

US ROCKIES REGION PLANNING

COLORADO-NAD83-UTMFT13N

WELD_BELLA FED 11-8HZ

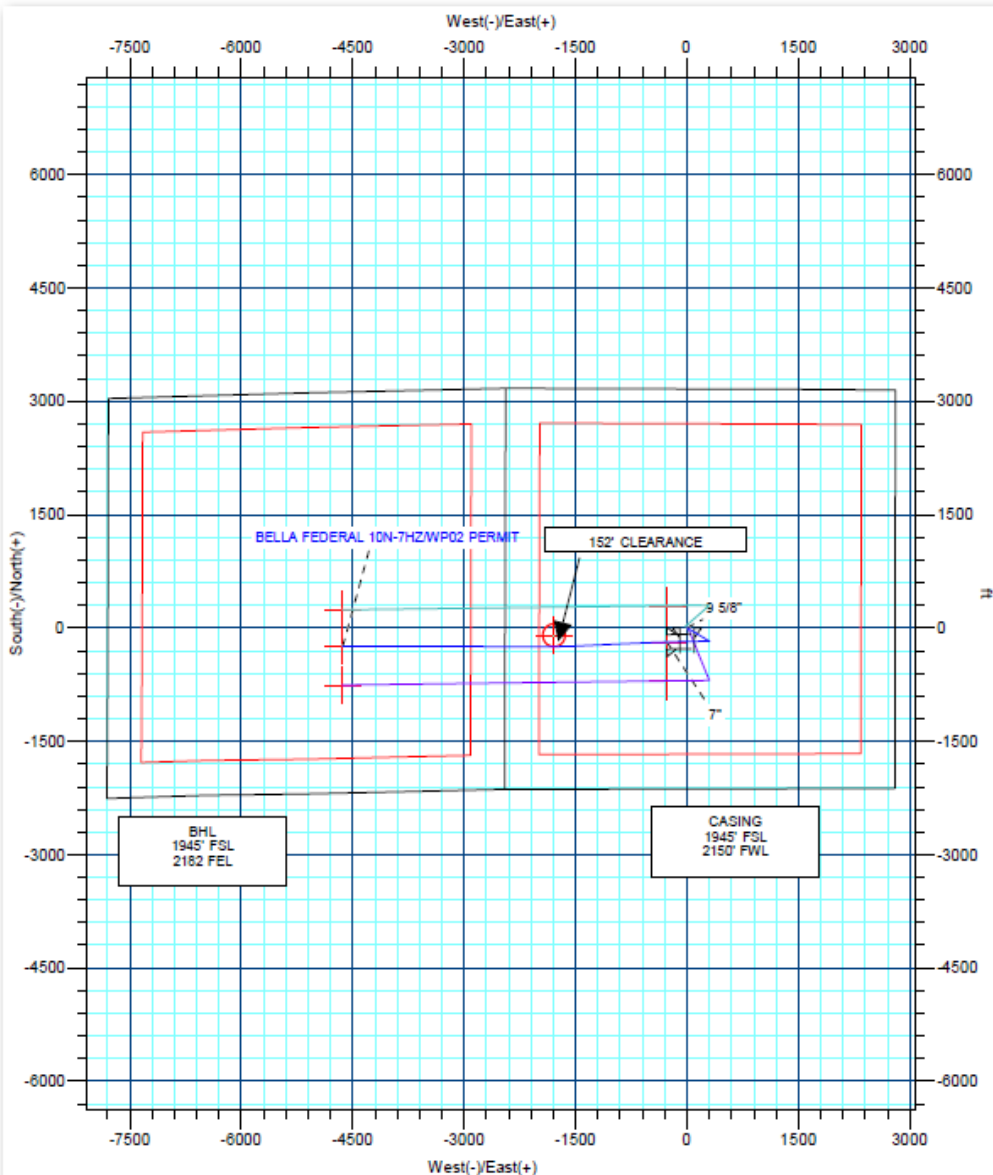
BELLA FEDERAL 10N-7HZ

Wellbore #1

Plan: WP02 PERMIT

Standard Planning Report

25 April, 2013



Azimuths to True North
 Magnetic North: 8.63°
 Magnetic Field Strength: 52856.6snT
 Dip Angle: 66.85°
 Date: 3/19/2013
 Model: IGRF2010



Project: COLORADO-NAD83-UTMFT13N
Site: WELD BELLA FED 11-8HZ
Well: BELLA FEDERAL 10N-7HZ
Wellbore: Wellbore #1
Design: WP02 PERMIT
Latitude: 40.237886
Longitude: -104.801952
GL: 4863.00
KB: 17'GL+4863'GL @ 4880.00ft

WELL DETAILS: BELLA FEDERAL 10N-7HZ

+N-S	+E-W	Northing	Ground Level: Easting	4863.00 Latitude	Longitude	Slot
0.00	0.00	14613420.87	1695687.27	40.237886	-104.801952	

SECTION DETAILS

MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00
1286.09	3.72	123.59	1285.96	-3.34	5.03	2.00	123.59	-4.85
6106.37	3.72	123.59	6096.08	-176.44	265.70	0.00	0.00	-256.21
6292.47	0.00	0.00	6282.04	-179.78	270.73	2.00	180.00	-261.07
6592.47	0.00	0.00	6582.04	-179.78	270.73	0.00	0.00	-261.07
7491.17	89.87	269.30	7155.00	-186.76	-300.89	10.00	269.30	310.14
7686.16	89.88	267.35	7155.42	-192.46	-495.78	1.00	-89.59	505.07
8788.31	89.88	267.35	7157.64	-243.42	-1596.75	0.00	0.00	1607.21
9073.30	89.86	270.20	7158.28	-249.51	-1881.65	1.00	90.49	1892.04
11823.30	89.86	270.20	7165.00	-239.91	-4631.63	0.00	0.00	4637.84

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

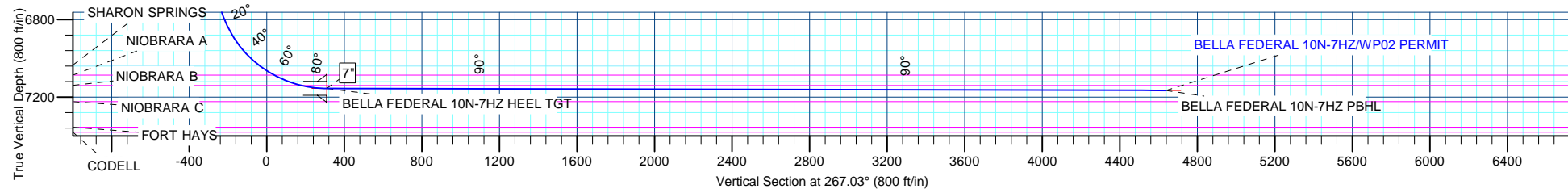
Name	TVD	+N-S	+E-W	Latitude	Longitude	Shape
BELLA FEDERAL 10N-7HZ HEEL TGT	7155.00	-186.76	-300.89	40.237373	-104.803030	Point
BELLA FEDERAL 10N-7HZ PBHL	7165.00	-239.91	-4631.63	40.237226	-104.818548	Point

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
846.00	846.00	FOX HILLS BASE
2477.00	2479.65	PARKMAN
3860.00	3865.57	SUSSEX
7034.00	7113.22	SHARON SPRINGS
7086.00	7208.38	NIOBRARA A
7140.00	7361.08	NIOBRARA B

CASING DETAILS

TVD	MD	Name	Size
896.00	896.00	9 5/8"	9-5/8
7155.00	7491.17	7"	7



Anadarko Petroleum Corp

Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well BELLA FEDERAL 10N-7HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	17'GL+4863'GL @ 4880.00ft
Project:	COLORADO-NAD83-UTMFT13N	MD Reference:	17'GL+4863'GL @ 4880.00ft
Site:	WELD_BELLA FED 11-8HZ	North Reference:	True
Well:	BELLA FEDERAL 10N-7HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	WP02 PERMIT		

Project	COLORADO-NAD83-UTMFT13N		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Zone 13N (108 W to 102 W)		

Site	WELD_BELLA FED 11-8HZ				
Site Position:		Northing:	14,613,420.87 usft	Latitude:	40.237886
From:	Lat/Long	Easting:	1,695,687.27 usft	Longitude:	-104.801952
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.13 °

Well	BELLA FEDERAL 10N-7HZ					
Well Position	+N/-S	0.00 ft	Northing:	14,613,420.87 usft	Latitude:	40.237886
	+E/-W	0.00 ft	Easting:	1,695,687.27 usft	Longitude:	-104.801952
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,863.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/19/2013	8.63	66.85	52,857

Design	WP02 PERMIT			
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	267.03

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	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	
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,286.09	3.72	123.59	1,285.96	-3.34	5.03	2.00	2.00	0.00	123.59	
6,106.37	3.72	123.59	6,096.08	-176.44	265.70	0.00	0.00	0.00	0.00	
6,292.47	0.00	0.00	6,282.04	-179.78	270.73	2.00	-2.00	0.00	180.00	
6,592.47	0.00	0.00	6,582.04	-179.78	270.73	0.00	0.00	0.00	0.00	
7,491.17	89.87	269.30	7,155.00	-186.76	-300.89	10.00	10.00	0.00	269.30	
7,686.16	89.88	267.35	7,155.42	-192.46	-495.78	1.00	0.01	-1.00	-89.59	
8,788.31	89.88	267.35	7,157.64	-243.42	-1,596.75	0.00	0.00	0.00	0.00	
9,073.30	89.86	270.20	7,158.28	-249.51	-1,881.65	1.00	-0.01	1.00	90.49	
11,823.30	89.86	270.20	7,165.00	-239.91	-4,631.63	0.00	0.00	0.00	0.00	BELLA FEDERAL 10I

Anadarko Petroleum Corp

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Company:	US ROCKIES REGION PLANNING	TVD Reference:	17°GL+4863'GL @ 4880.00ft
Project:	COLORADO-NAD83-UTMFT13N	MD Reference:	17°GL+4863'GL @ 4880.00ft
Site:	WELD_BELLA FED 11-8HZ	North Reference:	True
Well:	BELLA FEDERAL 10N-7HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	WP02 PERMIT		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	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	
846.00	0.00	0.00	846.00	0.00	0.00	0.00	0.00	0.00	0.00	
FOX HILLS BASE										
896.00	0.00	0.00	896.00	0.00	0.00	0.00	0.00	0.00	0.00	
9 5/8"										
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	
BEGIN NUJGE										
1,200.00	2.00	123.59	1,199.98	-0.97	1.45	-1.40	2.00	2.00	0.00	
1,286.09	3.72	123.59	1,285.96	-3.34	5.03	-4.85	2.00	2.00	0.00	
BEGIN HOLD										
1,300.00	3.72	123.59	1,299.84	-3.84	5.79	-5.58	0.00	0.00	0.00	
1,400.00	3.72	123.59	1,399.63	-7.43	11.19	-10.79	0.00	0.00	0.00	
1,500.00	3.72	123.59	1,499.42	-11.02	16.60	-16.01	0.00	0.00	0.00	
1,600.00	3.72	123.59	1,599.21	-14.61	22.01	-21.22	0.00	0.00	0.00	
1,700.00	3.72	123.59	1,699.00	-18.21	27.42	-26.44	0.00	0.00	0.00	
1,800.00	3.72	123.59	1,798.79	-21.80	32.82	-31.65	0.00	0.00	0.00	
1,900.00	3.72	123.59	1,898.57	-25.39	38.23	-36.87	0.00	0.00	0.00	
2,000.00	3.72	123.59	1,998.36	-28.98	43.64	-42.08	0.00	0.00	0.00	
2,100.00	3.72	123.59	2,098.15	-32.57	49.05	-47.30	0.00	0.00	0.00	
2,200.00	3.72	123.59	2,197.94	-36.16	54.45	-52.51	0.00	0.00	0.00	
2,300.00	3.72	123.59	2,297.73	-39.75	59.86	-57.73	0.00	0.00	0.00	
2,400.00	3.72	123.59	2,397.52	-43.34	65.27	-62.94	0.00	0.00	0.00	
2,479.65	3.72	123.59	2,477.00	-46.20	69.58	-67.09	0.00	0.00	0.00	
PARKMAN										
2,500.00	3.72	123.59	2,497.31	-46.93	70.68	-68.15	0.00	0.00	0.00	
2,600.00	3.72	123.59	2,597.10	-50.52	76.08	-73.37	0.00	0.00	0.00	
2,700.00	3.72	123.59	2,696.89	-54.12	81.49	-78.58	0.00	0.00	0.00	
2,800.00	3.72	123.59	2,796.68	-57.71	86.90	-83.80	0.00	0.00	0.00	
2,900.00	3.72	123.59	2,896.47	-61.30	92.31	-89.01	0.00	0.00	0.00	
3,000.00	3.72	123.59	2,996.25	-64.89	97.72	-94.23	0.00	0.00	0.00	
3,100.00	3.72	123.59	3,096.04	-68.48	103.12	-99.44	0.00	0.00	0.00	
3,200.00	3.72	123.59	3,195.83	-72.07	108.53	-104.66	0.00	0.00	0.00	
3,300.00	3.72	123.59	3,295.62	-75.66	113.94	-109.87	0.00	0.00	0.00	
3,400.00	3.72	123.59	3,395.41	-79.25	119.35	-115.09	0.00	0.00	0.00	
3,500.00	3.72	123.59	3,495.20	-82.84	124.75	-120.30	0.00	0.00	0.00	
3,600.00	3.72	123.59	3,594.99	-86.43	130.16	-125.52	0.00	0.00	0.00	
3,700.00	3.72	123.59	3,694.78	-90.03	135.57	-130.73	0.00	0.00	0.00	
3,800.00	3.72	123.59	3,794.57	-93.62	140.98	-135.94	0.00	0.00	0.00	
3,865.57	3.72	123.59	3,860.00	-95.97	144.52	-139.36	0.00	0.00	0.00	
SUSSEX										
3,900.00	3.72	123.59	3,894.36	-97.21	146.38	-141.16	0.00	0.00	0.00	
4,000.00	3.72	123.59	3,994.15	-100.80	151.79	-146.37	0.00	0.00	0.00	
4,100.00	3.72	123.59	4,093.93	-104.39	157.20	-151.59	0.00	0.00	0.00	

Anadarko Petroleum Corp

Planning Report

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Company:	US ROCKIES REGION PLANNING	TVD Reference:	17°GL+4863'GL @ 4880.00ft
Project:	COLORADO-NAD83-UTMFT13N	MD Reference:	17°GL+4863'GL @ 4880.00ft
Site:	WELD_BELLA FED 11-8HZ	North Reference:	True
Well:	BELLA FEDERAL 10N-7HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	WP02 PERMIT		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
4,200.00	3.72	123.59	4,193.72	-107.98	162.61	-156.80	0.00	0.00	0.00	
4,300.00	3.72	123.59	4,293.51	-111.57	168.01	-162.02	0.00	0.00	0.00	
4,400.00	3.72	123.59	4,393.30	-115.16	173.42	-167.23	0.00	0.00	0.00	
4,500.00	3.72	123.59	4,493.09	-118.75	178.83	-172.45	0.00	0.00	0.00	
4,600.00	3.72	123.59	4,592.88	-122.34	184.24	-177.66	0.00	0.00	0.00	
4,700.00	3.72	123.59	4,692.67	-125.93	189.65	-182.88	0.00	0.00	0.00	
4,800.00	3.72	123.59	4,792.46	-129.53	195.05	-188.09	0.00	0.00	0.00	
4,900.00	3.72	123.59	4,892.25	-133.12	200.46	-193.31	0.00	0.00	0.00	
5,000.00	3.72	123.59	4,992.04	-136.71	205.87	-198.52	0.00	0.00	0.00	
5,100.00	3.72	123.59	5,091.83	-140.30	211.28	-203.74	0.00	0.00	0.00	
5,200.00	3.72	123.59	5,191.61	-143.89	216.68	-208.95	0.00	0.00	0.00	
5,300.00	3.72	123.59	5,291.40	-147.48	222.09	-214.16	0.00	0.00	0.00	
5,400.00	3.72	123.59	5,391.19	-151.07	227.50	-219.38	0.00	0.00	0.00	
5,500.00	3.72	123.59	5,490.98	-154.66	232.91	-224.59	0.00	0.00	0.00	
5,600.00	3.72	123.59	5,590.77	-158.25	238.31	-229.81	0.00	0.00	0.00	
5,700.00	3.72	123.59	5,690.56	-161.84	243.72	-235.02	0.00	0.00	0.00	
5,800.00	3.72	123.59	5,790.35	-165.44	249.13	-240.24	0.00	0.00	0.00	
5,900.00	3.72	123.59	5,890.14	-169.03	254.54	-245.45	0.00	0.00	0.00	
6,000.00	3.72	123.59	5,989.93	-172.62	259.94	-250.67	0.00	0.00	0.00	
6,106.37	3.72	123.59	6,096.08	-176.44	265.70	-256.21	0.00	0.00	0.00	
BEGIN DROP										
6,200.00	1.85	123.59	6,189.59	-178.95	269.49	-259.87	2.00	-2.00	0.00	
6,292.47	0.00	0.00	6,282.04	-179.78	270.73	-261.07	2.00	-2.00	0.00	
BEGIN HOLD										
6,300.00	0.00	0.00	6,289.57	-179.78	270.73	-261.07	0.00	0.00	0.00	
6,400.00	0.00	0.00	6,389.57	-179.78	270.73	-261.07	0.00	0.00	0.00	
6,500.00	0.00	0.00	6,489.57	-179.78	270.73	-261.07	0.00	0.00	0.00	
6,592.47	0.00	0.00	6,582.04	-179.78	270.73	-261.07	0.00	0.00	0.00	
KOP										
6,600.00	0.75	269.30	6,589.57	-179.78	270.68	-261.02	10.00	10.00	0.00	
6,650.00	5.75	269.30	6,639.48	-179.82	267.84	-258.18	10.00	10.00	0.00	
6,700.00	10.75	269.30	6,688.94	-179.90	260.67	-251.01	10.00	10.00	0.00	
6,750.00	15.75	269.30	6,737.59	-180.04	249.21	-239.56	10.00	10.00	0.00	
6,800.00	20.75	269.30	6,785.06	-180.23	233.56	-223.92	10.00	10.00	0.00	
6,850.00	25.75	269.30	6,830.99	-180.48	213.82	-204.20	10.00	10.00	0.00	
6,900.00	30.75	269.30	6,875.02	-180.76	190.17	-180.56	10.00	10.00	0.00	
6,950.00	35.75	269.30	6,916.82	-181.10	162.76	-153.17	10.00	10.00	0.00	
7,000.00	40.75	269.30	6,956.07	-181.48	131.81	-122.25	10.00	10.00	0.00	
7,050.00	45.75	269.30	6,992.47	-181.90	97.57	-88.03	10.00	10.00	0.00	
7,100.00	50.75	269.30	7,025.75	-182.35	60.28	-50.76	10.00	10.00	0.00	
7,113.22	52.08	269.30	7,034.00	-182.48	49.94	-40.44	10.00	10.00	0.00	
SHARON SPRINGS										
7,150.00	55.75	269.30	7,055.66	-182.84	20.23	-10.74	10.00	10.00	0.00	
7,200.00	60.75	269.30	7,081.96	-183.36	-22.27	31.73	10.00	10.00	0.00	
7,208.38	61.59	269.30	7,086.00	-183.45	-29.61	39.06	10.00	10.00	0.00	
NIORARA A										
7,250.00	65.75	269.30	7,104.45	-183.91	-66.91	76.33	10.00	10.00	0.00	
7,300.00	70.75	269.30	7,122.97	-184.47	-113.33	122.72	10.00	10.00	0.00	
7,350.00	75.75	269.30	7,137.38	-185.06	-161.19	170.55	10.00	10.00	0.00	
7,361.08	76.86	269.30	7,140.00	-185.19	-171.96	181.30	10.00	10.00	0.00	
NIORARA B										
7,400.00	80.75	269.30	7,147.55	-185.66	-210.12	219.45	10.00	10.00	0.00	
7,450.00	85.75	269.30	7,153.43	-186.26	-259.76	269.05	10.00	10.00	0.00	

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Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well BELLA FEDERAL 10N-7HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	17'GL+4863'GL @ 4880.00ft
Project:	COLORADO-NAD83-UTMFT13N	MD Reference:	17'GL+4863'GL @ 4880.00ft
Site:	WELD_BELLA FED 11-8HZ	North Reference:	True
Well:	BELLA FEDERAL 10N-7HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	WP02 PERMIT		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
7,491.17	89.87	269.30	7,155.00	-186.76	-300.89	310.15	10.00	10.00	0.00	
BEGIN TURN - 7" - BELLA FEDERAL 10N-7HZ HEEL TGT										
7,500.00	89.87	269.21	7,155.02	-186.88	-309.72	318.97	1.00	0.01	-1.00	
7,600.00	89.88	268.21	7,155.24	-189.13	-409.69	418.92	1.00	0.01	-1.00	
7,686.16	89.88	267.35	7,155.42	-192.46	-495.78	505.07	1.00	0.01	-1.00	
BEGIN HOLD										
7,700.00	89.88	267.35	7,155.44	-193.10	-509.61	518.92	0.00	0.00	0.00	
7,800.00	89.88	267.35	7,155.65	-197.73	-609.50	618.91	0.00	0.00	0.00	
7,900.00	89.88	267.35	7,155.85	-202.35	-709.39	718.91	0.00	0.00	0.00	
8,000.00	89.88	267.35	7,156.05	-206.97	-809.29	818.91	0.00	0.00	0.00	
8,100.00	89.88	267.35	7,156.25	-211.60	-909.18	918.91	0.00	0.00	0.00	
8,200.00	89.88	267.35	7,156.45	-216.22	-1,009.07	1,018.91	0.00	0.00	0.00	
8,300.00	89.88	267.35	7,156.66	-220.84	-1,108.97	1,118.90	0.00	0.00	0.00	
8,400.00	89.88	267.35	7,156.86	-225.47	-1,208.86	1,218.90	0.00	0.00	0.00	
8,500.00	89.88	267.35	7,157.06	-230.09	-1,308.75	1,318.90	0.00	0.00	0.00	
8,600.00	89.88	267.35	7,157.26	-234.71	-1,408.64	1,418.90	0.00	0.00	0.00	
8,700.00	89.88	267.35	7,157.47	-239.33	-1,508.54	1,518.90	0.00	0.00	0.00	
8,788.31	89.88	267.35	7,157.64	-243.42	-1,596.75	1,607.21	0.00	0.00	0.00	
BEGIN TURN										
8,800.00	89.88	267.47	7,157.67	-243.95	-1,608.43	1,618.90	1.00	-0.01	1.00	
8,900.00	89.87	268.47	7,157.88	-247.49	-1,708.37	1,718.88	1.00	-0.01	1.00	
9,000.00	89.87	269.47	7,158.11	-249.30	-1,808.35	1,818.82	1.00	-0.01	1.00	
9,073.30	89.86	270.20	7,158.28	-249.51	-1,881.65	1,892.04	1.00	-0.01	1.00	
BEGIN HOLD										
9,100.00	89.86	270.20	7,158.35	-249.42	-1,908.35	1,918.69	0.00	0.00	0.00	
9,200.00	89.86	270.20	7,158.59	-249.07	-2,008.35	2,018.54	0.00	0.00	0.00	
9,300.00	89.86	270.20	7,158.83	-248.72	-2,108.35	2,118.39	0.00	0.00	0.00	
9,400.00	89.86	270.20	7,159.08	-248.37	-2,208.34	2,218.24	0.00	0.00	0.00	
9,500.00	89.86	270.20	7,159.32	-248.02	-2,308.34	2,318.08	0.00	0.00	0.00	
9,600.00	89.86	270.20	7,159.57	-247.67	-2,408.34	2,417.93	0.00	0.00	0.00	
9,700.00	89.86	270.20	7,159.81	-247.32	-2,508.34	2,517.78	0.00	0.00	0.00	
9,800.00	89.86	270.20	7,160.06	-246.97	-2,608.34	2,617.62	0.00	0.00	0.00	
9,900.00	89.86	270.20	7,160.30	-246.62	-2,708.34	2,717.47	0.00	0.00	0.00	
10,000.00	89.86	270.20	7,160.54	-246.27	-2,808.34	2,817.32	0.00	0.00	0.00	
10,100.00	89.86	270.20	7,160.79	-245.93	-2,908.34	2,917.17	0.00	0.00	0.00	
10,200.00	89.86	270.20	7,161.03	-245.58	-3,008.34	3,017.01	0.00	0.00	0.00	
10,300.00	89.86	270.20	7,161.28	-245.23	-3,108.34	3,116.86	0.00	0.00	0.00	
10,400.00	89.86	270.20	7,161.52	-244.88	-3,208.34	3,216.71	0.00	0.00	0.00	
10,500.00	89.86	270.20	7,161.77	-244.53	-3,308.33	3,316.55	0.00	0.00	0.00	
10,600.00	89.86	270.20	7,162.01	-244.18	-3,408.33	3,416.40	0.00	0.00	0.00	
10,700.00	89.86	270.20	7,162.26	-243.83	-3,508.33	3,516.25	0.00	0.00	0.00	
10,800.00	89.86	270.20	7,162.50	-243.48	-3,608.33	3,616.10	0.00	0.00	0.00	
10,900.00	89.86	270.20	7,162.74	-243.13	-3,708.33	3,715.94	0.00	0.00	0.00	
11,000.00	89.86	270.20	7,162.99	-242.78	-3,808.33	3,815.79	0.00	0.00	0.00	
11,100.00	89.86	270.20	7,163.23	-242.43	-3,908.33	3,915.64	0.00	0.00	0.00	
11,200.00	89.86	270.20	7,163.48	-242.09	-4,008.33	4,015.48	0.00	0.00	0.00	
11,300.00	89.86	270.20	7,163.72	-241.74	-4,108.33	4,115.33	0.00	0.00	0.00	
11,400.00	89.86	270.20	7,163.97	-241.39	-4,208.33	4,215.18	0.00	0.00	0.00	
11,500.00	89.86	270.20	7,164.21	-241.04	-4,308.33	4,315.03	0.00	0.00	0.00	
11,600.00	89.86	270.20	7,164.45	-240.69	-4,408.32	4,414.87	0.00	0.00	0.00	
11,700.00	89.86	270.20	7,164.70	-240.34	-4,508.32	4,514.72	0.00	0.00	0.00	
11,800.00	89.86	270.20	7,164.94	-239.99	-4,608.32	4,614.57	0.00	0.00	0.00	
11,823.30	89.86	270.20	7,165.00	-239.91	-4,631.63	4,637.84	0.00	0.00	0.00	

Anadarko Petroleum Corp

Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well BELLA FEDERAL 10N-7HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	17'GL+4863'GL @ 4880.00ft
Project:	COLORADO-NAD83-UTMFT13N	MD Reference:	17'GL+4863'GL @ 4880.00ft
Site:	WELD_BELLA FED 11-8HZ	North Reference:	True
Well:	BELLA FEDERAL 10N-7HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	WP02 PERMIT		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
TD - BELLA FEDERAL 10N-7HZ PBHL									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
BELLA FEDERAL 10N-7 - hit/miss target - Shape - plan hits target center - Point	0.00	0.00	7,155.00	-186.76	-300.89	14,613,233.43	1,695,386.80	40.237373	-104.803030
BELLA FEDERAL 10N-7 - plan hits target center - Point	0.00	0.00	7,165.00	-239.91	-4,631.63	14,613,170.61	1,691,056.20	40.237226	-104.818548

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
896.00	896.00	9 5/8"	9-5/8	12-1/4	
7,491.17	7,155.00	7"	7	8-3/4	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
846.00	861.00	FOX HILLS BASE		0.00	
2,479.65	2,492.00	PARKMAN		0.00	
3,865.57	3,875.00	SUSSEX		0.00	
7,113.22	7,049.00	SHARON SPRINGS		0.00	
7,208.38	7,101.00	NIOBRARA A		0.00	
7,361.08	7,155.00	NIOBRARA B		0.00	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
1,100.00	1,100.00	0.00	0.00	BEGIN NUDGE	
1,286.09	1,285.96	-3.34	5.03	BEGIN HOLD	
6,106.37	6,096.08	-176.44	265.70	BEGIN DROP	
6,292.47	6,282.04	-179.78	270.73	BEGIN HOLD	
6,592.47	6,582.04	-179.78	270.73	KOP	
7,491.17	7,155.00	-186.76	-300.89	BEGIN TURN	
7,686.16	7,155.42	-192.46	-495.78	BEGIN HOLD	
8,788.31	7,157.64	-243.42	-1,596.75	BEGIN TURN	
9,073.30	7,158.28	-249.51	-1,881.65	BEGIN HOLD	
11,823.30	7,165.00	-239.91	-4,631.63	TD	