

ANADARKO PETROLEUM CORP.

ANADARKO COLORADO NORTHERN ZONE NAD 83

WELD_HUTCHISON 9-67-3-16H

P_HUTCHINSON 9-67-3-16H

P_HUTCHINSON 9-67-3-16H (600 FSL 600 FEL)

Plan: PLAN #1 4-26-10

Standard Planning Report

06 May, 2010

Project: ANADARKO COLORADO NOTHERN ZONE NAD 83
Site: WELD_HUTCHINSON 9-67-3-16H
Well: P_HUTCHINSON 9-67-3-16H
Wellbore: P_HUTCHINSON 9-67-3-16H (600 FSL 600 FEL)
Design: PLAN #1 4-26-10
Latitude: 40° 46' 14.495 N
Longitude: 104° 52' 11.608 W
GL: 5525.00
KB: WELL @ 5543.00ft (Original Well Elev)

WELLBORE TARGET DETAILS (LAT/LONG)

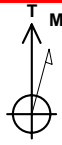
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PBHL	7688.00	4004.75	-4020.93	40° 46' 54.062 N	104° 53' 3.876 W	Point

WELL DETAILS: P_HUTCHINSON 9-67-3-16H

+N/-S	+E/-W	Northing	Ground Level: Easting	5525.00 Latitude	Longitude	Slot
0.00	0.00	1524229.21	3174530.78	40° 46' 14.495 N	104° 52' 11.608 W	

CASING DETAILS

TVD	MD	Name	Size
1000.00	1000.00	9 5/8"	9.62
7720.00	7995.48	7"	7.00

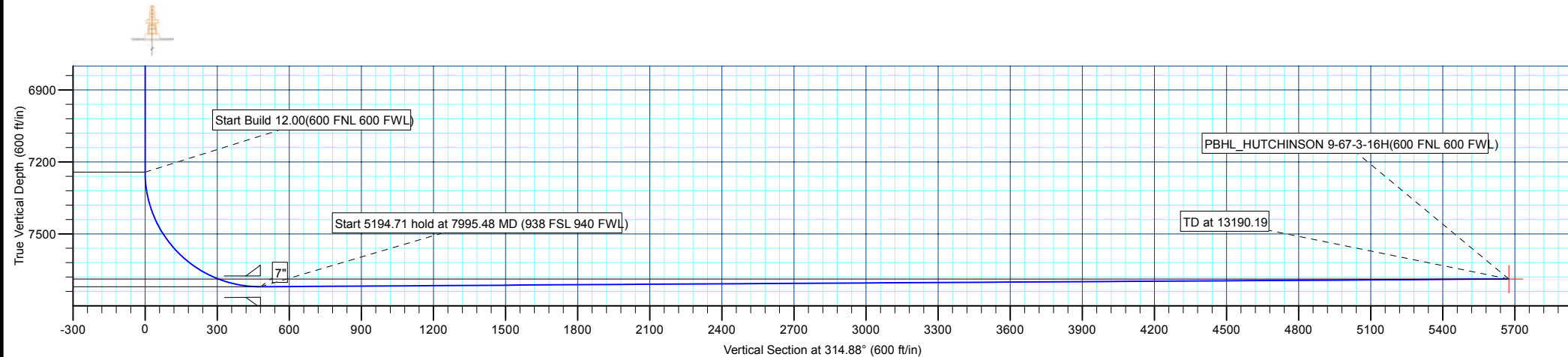
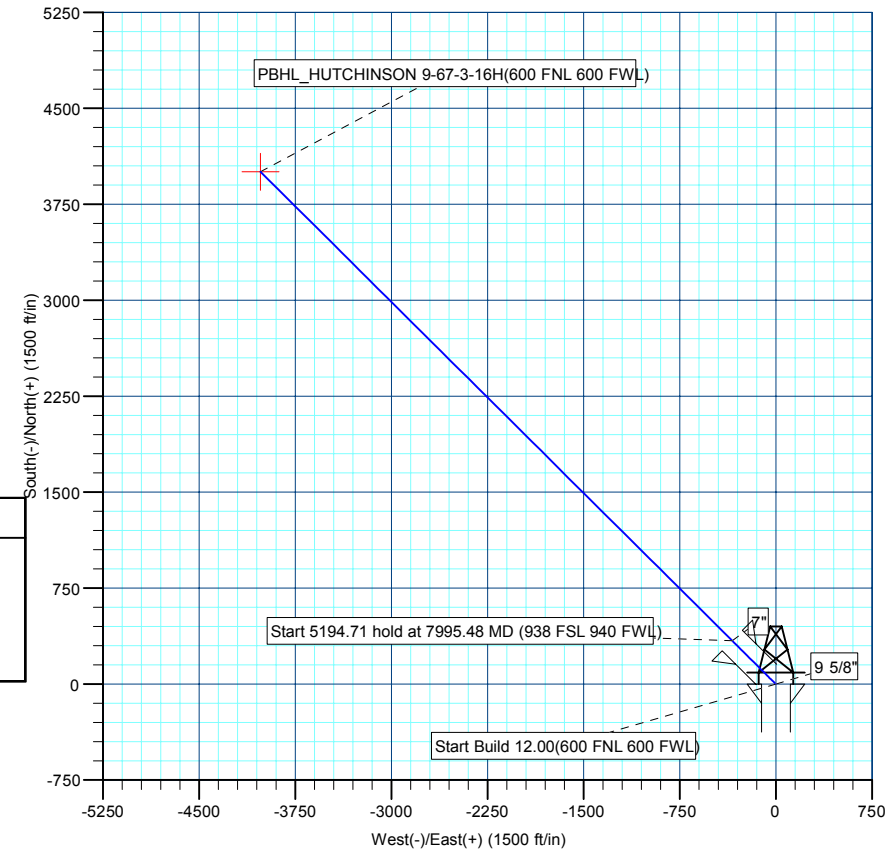


Azimuths to True North
Magnetic North: 9.11°

Magnetic Field
Strength: 53427.8snT
Dip Angle: 67.37°
Date: 4/26/2010
Model: IGRF2010

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7242.54	0.00	0.00	7242.54	0.00	0.00	0.00	0.00	0.00	Start Build 12.00(600 FNL 600 FWL)
7995.48	90.35	314.88	7720.00	339.01	-340.38	12.00	314.88	480.41	Start 5194.71 hold at 7995.48 MD (938 FSL 940 FWL)
13190.20	90.35	314.88	7688.00	4004.75	-4020.93	0.00	0.00	5675.03	TD at 13190.19



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_HUTCHINSON 9-67-3-16H
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 5543.00ft (Original Well Elev)
Project:	ANADARKO COLORADO NOTHERN ZONE NAD 83	MD Reference:	WELL @ 5543.00ft (Original Well Elev)
Site:	WELD_HUTCHISON 9-67-3-16H	North Reference:	True
Well:	P_HUTCHINSON 9-67-3-16H	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_HUTCHINSON 9-67-3-16H (600 FSL 600 FEL)		
Design:	PLAN #1 4-26-10		

Project	ANADARKO COLORADO NOTHERN ZONE NAD 83, ROCKIES, ROCKIES		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		WELD_HUTCHISON 9-67-3-16H, SECTION 3 T9N R67W			
Site Position:		Northing:	1,524,229.21 ft	Latitude:	40° 46' 14.495 N
From:	Lat/Long	Easting:	3,174,530.78 ft	Longitude:	104° 52' 11.608 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	0.41 °

Well	P_HUTCHINSON 9-67-3-16H					
Well Position	+N/-S	0.00 ft	Northing:	1,524,229.21 ft	Latitude:	40° 46' 14.495 N
	+E/-W	0.00 ft	Easting:	3,174,530.78 ft	Longitude:	104° 52' 11.608 W
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,525.00 ft	

Wellbore	P_HUTCHINSON 9-67-3-16H (600 FSL 600 FEL)				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/26/2010	9.11	67.37	53,428

Design	PLAN #1 4-26-10			
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	314.88

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	
7,242.54	0.00	0.00	7,242.54	0.00	0.00	0.00	0.00	0.00	0.00	
7,995.48	90.35	314.88	7,720.00	339.01	-340.38	12.00	12.00	0.00	314.88	
13,190.20	90.35	314.88	7,688.00	4,004.75	-4,020.93	0.00	0.00	0.00	0.00	PBHL_HUTCHINS

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_HUTCHINSON 9-67-3-16H
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 5543.00ft (Original Well Elev)
Project:	ANADARKO COLORADO NOTHERN ZONE NAD 83	MD Reference:	WELL @ 5543.00ft (Original Well Elev)
Site:	WELD_HUTCHISON 9-67-3-16H	North Reference:	True
Well:	P_HUTCHINSON 9-67-3-16H	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_HUTCHINSON 9-67-3-16H (600 FSL 600 FEL)		
Design:	PLAN #1 4-26-10		

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)
Start Build 12.00(600 FNL 600 FWL)									
7,242.54	0.00	0.00	7,242.54	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	6.90	314.88	7,299.86	2.44	-2.45	3.45	12.00	12.00	0.00
7,400.00	18.90	314.88	7,397.16	18.16	-18.23	25.73	12.00	12.00	0.00
7,500.00	30.90	314.88	7,487.70	47.81	-48.00	67.75	12.00	12.00	0.00
7,600.00	42.90	314.88	7,567.53	90.10	-90.46	127.67	12.00	12.00	0.00
7,700.00	54.90	314.88	7,633.15	143.17	-143.75	202.89	12.00	12.00	0.00
7,800.00	66.90	314.88	7,681.71	204.72	-205.55	290.10	12.00	12.00	0.00
7,900.00	78.90	314.88	7,711.07	272.04	-273.14	385.50	12.00	12.00	0.00
Start 5194.71 hold at 7995.48 MD (938 FSL 940 FWL) - 7"									
7,995.48	90.35	314.88	7,720.00	339.01	-340.38	480.40	12.00	12.00	0.00
8,000.00	90.35	314.88	7,719.97	342.20	-343.58	484.92	0.00	0.00	0.00
8,100.00	90.35	314.88	7,719.35	412.77	-414.44	584.92	0.00	0.00	0.00
8,200.00	90.35	314.88	7,718.74	483.33	-485.29	684.92	0.00	0.00	0.00
8,300.00	90.35	314.88	7,718.12	553.90	-556.14	784.92	0.00	0.00	0.00
8,400.00	90.35	314.88	7,717.50	624.47	-626.99	884.92	0.00	0.00	0.00
8,500.00	90.35	314.88	7,716.89	695.03	-697.84	984.92	0.00	0.00	0.00
8,600.00	90.35	314.88	7,716.27	765.60	-768.69	1,084.91	0.00	0.00	0.00
8,700.00	90.35	314.88	7,715.66	836.17	-839.55	1,184.91	0.00	0.00	0.00
8,800.00	90.35	314.88	7,715.04	906.73	-910.40	1,284.91	0.00	0.00	0.00
8,900.00	90.35	314.88	7,714.42	977.30	-981.25	1,384.91	0.00	0.00	0.00
9,000.00	90.35	314.88	7,713.81	1,047.87	-1,052.10	1,484.91	0.00	0.00	0.00
9,100.00	90.35	314.88	7,713.19	1,118.43	-1,122.95	1,584.90	0.00	0.00	0.00
9,200.00	90.35	314.88	7,712.58	1,189.00	-1,193.81	1,684.90	0.00	0.00	0.00
9,300.00	90.35	314.88	7,711.96	1,259.57	-1,264.66	1,784.90	0.00	0.00	0.00
9,400.00	90.35	314.88	7,711.34	1,330.13	-1,335.51	1,884.90	0.00	0.00	0.00
9,500.00	90.35	314.88	7,710.73	1,400.70	-1,406.36	1,984.90	0.00	0.00	0.00
9,600.00	90.35	314.88	7,710.11	1,471.27	-1,477.21	2,084.89	0.00	0.00	0.00
9,700.00	90.35	314.88	7,709.50	1,541.83	-1,548.06	2,184.89	0.00	0.00	0.00
9,800.00	90.35	314.88	7,708.88	1,612.40	-1,618.92	2,284.89	0.00	0.00	0.00
9,900.00	90.35	314.88	7,708.27	1,682.97	-1,689.77	2,384.89	0.00	0.00	0.00
10,000.00	90.35	314.88	7,707.65	1,753.53	-1,760.62	2,484.89	0.00	0.00	0.00
10,100.00	90.35	314.88	7,707.03	1,824.10	-1,831.47	2,584.88	0.00	0.00	0.00
10,200.00	90.35	314.88	7,706.42	1,894.67	-1,902.32	2,684.88	0.00	0.00	0.00
10,300.00	90.35	314.88	7,705.80	1,965.23	-1,973.18	2,784.88	0.00	0.00	0.00
10,400.00	90.35	314.88	7,705.19	2,035.80	-2,044.03	2,884.88	0.00	0.00	0.00
10,500.00	90.35	314.88	7,704.57	2,106.37	-2,114.88	2,984.88	0.00	0.00	0.00
10,600.00	90.35	314.88	7,703.95	2,176.93	-2,185.73	3,084.88	0.00	0.00	0.00
10,700.00	90.35	314.88	7,703.34	2,247.50	-2,256.58	3,184.87	0.00	0.00	0.00
10,800.00	90.35	314.88	7,702.72	2,318.07	-2,327.43	3,284.87	0.00	0.00	0.00
10,900.00	90.35	314.88	7,702.11	2,388.63	-2,398.29	3,384.87	0.00	0.00	0.00
11,000.00	90.35	314.88	7,701.49	2,459.20	-2,469.14	3,484.87	0.00	0.00	0.00
11,100.00	90.35	314.88	7,700.87	2,529.77	-2,539.99	3,584.87	0.00	0.00	0.00
11,200.00	90.35	314.88	7,700.26	2,600.33	-2,610.84	3,684.86	0.00	0.00	0.00
11,300.00	90.35	314.88	7,699.64	2,670.90	-2,681.69	3,784.86	0.00	0.00	0.00
11,400.00	90.35	314.88	7,699.03	2,741.47	-2,752.54	3,884.86	0.00	0.00	0.00
11,500.00	90.35	314.88	7,698.41	2,812.03	-2,823.40	3,984.86	0.00	0.00	0.00
11,600.00	90.35	314.88	7,697.79	2,882.60	-2,894.25	4,084.86	0.00	0.00	0.00
11,700.00	90.35	314.88	7,697.18	2,953.17	-2,965.10	4,184.85	0.00	0.00	0.00
11,800.00	90.35	314.88	7,696.56	3,023.73	-3,035.95	4,284.85	0.00	0.00	0.00
11,900.00	90.35	314.88	7,695.95	3,094.30	-3,106.80	4,384.85	0.00	0.00	0.00
12,000.00	90.35	314.88	7,695.33	3,164.87	-3,177.66	4,484.85	0.00	0.00	0.00

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Project:	ANADARKO COLORADO NOTHERN ZONE NAD 83	MD Reference:	WELL @ 5543.00ft (Original Well Elev)
Site:	WELD_HUTCHISON 9-67-3-16H	North Reference:	True
Well:	P_HUTCHINSON 9-67-3-16H	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_HUTCHINSON 9-67-3-16H (600 FSL 600 FEL)		
Design:	PLAN #1 4-26-10		

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)
12,100.00	90.35	314.88	7,694.71	3,235.43	-3,248.51	4,584.85	0.00	0.00	0.00
12,200.00	90.35	314.88	7,694.10	3,306.00	-3,319.36	4,684.85	0.00	0.00	0.00
12,300.00	90.35	314.88	7,693.48	3,376.57	-3,390.21	4,784.84	0.00	0.00	0.00
12,400.00	90.35	314.88	7,692.87	3,447.13	-3,461.06	4,884.84	0.00	0.00	0.00
12,500.00	90.35	314.88	7,692.25	3,517.70	-3,531.91	4,984.84	0.00	0.00	0.00
12,600.00	90.35	314.88	7,691.64	3,588.27	-3,602.77	5,084.84	0.00	0.00	0.00
12,700.00	90.35	314.88	7,691.02	3,658.83	-3,673.62	5,184.84	0.00	0.00	0.00
12,800.00	90.35	314.88	7,690.40	3,729.40	-3,744.47	5,284.83	0.00	0.00	0.00
12,900.00	90.35	314.88	7,689.79	3,799.97	-3,815.32	5,384.83	0.00	0.00	0.00
13,000.00	90.35	314.88	7,689.17	3,870.53	-3,886.17	5,484.83	0.00	0.00	0.00
13,100.00	90.35	314.88	7,688.56	3,941.10	-3,957.02	5,584.83	0.00	0.00	0.00
TD at 13190.19									
13,190.19	90.35	314.88	7,688.00	4,004.74	-4,020.93	5,675.02	0.00	0.00	0.00
PBHL_HUTCHINSON 9-67-3-16H(600 FNL 600 FWL)									
13,190.20	90.35	314.88	7,688.00	4,004.75	-4,020.93	5,675.03	0.00	0.00	0.00

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL_HUTCHINSON	0.00	0.00	7,688.00	4,004.75	-4,020.93	1,528,205.28	3,170,481.50	40° 46' 54.062 N	104° 53' 3.876 W
- plan hits target center									
- Point									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
1,000.00	1,000.00	9 5/8"	9.62	12.25
7,995.48	7,720.00	7"	7.00	7.50

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
7,242.54	7,242.54	0.00	0.00	Start Build 12.00(600 FNL 600 FWL)
7,995.48	7,720.00	339.01	-340.38	Start 5194.71 hold at 7995.48 MD (938 FSL 940 FWL)
13,190.19	7,688.00	4,004.74	-4,020.93	TD at 13190.19