12	-154.75	637.83	-291.17	210.84	182.50	28.34	7.441	
5,200.00	5,109.44	5,197.31	5,140.15	20.19	17.49	-154.81	653.10	-297.76	215.43	186.50	28.93	7.447	
5,300.00	5,207.27	5,297.20	5,238.65	20.63	17.87	-154.87	668.37	-304.35	220.02	190.50	29.52	7.454	
5,400.00	5,305.10	5,397.10	5,337.15	21.07	18.25	-154.93	683.64	-310.94	224.61	194.50	30.11	7.460	
5,500.00	5,402.93	5,496.99	5,435.65	21.51	18.63	-154.98	698.92	-317.52	229.20	198.50	30.70	7.466	
5,600.00	5,500.75	5,596.89	5,534.15	21.95	19.00	-155.03	714.19	-324.11	233.78	202.49	31.29	7.471	
5,700.00	5,598.58	5,696.78	5,632.65	22.39	19.38	-155.08	729.46	-330.70	238.37	206.49	31.88	7.477	
5,800.00	5,696.41	5,796.68	5,731.15	22.83	19.76	-155.12	744.73	-337.29	242.96	210.49	32.47	7.482	
5,900.00	5,794.24	5,896.57	5,829.65	23.28	20.14	-155.17	760.00	-343.88	247.55	214.49	33.06	7.487	
6,000.00	5,892.06	5,996.46	5,928.15	23.72	20.51	-155.21	775.27	-350.46	252.14	218.49	33.65	7.492	
6,100.00	5,989.89	6,096.36	6,026.65	24.16	20.89	-155.25	790.54	-357.05	256.73	222.49	34.25	7.497	
6,200.00	6,087.72	6,196.25	6,125.15	24.60	21.27	-155.29	805.81	-363.64	261.32	226.49	34.84	7.501	
6,300.00	6,185.55	6,296.15	6,223.65	25.04	21.65	-155.33	821.08	-370.23	265.91	230.48	35.43	7.506	
6,400.00	6,283.37	6,396.04	6,322.15	25.49	22.03	-155.37	836.36	-376.81	270.50	234.48	36.02	7.510	
6,500.00	6,381.20	6,495.94	6,420.65	25.93	22.40	-155.41	851.63	-383.40	275.09	238.48	36.61	7.514	
6,600.00	6,479.03	6,595.83	6,519.15	26.37	22.78	-155.44	866.90	-389.99	279.68	242.48	37.20	7.518	
6,700.00	6,576.86	6,695.73	6,617.65	26.81	23.16	-155.48	882.17	-396.58	284.27	246.48	37.79	7.522	
6,800.00	6,674.68	6,795.62	6,716.15	27.25	23.54	-155.51	897.44	-403.17	288.86	250.48	38.38	7.526	
6,874.12	6,747.19	6,869.66	6,789.15	27.58	23.82	-155.53	908.76	-408.05	292.27	253.45	38.82	7.529	
6,900.00	6,772.52	6,895.52	6,814.65	27.68	23.92	-155.54	912.71	-409.75	293.40	254.43	38.97	7.529	
7,000.00	6,870.61	6,995.46	6,913.20	28.02	24.29	-155.48	927.99	-416.34	296.79	257.26	39.53	7.508	

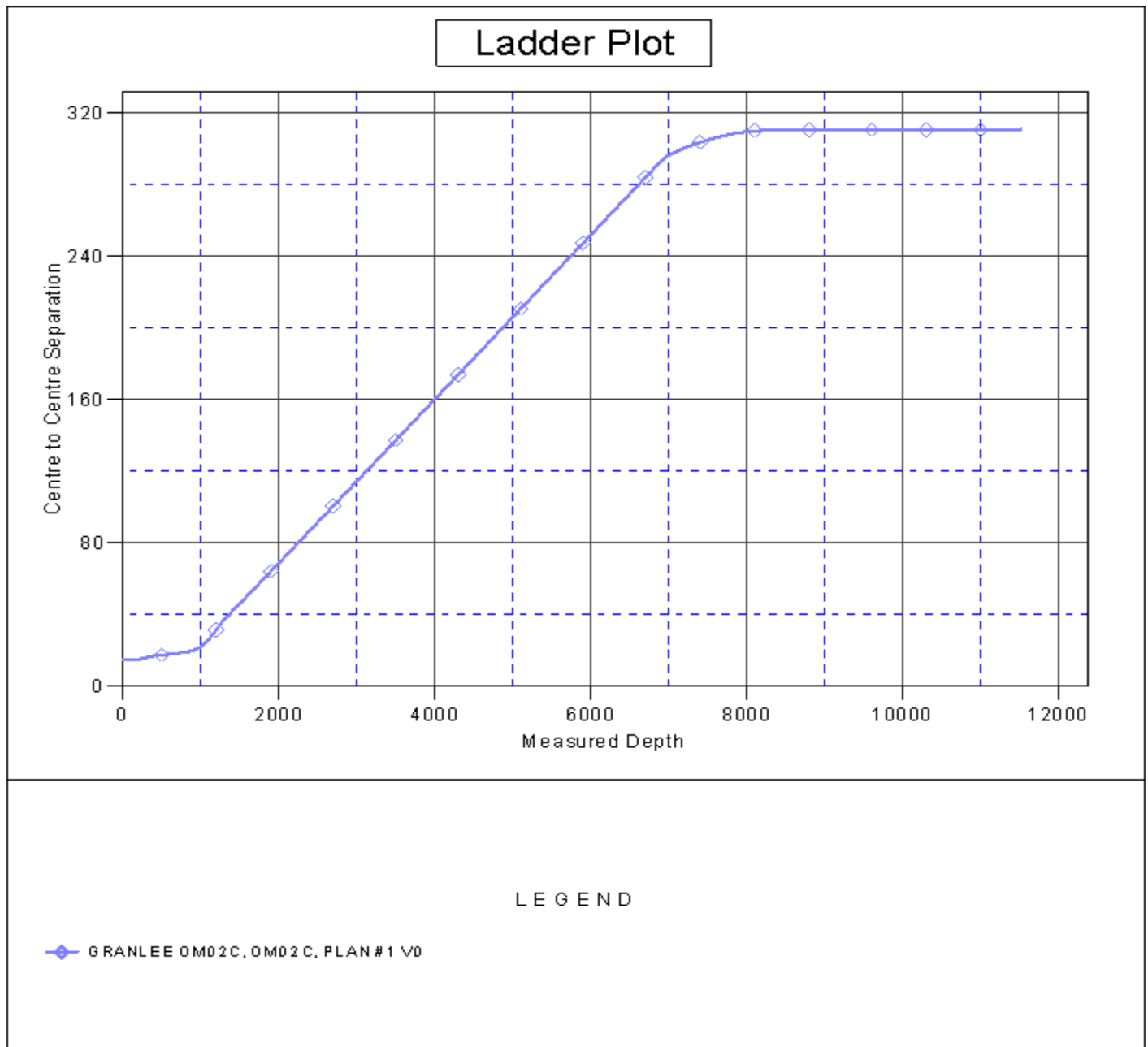
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	BERRY PETROLEUM COMPANY	Local Co-ordinate Reference:	Well GRANLEE OM02B
Project:	GARFIELD COUNTY, COLORADO	TVD Reference:	WELL @ 8185.50ft (Original Well Elev)
Reference Site:	OM G03 696 PAD	MD Reference:	WELL @ 8185.50ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	GRANLEE OM02B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	OM02B	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design OM G03 696 PAD - GRANLEE OM02C - OM02C - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
7,100.00	6,969.03	7,092.79	7,009.22	28.33	24.64	-155.31	942.59	-422.64	298.86	258.79	40.08	7.457	
7,200.00	7,067.74	7,188.47	7,103.84	28.63	24.91	-155.16	955.60	-428.26	300.68	260.13	40.55	7.415	
7,300.00	7,166.72	7,284.13	7,198.67	28.91	25.16	-155.03	967.16	-433.24	302.36	261.37	40.99	7.377	
7,400.00	7,265.93	7,379.78	7,293.69	29.16	25.39	-154.92	977.26	-437.60	303.88	262.48	41.40	7.340	
7,500.00	7,365.34	7,475.42	7,388.86	29.40	25.61	-154.84	985.90	-441.33	305.25	263.48	41.78	7.307	
7,600.00	7,464.92	7,571.05	7,484.17	29.62	25.81	-154.77	993.08	-444.42	306.48	264.35	42.12	7.276	
7,700.00	7,564.65	7,666.66	7,579.58	29.81	25.99	-154.73	998.80	-446.89	307.55	265.11	42.44	7.247	
7,800.00	7,664.50	7,762.27	7,675.07	29.98	26.15	-154.71	1,003.05	-448.72	308.47	265.74	42.72	7.220	
7,900.00	7,764.42	7,857.86	7,770.62	30.14	26.30	-154.72	1,005.84	-449.93	309.23	266.26	42.97	7.196	
8,000.00	7,864.40	7,953.45	7,866.19	30.27	26.43	-154.74	1,007.17	-450.50	309.84	266.65	43.19	7.173	
8,070.60	7,935.00	8,021.29	7,934.03	30.35	26.51	-172.03	1,007.25	-450.62	310.17	265.55	44.61	6.952	
8,100.00	7,964.39	8,049.74	7,962.48	30.38	26.55	-52.01	1,007.14	-450.80	310.26	266.84	43.42	7.145	
8,200.00	8,064.38	8,146.51	8,059.23	30.49	26.67	-51.95	1,006.25	-452.35	310.54	266.84	43.70	7.107	
8,300.00	8,164.33	8,243.31	8,155.97	30.59	26.79	-51.89	1,004.54	-455.32	310.79	266.81	43.98	7.066	
8,320.60	8,184.92	8,263.91	8,176.55	30.61	26.82	-51.88	1,004.09	-456.09	310.81	266.77	44.04	7.057	
8,400.00	8,264.24	8,343.31	8,255.87	30.69	26.91	-51.88	1,002.36	-459.09	310.81	266.49	44.32	7.013	
8,500.00	8,364.14	8,443.31	8,355.78	30.79	27.04	-51.88	1,000.18	-462.87	310.81	266.14	44.67	6.957	
8,600.00	8,464.05	8,543.31	8,455.68	30.89	27.17	-51.88	998.00	-466.65	310.81	265.78	45.03	6.903	
8,700.00	8,563.95	8,643.31	8,555.59	31.00	27.30	-51.88	995.82	-470.43	310.81	265.43	45.39	6.848	
8,800.00	8,663.86	8,743.31	8,655.49	31.11	27.42	-51.88	993.63	-474.20	310.81	265.07	45.75	6.794	
8,900.00	8,763.76	8,843.31	8,755.40	31.21	27.56	-51.88	991.45	-477.98	310.81	264.71	46.11	6.741	
9,000.00	8,863.67	8,943.31	8,855.30	31.32	27.69	-51.88	989.27	-481.76	310.81	264.34	46.47	6.688	
9,100.00	8,963.57	9,043.31	8,955.20	31.43	27.82	-51.88	987.09	-485.54	310.81	263.98	46.84	6.636	
9,200.00	9,063.48	9,143.31	9,055.11	31.55	27.96	-51.88	984.91	-489.31	310.81	263.61	47.20	6.585	
9,300.00	9,163.38	9,243.31	9,155.01	31.66	28.09	-51.88	982.73	-493.09	310.81	263.24	47.57	6.534	
9,400.00	9,263.29	9,343.31	9,254.92	31.77	28.23	-51.88	980.55	-496.87	310.81	262.87	47.94	6.483	
9,500.00	9,363.19	9,443.31	9,354.82	31.89	28.37	-51.88	978.37	-500.65	310.81	262.50	48.31	6.433	
9,600.00	9,463.10	9,543.31	9,454.73	32.01	28.51	-51.88	976.19	-504.42	310.81	262.13	48.69	6.384	
9,700.00	9,563.00	9,643.31	9,554.63	32.12	28.65	-51.88	974.01	-508.20	310.81	261.75	49.06	6.335	
9,800.00	9,662.91	9,743.31	9,654.54	32.24	28.79	-51.88	971.83	-511.98	310.81	261.37	49.44	6.287	
9,900.00	9,762.81	9,843.31	9,754.44	32.36	28.94	-51.88	969.64	-515.76	310.81	260.99	49.82	6.239	
10,000.00	9,862.72	9,943.31	9,854.35	32.49	29.08	-51.88	967.46	-519.53	310.81	260.61	50.20	6.192	
10,100.00	9,962.62	10,043.31	9,954.25	32.61	29.23	-51.88	965.28	-523.31	310.81	260.23	50.58	6.145	
10,137.95	10,000.53	10,081.25	9,992.16	32.66	29.28	-51.88	964.45	-524.74	310.81	260.09	50.73	6.127	
10,200.00	10,062.53	10,143.31	10,054.16	32.73	29.37	-51.88	963.10	-527.09	310.81	259.85	50.96	6.099	
10,300.00	10,162.43	10,243.31	10,154.06	32.86	29.52	-51.88	960.92	-530.87	310.81	259.46	51.35	6.053	
10,400.00	10,262.34	10,343.31	10,253.97	32.99	29.67	-51.88	958.74	-534.64	310.81	259.08	51.74	6.008	
10,437.95	10,300.25	10,381.25	10,291.88	33.04	29.73	-51.88	957.91	-536.08	310.81	258.93	51.88	5.991	
10,500.00	10,362.24	10,443.31	10,353.87	33.12	29.82	-51.88	956.56	-538.42	310.81	258.69	52.12	5.963	
10,600.00	10,462.15	10,543.31	10,453.78	33.24	29.97	-51.88	954.38	-542.20	310.81	258.30	52.51	5.919	
10,700.00	10,562.05	10,643.31	10,553.68	33.38	30.13	-51.88	952.20	-545.98	310.81	257.91	52.90	5.875	
10,800.00	10,661.96	10,743.31	10,653.59	33.51	30.28	-51.88	950.02	-549.75	310.81	257.52	53.29	5.832	
10,900.00	10,761.86	10,843.31	10,753.49	33.64	30.43	-51.88	947.83	-553.53	310.81	257.13	53.69	5.790	
11,000.00	10,861.77	10,943.31	10,853.40	33.77	30.59	-51.88	945.65	-557.31	310.81	256.73	54.08	5.747	
11,100.00	10,961.67	11,043.31	10,953.30	33.91	30.75	-51.88	943.47	-561.09	310.81	256.34	54.47	5.706	
11,166.67	11,028.28	11,109.98	11,019.91	34.00	30.85	-51.88	942.02	-563.61	310.81	256.08	54.74	5.678	
11,200.00	11,061.58	11,143.31	11,053.21	34.04	30.90	-51.88	941.29	-564.86	310.81	255.94	54.87	5.664	
11,300.00	11,161.48	11,243.31	11,153.11	34.18	31.06	-51.88	939.11	-568.64	310.81	255.55	55.27	5.624	
11,400.00	11,261.38	11,343.31	11,253.02	34.32	31.22	-51.88	936.93	-572.42	310.81	255.15	55.67	5.584	
11,500.00	11,361.29	11,443.31	11,352.92	34.46	31.38	-51.88	934.75	-576.20	310.81	254.75	56.07	5.544	
11,523.73	11,385.00	11,445.39	11,355.00	34.49	31.39	-51.88	934.70	-576.28	311.57	255.45	56.12	5.552	

Company:	BERRY PETROLEUM COMPANY	Local Co-ordinate Reference:	Well GRANLEE OM02B
Project:	GARFIELD COUNTY, COLORADO	TVD Reference:	WELL @ 8185.50ft (Original Well Elev)
Reference Site:	OM G03 696 PAD	MD Reference:	WELL @ 8185.50ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	GRANLEE OM02B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	OM02B	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

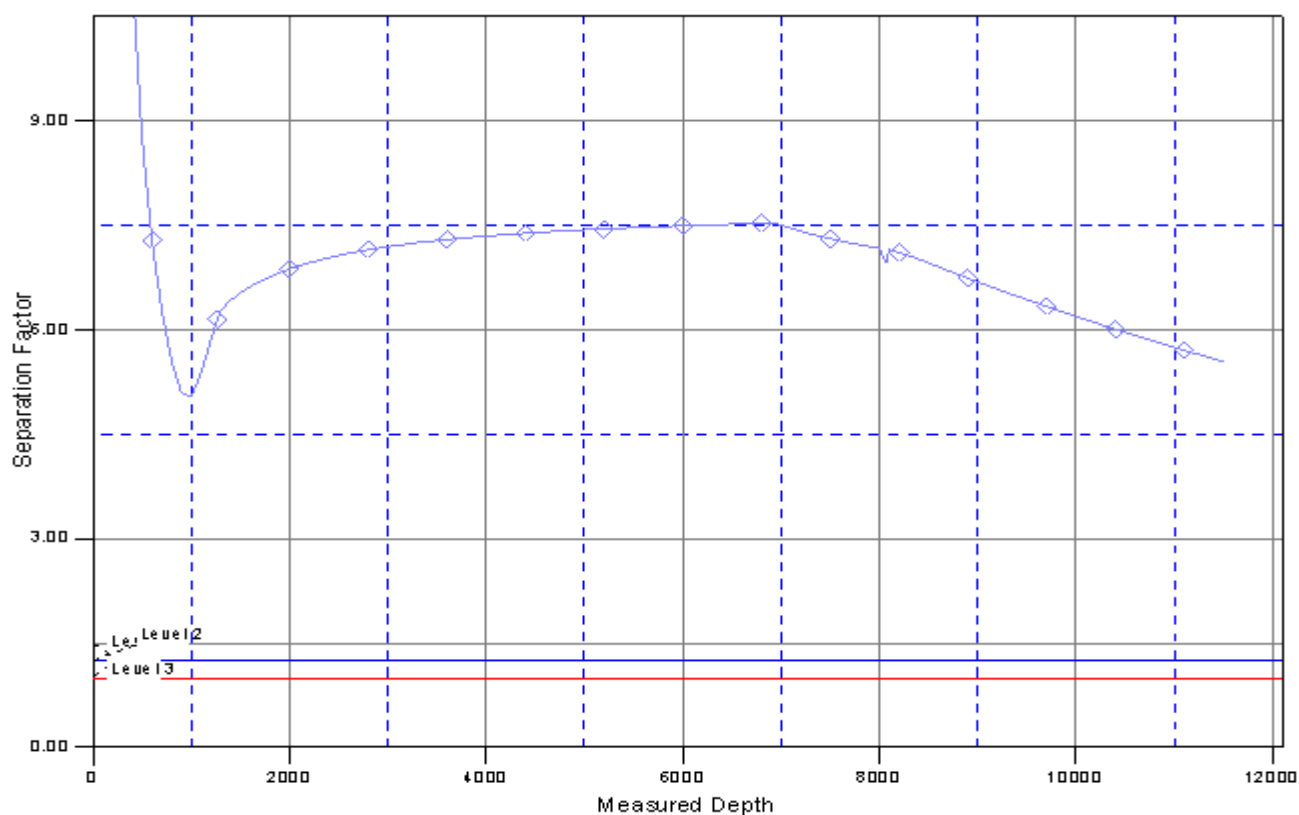
Reference Depths are relative to WELL @ 8185.50ft (Original Well Elev) Coordinates are relative to: GRANLEE OM02B
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Central Zone
Central Meridian is 105° 30' 0.0000 W ° Grid Convergence at Surface is: -1.63°



Company:	BERRY PETROLEUM COMPANY	Local Co-ordinate Reference:	Well GRANLEE OM02B
Project:	GARFIELD COUNTY, COLORADO	TVD Reference:	WELL @ 8185.50ft (Original Well Elev)
Reference Site:	OM G03 696 PAD	MD Reference:	WELL @ 8185.50ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	GRANLEE OM02B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	OM02B	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 8185.50ft (Original Well Elev) Coordinates are relative to: GRANLEE OM02B
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Central Zone
Central Meridian is 105° 30' 0.0000 W ° Grid Convergence at Surface is: -1.63°

Separation Factor Plot



LEGEND

—◆— GRANLEE OM02C, OM02C, PLAN #1 VD



Weatherford®

Weatherford International, Ltd

2000 Oil Field Drive

Casper, Wyoming 82604 USA

+1.307.268-7900 Main

+1.307.235.3958 Fax

www.weatherford.com

Contact Information

District Manager: Pat Rasmussen

+1.307.268-7900 Casper, Wyoming

Email: pat.rasmussen@weatherford.com

Directional Drilling Coordinator: Larren Holdren

+1.307.268-7900 Casper, Wyoming

Email: larren.holdren@weatherford.com

MWD Coordinators:

+1.307.268-7900 Casper, Wyoming

Adam Rinker

Email: adam.rinker@weatherford.com

Matthew Heaton

Email: matthew.heaton@weatherford.com

Directional Drilling Sales Casper: Dean Reed

1.307.268-7900 Casper, Wyoming

Email: dean.reed@weatherford.com

Directional Drilling Sales Denver: Linda Smith

+1.303.825.6558 Denver, Colorado

Email: linda.smith@weatherford.com

Well Planning Casper Office:

+1.307.268-7900 Casper, Wyoming

Tracy Williams

Email: tracy.williams@weatherford.com

Bret Wolford

Email: bret.wolford@weatherford.com

Well Planning Denver Office:

+1.303.825.6558 Denver, Colorado

Robert Scott

Email: robert.scott@weatherford.com