

# ANADARKO PETROLEUM



INTEQ

Location: COLORADO Slot: SLOT#04 BELLA FEDERAL 16-7 (910'FSL & 1157'FEL)  
Field: WELD COUNTY (ANADARKO) Well: BELLA FEDERAL 16-7  
Facility: SEC.07-T3N-R66W Wellbore: BELLA FEDERAL 16-7 PWB

## Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	15.00	0.000	120.909	15.00	0.00	0.00	0.00	0.00
End of Tangent	800.00	0.000	120.909	800.00	0.00	0.00	0.00	0.00
End of Build (S)	1400.00	12.000	120.909	1395.62	-32.16	53.71	2.00	62.60
End of Tangent (S)	4413.42	12.000	120.909	4343.19	-353.99	591.26	0.00	689.13
End of Drop (S)	5013.42	0.000	120.909	4938.81	-386.15	644.97	2.00	751.73
End of Tangent	7994.60	0.000	120.909	7920.00	-386.15	644.97	0.00	751.73

## Location Information

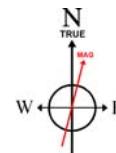
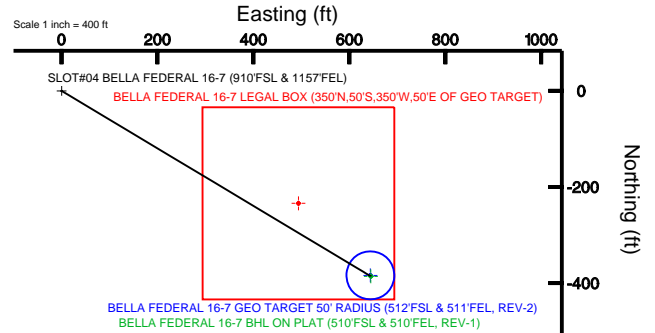
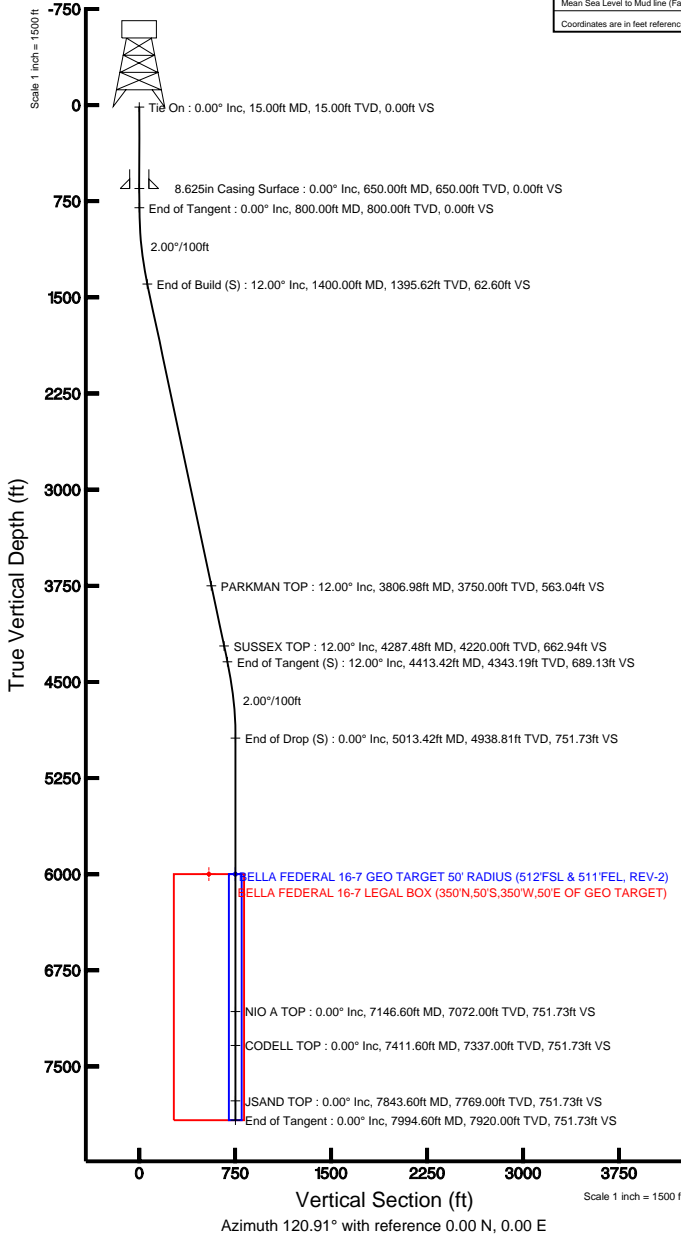
Facility Name			Grid East (USft)	Grid North (USft)	Latitude	Longitude
SEC.07-T3N-R66W			3190294.846	1331460.620	40°14'28.500"N	104°49'05.988"W
Slot	Local N (ft)	Local E (ft)	Grid East (USft)	Grid North (USft)	Latitude	Longitude
SLOT#04 BELLA FEDERAL 16-7 (910FSL & 1157FEL)	-2477.23	963.25	3191277.067	1328990.976	40°14'04.020"N	104°48'53.568"W
Rig on SLOT#04 BELLA FEDERAL 16-7 (910FSL & 1157FEL) (RT) to Mud line (Facility: SEC.07-T3N-R66W)					4855ft	
Mean Sea Level to Mud line (Facility: SEC.07-T3N-R66W)					0ft	
Rig on SLOT#04 BELLA FEDERAL 16-7 (910FSL & 1157FEL) (RT) to Mean Sea Level					4855ft	

## Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (USft)	Grid North (USft)	Latitude	Longitude
BELLA FEDERAL 16-7 BHL ON PLAT (510'FSL & 510'FEL, REV-1)		6000.00	-386.15	644.97	3191324.97	1328609.84	40°14'00.204"N	104°48'45.252"W
BELLA FEDERAL 16-7 GEO TARGET 50' RADIUS (512'FSL & 511'FEL, REV-2)		6000.00	-384.15	643.97	3191523.96	1328611.83	40°14'00.224"N	104°48'45.265"W
BELLA FEDERAL 16-7 LEGAL BOX (350'N,50'S,350'W,50'E OF GEO TARGET)		6000.00	-234.15	493.97	3191772.81	1328760.66	40°14'01.706"N	104°48'47.199"W

Plot reference wellpath is BELLA FEDERAL 16-7 (REV-A.0) PWP

True vertical depths are referenced to Rig on SLOT#04 BELLA FEDERAL 16-7 (910'FSL & 1157'FEL) (RT)	Grid System: NAD83 / Lambert Colorado State Planes, Northern Zone (501), US feet
Measured depths are referenced to Rig on SLOT#04 BELLA FEDERAL 16-7 (910'FSL & 1157'FEL) (RT)	North Reference: True north
Rig on SLOT#04 BELLA FEDERAL 16-7 (910'FSL & 1157'FEL) (RT) to Mean Sea Level: 4855 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: SEC.07-T3N-R66W): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: cookdam on 8/14/2009



BGGM (1945.0 to 2010.0) Dip: 67.00° Field: 53267.8 nT  
Magnetic North is 9.09 degrees East of True North (at 8/14/2009)

To correct azimuth from Magnetic to True add 9.09 degrees  
For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 9.09 = 99.09

# Planned Wellpath Report

BELLA FEDERAL 16-7 (REV-A.0) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANADARKO PETROLEUM	Slot	SLOT#04 BELLA FEDERAL 16-7 (910'FSL & 1157'FEL)
Area	COLORADO	Well	BELLA FEDERAL 16-7
Field	WELD COUNTY (ANADARKO)	Wellbore	BELLA FEDERAL 16-7 PWB
Facility	SEC.07-T3N-R66W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado State Planes, Northern Zone (501), US feet	Software System	WellArchitect® 2.0
North Reference	True	User	Cookdanm
Scale	0.999957	Report Generated	8/14/2009 at 4:58:33 PM
Convergence at slot	0.44° East	Database/Source file	WellArchitect_Denver/BELLA_FEDERAL_16-7_PWB.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	-2477.23	963.25	3191277.07	1328990.98	40°14'04.020"N	104°48'53.568"W
Facility Reference Pt			3190294.85	1331460.62	40°14'28.500"N	104°49'05.988"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

## WELLPATH DATUM

Calculation method	Minimum curvature	Rig on SLOT#04 BELLA FEDERAL 16-7 (910'FSL & 1157'FEL) (RT) to Facility Vertical Datum
Horizontal Reference Pt	Slot	Rig on SLOT#04 BELLA FEDERAL 16-7 (910'FSL & 1157'FEL) (RT) to Mean Sea Level
Vertical Reference Pt	Rig on SLOT#04 BELLA FEDERAL 16-7 (910'FSL & 1157'FEL) (RT)	Facility Vertical Datum to Mud Line (Fac)
MD Reference Pt	Rig on SLOT#04 BELLA FEDERAL 16-7 (910'FSL & 1157'FEL) (RT)	Section Origin
Field Vertical Reference	Mean Sea Level	Section Azimuth

# Planned Wellpath Report

BELLA FEDERAL 16-7 (REV-A.0) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANADARKO PETROLEUM	Slot	SLOT#04 BELLA FEDERAL 16-7 (910'FSL & 1157'FEL)
Area	COLORADO	Well	BELLA FEDERAL 16-7
Field	WELD COUNTY (ANADARKO)	Wellbore	BELLA FEDERAL 16-7 PWB
Facility	SEC.07-T3N-R66W		

## WELLPATH DATA (91 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	120.909	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	120.909	15.00	0.00	0.00	0.00	0.00	Tie On
115.00†	0.000	120.909	115.00	0.00	0.00	0.00	0.00	
215.00†	0.000	120.909	215.00	0.00	0.00	0.00	0.00	
315.00†	0.000	120.909	315.00	0.00	0.00	0.00	0.00	
415.00†	0.000	120.909	415.00	0.00	0.00	0.00	0.00	
515.00†	0.000	120.909	515.00	0.00	0.00	0.00	0.00	
615.00†	0.000	120.909	615.00	0.00	0.00	0.00	0.00	
715.00†	0.000	120.909	715.00	0.00	0.00	0.00	0.00	
800.00	0.000	120.909	800.00	0.00	0.00	0.00	0.00	End of Tangent
815.00†	0.300	120.909	815.00	0.04	-0.02	0.03	2.00	
915.00†	2.300	120.909	914.97	2.31	-1.19	1.98	2.00	
1015.00†	4.300	120.909	1014.80	8.06	-4.14	6.92	2.00	
1115.00†	6.300	120.909	1114.37	17.30	-8.89	14.84	2.00	
1215.00†	8.300	120.909	1213.55	30.01	-15.41	25.74	2.00	
1315.00†	10.300	120.909	1312.23	46.17	-23.71	39.61	2.00	
1400.00	12.000	120.909	1395.62	62.60	-32.16	53.71	2.00	End of Build (S)
1415.00†	12.000	120.909	1410.30	65.72	-33.76	56.39	0.00	
1515.00†	12.000	120.909	1508.11	86.51	-44.44	74.23	0.00	
1615.00†	12.000	120.909	1605.92	107.30	-55.12	92.06	0.00	
1715.00†	12.000	120.909	1703.74	128.09	-65.80	109.90	0.00	
1815.00†	12.000	120.909	1801.55	148.89	-76.48	127.74	0.00	
1915.00†	12.000	120.909	1899.37	169.68	-87.16	145.58	0.00	
2015.00†	12.000	120.909	1997.18	190.47	-97.84	163.42	0.00	
2115.00†	12.000	120.909	2095.00	211.26	-108.52	181.26	0.00	
2215.00†	12.000	120.909	2192.81	232.05	-119.20	199.09	0.00	
2315.00†	12.000	120.909	2290.63	252.84	-129.88	216.93	0.00	
2415.00†	12.000	120.909	2388.44	273.63	-140.56	234.77	0.00	
2515.00†	12.000	120.909	2486.26	294.42	-151.24	252.61	0.00	
2615.00†	12.000	120.909	2584.07	315.22	-161.92	270.45	0.00	
2715.00†	12.000	120.909	2681.89	336.01	-172.60	288.29	0.00	
2815.00†	12.000	120.909	2779.70	356.80	-183.28	306.13	0.00	
2915.00†	12.000	120.909	2877.52	377.59	-193.96	323.96	0.00	
3015.00†	12.000	120.909	2975.33	398.38	-204.64	341.80	0.00	
3115.00†	12.000	120.909	3073.15	419.17	-215.32	359.64	0.00	
3215.00†	12.000	120.909	3170.96	439.96	-226.00	377.48	0.00	
3315.00†	12.000	120.909	3268.78	460.75	-236.68	395.32	0.00	
3415.00†	12.000	120.909	3366.59	481.54	-247.36	413.16	0.00	
3515.00†	12.000	120.909	3464.41	502.34	-258.04	430.99	0.00	
3615.00†	12.000	120.909	3562.22	523.13	-268.72	448.83	0.00	
3715.00†	12.000	120.909	3660.03	543.92	-279.40	466.67	0.00	
3806.98†	12.000	120.909	3750.00	563.04	-289.22	483.08	0.00	PARKMAN TOP
3815.00†	12.000	120.909	3757.85	564.71	-290.08	484.51	0.00	
3915.00†	12.000	120.909	3855.66	585.50	-300.76	502.35	0.00	
4015.00†	12.000	120.909	3953.48	606.29	-311.44	520.19	0.00	

# Planned Wellpath Report

BELLA FEDERAL 16-7 (REV-A.0) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANADARKO PETROLEUM	Slot	SLOT#04 BELLA FEDERAL 16-7 (910'FSL & 1157'FEL)
Area	COLORADO	Well	BELLA FEDERAL 16-7
Field	WELD COUNTY (ANADARKO)	Wellbore	BELLA FEDERAL 16-7 PWB
Facility	SEC.07-T3N-R66W		

## WELLPATH DATA (91 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
4115.00†	12.000	120.909	4051.29	627.08	-322.12	538.02	0.00	
4215.00†	12.000	120.909	4149.11	647.87	-332.80	555.86	0.00	
4287.48†	12.000	120.909	4220.00	662.94	-340.54	568.79	0.00	SUSSEX TOP
4315.00†	12.000	120.909	4246.92	668.67	-343.48	573.70	0.00	
4413.42	12.000	120.909	4343.19	689.13	-353.99	591.26	0.00	End of Tangent (S)
4415.00†	11.968	120.909	4344.74	689.46	-354.16	591.54	2.00	
4515.00†	9.968	120.909	4442.91	708.48	-363.94	607.86	2.00	
4615.00†	7.968	120.909	4541.68	724.07	-371.94	621.24	2.00	
4715.00†	5.968	120.909	4640.94	736.20	-378.17	631.65	2.00	
4815.00†	3.968	120.909	4740.55	744.86	-382.62	639.08	2.00	
4915.00†	1.968	120.909	4840.42	750.04	-385.28	643.52	2.00	
5013.42	0.000	120.909	4938.81 <sup>1</sup>	751.73	-386.15	644.97	2.00	End of Drop (S)
5015.00†	0.000	120.909	4940.40	751.73	-386.15	644.97	0.00	
5115.00†	0.000	120.909	5040.40	751.73	-386.15	644.97	0.00	
5215.00†	0.000	120.909	5140.40	751.73	-386.15	644.97	0.00	
5315.00†	0.000	120.909	5240.40	751.73	-386.15	644.97	0.00	
5415.00†	0.000	120.909	5340.40	751.73	-386.15	644.97	0.00	
5515.00†	0.000	120.909	5440.40	751.73	-386.15	644.97	0.00	
5615.00†	0.000	120.909	5540.40	751.73	-386.15	644.97	0.00	
5715.00†	0.000	120.909	5640.40	751.73	-386.15	644.97	0.00	
5815.00†	0.000	120.909	5740.40	751.73	-386.15	644.97	0.00	
5915.00†	0.000	120.909	5840.40	751.73	-386.15	644.97	0.00	
6015.00†	0.000	120.909	5940.40	751.73	-386.15	644.97	0.00	
6115.00†	0.000	120.909	6040.40	751.73	-386.15	644.97	0.00	
6215.00†	0.000	120.909	6140.40	751.73	-386.15	644.97	0.00	
6315.00†	0.000	120.909	6240.40	751.73	-386.15	644.97	0.00	
6415.00†	0.000	120.909	6340.40	751.73	-386.15	644.97	0.00	
6515.00†	0.000	120.909	6440.40	751.73	-386.15	644.97	0.00	
6615.00†	0.000	120.909	6540.40	751.73	-386.15	644.97	0.00	
6715.00†	0.000	120.909	6640.40	751.73	-386.15	644.97	0.00	
6815.00†	0.000	120.909	6740.40	751.73	-386.15	644.97	0.00	
6915.00†	0.000	120.909	6840.40	751.73	-386.15	644.97	0.00	
7015.00†	0.000	120.909	6940.40	751.73	-386.15	644.97	0.00	
7115.00†	0.000	120.909	7040.40	751.73	-386.15	644.97	0.00	
7146.60†	0.000	120.909	7072.00	751.73	-386.15	644.97	0.00	NIO A TOP
7215.00†	0.000	120.909	7140.40	751.73	-386.15	644.97	0.00	
7315.00†	0.000	120.909	7240.40	751.73	-386.15	644.97	0.00	
7411.60†	0.000	120.909	7337.00	751.73	-386.15	644.97	0.00	CODELL TOP
7415.00†	0.000	120.909	7340.40	751.73	-386.15	644.97	0.00	
7515.00†	0.000	120.909	7440.40	751.73	-386.15	644.97	0.00	
7615.00†	0.000	120.909	7540.40	751.73	-386.15	644.97	0.00	
7715.00†	0.000	120.909	7640.40	751.73	-386.15	644.97	0.00	
7815.00†	0.000	120.909	7740.40	751.73	-386.15	644.97	0.00	
7843.60†	0.000	120.909	7769.00	751.73	-386.15	644.97	0.00	JSAND TOP
7915.00†	0.000	120.909	7840.40	751.73	-386.15	644.97	0.00	

# Planned Wellpath Report

BELLA FEDERAL 16-7 (REV-A.0) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	ANADARKO PETROLEUM	Slot	SLOT#04 BELLA FEDERAL 16-7 (910'FSL & 1157'FEL)
Area	COLORADO	Well	BELLA FEDERAL 16-7
Field	WELD COUNTY (ANADARKO)	Wellbore	BELLA FEDERAL 16-7 PWB
Facility	SEC.07-T3N-R66W		

## WELLPATH DATA (91 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
7994.60	0.000	120.909	7920.00	751.73	-386.15	644.97	0.00	End of Tangent

## HOLE & CASING SECTIONS

Ref Wellbore: BELLA FEDERAL 16-7 PWB

Ref Wellpath: BELLA FEDERAL 16-7 (REV-A.0) PWP

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
12.25in Open Hole	15.00	650.00	635.00	15.00	650.00	0.00	0.00	0.00	0.00
8.625in Casing Surface	15.00	650.00	635.00	15.00	650.00	0.00	0.00	0.00	0.00
7.875in Open Hole	650.00	7994.60	7344.60	650.00	7920.00	0.00	0.00	-386.15	644.97

## TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) BELLA FEDERAL 16-7 BHL ON PLAT (510'FSL & 510'FEL, REV-1)		6000.00	-386.15	644.97	3191924.97	1328609.84	40°14'00.204"N	104°48'45.252"W	point
BELLA FEDERAL 16-7 GEO TARGET 50' RADIUS (512'FSL & 511'FEL, REV-2)		6000.00	-384.15	643.97	3191923.96	1328611.83	40°14'00.224"N	104°48'45.265"W	circle
BELLA FEDERAL 16-7 LEGAL BOX (350'N,50'S,350'W,50'E OF GEO TARGET)		6000.00	-234.15	493.97	3191772.81	1328760.66	40°14'01.706"N	104°48'47.199"W	square

## SURVEY PROGRAM

Ref Wellbore: BELLA FEDERAL 16-7 PWB

Ref Wellpath: BELLA FEDERAL 16-7 (REV-A.0) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
15.00	7994.60	MTC (Collar, post-2000) (Standard)		BELLA FEDERAL 16-7 PWB

# Planned Wellpath Report

BELLA FEDERAL 16-7 (REV-A.0) PWP

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Operator	ANADARKO PETROLEUM	Slot	SLOT#04 BELLA FEDERAL 16-7 (910'FSL & 1157'FEL)
Area	COLORADO	Well	BELLA FEDERAL 16-7
Field	WELD COUNTY (ANADARKO)	Wellbore	BELLA FEDERAL 16-7 PWB
Facility	SEC.07-T3N-R66W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
3806.98	12.000	120.909	3750.00	PARKMAN TOP
4287.48	12.000	120.909	4220.00	SUSSEX TOP
7146.60	0.000	120.909	7072.00	NIO A TOP
7411.60	0.000	120.909	7337.00	CODELL TOP
7843.60	0.000	120.909	7769.00	JSAND TOP