

# ANADARKO PETROLEUM

Location: COLORADO Slot: SLOT#05 GARCIA 21-25 (1234'FNL & 1319'FWL)  
Field: WELD COUNTY (ANADARKO) Well: GARCIA 21-25  
Facility: SEC.25-T4N-R67W Wellbore: GARCIA 21-25 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	93.093	15.00	0.00	0.00	0.00	0.00
End of Tangent	950.00	0.000	93.093	950.00	0.00	0.00	0.00	0.00
End of Build (S)	1800.00	17.000	93.093	1787.58	-6.75	125.00	2.00	125.18
End of Tangent (S)	5330.00	17.000	93.093	5163.34	-62.43	1155.56	0.00	1157.25
Drop (S)	6180.00	0.000	93.093	6000.92	-69.18	1280.56	2.00	1282.43
End of Tangent	7974.08	0.000	93.093	7795.00	-69.18	1280.56	0.00	1282.43

## Location Information

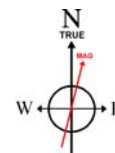
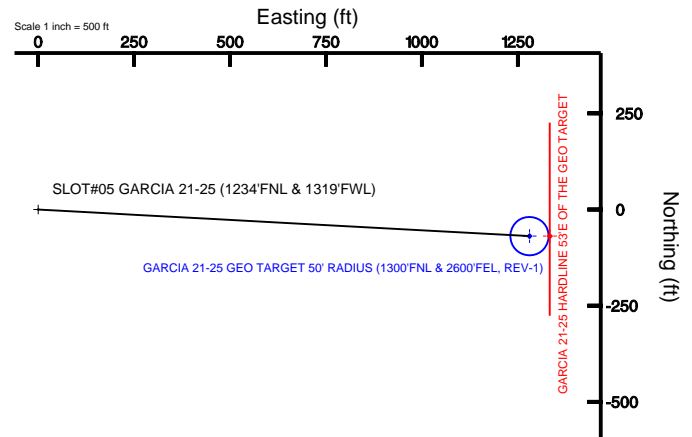
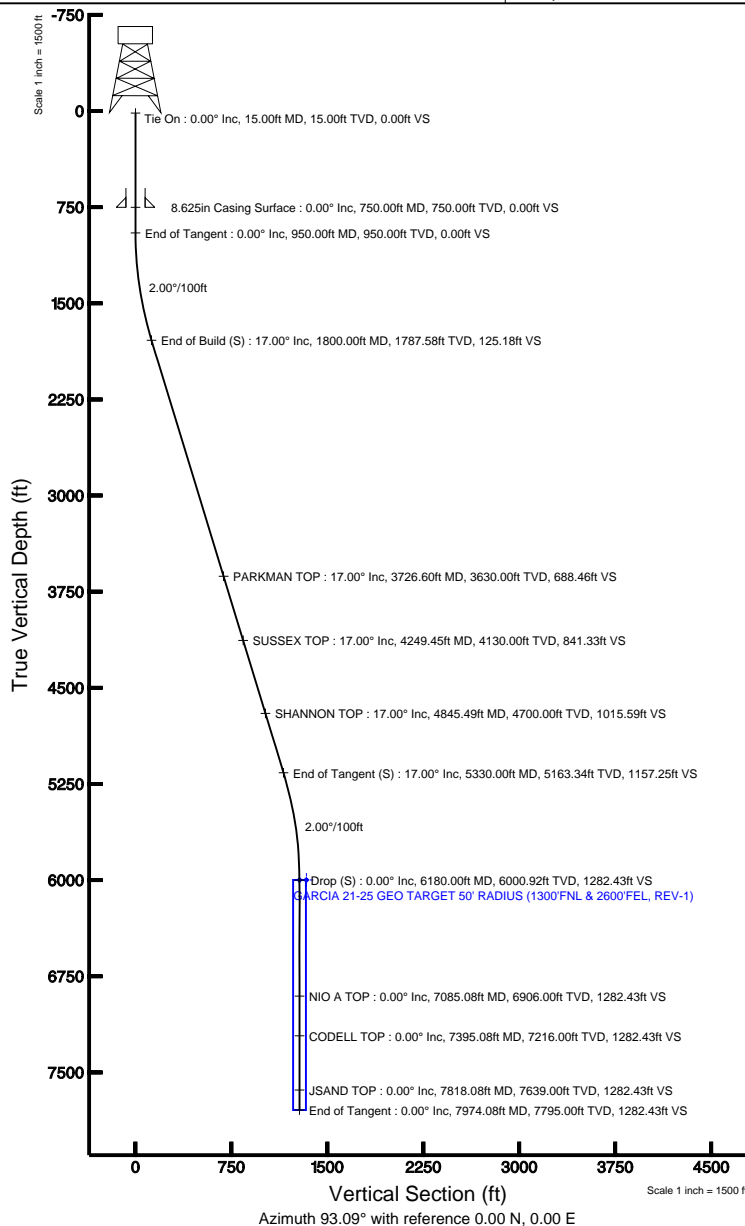
Facility Name				Grid East (USft)	Grid North (USft)	Latitude	Longitude
SEC.25-T4N-R67W				3184802.670	1344661.200	40°16'39.360"N	104°50'15.540"W
Slot	Local N (ft)	Local E (ft)	Grid East (USft)	Grid North (USft)	Latitude	Longitude	
SLOT#05 GARCIA 21-25 (1234FNL & 1319FWL)	3329.81	-1752.04	3183025.884	1347977.680	40°17'12.264"N	104°50'38.148"W	
Rig on SLOT#05 GARCIA 21-25 (1234FNL & 1319FWL) (RT) to Mud line (Facility: SEC.25-T4N-R67W)						4742ft	
Mean Sea Level to Mud line (Facility: SEC.25-T4N-R67W)						0ft	
Rig on SLOT#05 GARCIA 21-25 (1234FNL & 1319FWL) (RT) to Mean Sea Level						4742ft	

## Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (USft)	Grid North (USft)	Latitude	Longitude
GARCIA 21-25 GEO TARGET 50' RADIUS (1300'FNL & 2600'FEL, REV-1)	6000.00	-69.18	1280.56	3184306.86	1347917.97	40°17'11.580"N	104°50'21.624"W	
GARCIA 21-25 HARDLINE 53'E OF THE GEO TARGET	6000.00	-69.18	1333.56	3184359.86	1347918.37	40°17'11.580"N	104°50'20.940"W	

## Plot reference wellpath is GARCIA 21-25 (REV-A.0) PWP

True vertical depths are referenced to Rig on SLOT#05 GARCIA 21-25 (1234'FNL & 1319'FWL) (RT)  
Measured depths are referenced to Rig on SLOT#05 GARCIA 21-25 (1234'FNL & 1319'FWL) (RT)  
Rig on SLOT#05 GARCIA 21-25 (1234'FNL & 1319'FWL) (RT) to Mean Sea Level: 4742 feet  
Mean Sea Level to Mud line (Facility: SEC.25-T4N-R67W): 0 feet  
Coordinates are in feet referenced to Slot  
Grid System: NAD83 / Lambert Colorado State Planes, Northern Zone (501), US feet  
North Reference: True north  
Scale: True distance  
Depths are in feet  
Created by: cookdanm on 8/17/2009



BGGM (1945.0 to 2008.0) Dip: 67.12° Field: 53539 nT  
Magnetic North is 9.46 degrees East of True North (at 4/19/2007)

To correct azimuth from Magnetic to True add 9.46 degrees  
For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 9.46 = 99.46

# Planned Wellpath Report

GARCIA 21-25 (REV-A.0) PWP

Page 1 of 5

INTEQ

## REFERENCE WELLPATH IDENTIFICATION

Operator	ANADARKO PETROLEUM	Slot	SLOT#05 GARCIA 21-25 (1234'FNL & 1319'FWL)
Area	COLORADO	Well	GARCIA 21-25
Field	WELD COUNTY (ANADARKO)	Wellbore	GARCIA 21-25 PWB
Facility	SEC.25-T4N-R67W		

## 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	8/17/2009 at 1:18:27 PM
Convergence at slot	0.42° East	Database/Source file	WellArchitect_Denver/GARCIA_21-25_PWB.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	3329.81	-1752.04	3183025.88	1347977.68	40°17'12.264"N	104°50'38.148"W
Facility Reference Pt			3184802.67	1344661.20	40°16'39.360"N	104°50'15.540"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#05 GARCIA 21-25 (1234'FNL & 1319'FWL) (RT) to Facility Vertical Datum	4
Horizontal Reference Pt	Slot	Rig on SLOT#05 GARCIA 21-25 (1234'FNL & 1319'FWL) (RT) to Mean Sea Level	4
Vertical Reference Pt	Rig on SLOT#05 GARCIA 21-25 (1234'FNL & 1319'FWL) (RT)	Facility Vertical Datum to Mud Line (Facility)	0
MD Reference Pt	Rig on SLOT#05 GARCIA 21-25 (1234'FNL & 1319'FWL) (RT)	Section Origin	7
Field Vertical Reference	Mean Sea Level	Section Azimuth	9

# Planned Wellpath Report

GARCIA 21-25 (REV-A.0) PWP

Page 2 of 5

INTEQ

## REFERENCE WELLPATH IDENTIFICATION

Operator	ANADARKO PETROLEUM	Slot	SLOT#05 GARCIA 21-25 (1234'FNL & 1319'FWL)
Area	COLORADO	Well	GARCIA 21-25
Field	WELD COUNTY (ANADARKO)	Wellbore	GARCIA 21-25 PWB
Facility	SEC.25-T4N-R67W		

## WELLPATH DATA (92 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	93.093	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	93.093	15.00	0.00	0.00	0.00	0.00	Tie On
115.00†	0.000	93.093	115.00	0.00	0.00	0.00	0.00	
215.00†	0.000	93.093	215.00	0.00	0.00	0.00	0.00	
315.00†	0.000	93.093	315.00	0.00	0.00	0.00	0.00	
415.00†	0.000	93.093	415.00	0.00	0.00	0.00	0.00	
515.00†	0.000	93.093	515.00	0.00	0.00	0.00	0.00	
615.00†	0.000	93.093	615.00	0.00	0.00	0.00	0.00	
715.00†	0.000	93.093	715.00	0.00	0.00	0.00	0.00	
815.00†	0.000	93.093	815.00	0.00	0.00	0.00	0.00	
915.00†	0.000	93.093	915.00	0.00	0.00	0.00	0.00	
950.00	0.000	93.093	950.00	0.00	0.00	0.00	0.00	End of Tangent
1015.00†	1.300	93.093	1014.99	0.74	-0.04	0.74	2.00	
1115.00†	3.300	93.093	1114.91	4.75	-0.26	4.74	2.00	
1215.00†	5.300	93.093	1214.62	12.25	-0.66	12.23	2.00	
1315.00†	7.300	93.093	1314.01	23.22	-1.25	23.19	2.00	
1415.00†	9.300	93.093	1412.96	37.66	-2.03	37.60	2.00	
1515.00†	11.300	93.093	1511.34	55.53	-3.00	55.45	2.00	
1615.00†	13.300	93.093	1609.04	76.84	-4.15	76.72	2.00	
1715.00†	15.300	93.093	1705.94	101.54	-5.48	101.39	2.00	
1800.00	17.000	93.093	1787.58	125.18	-6.75	125.00	2.00	End of Build (S)
1815.00†	17.000	93.093	1801.93	129.56	-6.99	129.37	0.00	
1915.00†	17.000	93.093	1897.56	158.80	-8.57	158.57	0.00	
2015.00†	17.000	93.093	1993.19	188.04	-10.14	187.76	0.00	
2115.00†	17.000	93.093	2088.82	217.27	-11.72	216.96	0.00	
2215.00†	17.000	93.093	2184.45	246.51	-13.30	246.15	0.00	
2315.00†	17.000	93.093	2280.08	275.75	-14.88	275.35	0.00	
2415.00†	17.000	93.093	2375.71	304.99	-16.45	304.54	0.00	
2515.00†	17.000	93.093	2471.34	334.22	-18.03	333.74	0.00	
2615.00†	17.000	93.093	2566.97	363.46	-19.61	362.93	0.00	
2715.00†	17.000	93.093	2662.60	392.70	-21.19	392.13	0.00	
2815.00†	17.000	93.093	2758.23	421.93	-22.76	421.32	0.00	
2915.00†	17.000	93.093	2853.86	451.17	-24.34	450.52	0.00	
3015.00†	17.000	93.093	2949.49	480.41	-25.92	479.71	0.00	
3115.00†	17.000	93.093	3045.12	509.65	-27.49	508.90	0.00	
3215.00†	17.000	93.093	3140.75	538.88	-29.07	538.10	0.00	
3315.00†	17.000	93.093	3236.38	568.12	-30.65	567.29	0.00	
3415.00†	17.000	93.093	3332.02	597.36	-32.23	596.49	0.00	
3515.00†	17.000	93.093	3427.65	626.60	-33.80	625.68	0.00	
3615.00†	17.000	93.093	3523.28	655.83	-35.38	654.88	0.00	
3715.00†	17.000	93.093	3618.91	685.07	-36.96	684.07	0.00	
3726.60†	17.000	93.093	3630.00	688.46	-37.14	687.46	0.00	PARKMAN TOP
3815.00†	17.000	93.093	3714.54	714.31	-38.54	713.27	0.00	
3915.00†	17.000	93.093	3810.17	743.54	-40.11	742.46	0.00	
4015.00†	17.000	93.093	3905.80	772.78	-41.69	771.66	0.00	

# Planned Wellpath Report

GARCIA 21-25 (REV-A.0) PWP

Page 3 of 5

INTEQ

## REFERENCE WELLPATH IDENTIFICATION

Operator	ANADARKO PETROLEUM	Slot	SLOT#05 GARCIA 21-25 (1234'FNL & 1319'FWL)
Area	COLORADO	Well	GARCIA 21-25
Field	WELD COUNTY (ANADARKO)	Wellbore	GARCIA 21-25 PWB
Facility	SEC.25-T4N-R67W		

## WELLPATH DATA (92 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
4115.00†	17.000	93.093	4001.43	802.02	-43.27	800.85	0.00	
4215.00†	17.000	93.093	4097.06	831.26	-44.84	830.04	0.00	
4249.45†	17.000	93.093	4130.00	841.33	-45.39	840.10	0.00	SUSSEX TOP
4315.00†	17.000	93.093	4192.69	860.49	-46.42	859.24	0.00	
4415.00†	17.000	93.093	4288.32	889.73	-48.00	888.43	0.00	
4515.00†	17.000	93.093	4383.95	918.97	-49.58	917.63	0.00	
4615.00†	17.000	93.093	4479.58	948.20	-51.15	946.82	0.00	
4715.00†	17.000	93.093	4575.21	977.44	-52.73	976.02	0.00	
4815.00†	17.000	93.093	4670.84	1006.68	-54.31	1005.21	0.00	
4845.49†	17.000	93.093	4700.00	1015.59	-54.79	1014.11	0.00	SHANNON TOP
4915.00†	17.000	93.093	4766.47	1035.92	-55.89	1034.41	0.00	
5015.00†	17.000	93.093	4862.10	1065.15	-57.46	1063.60	0.00	
5115.00†	17.000	93.093	4957.73	1094.39	-59.04	1092.80	0.00	
5215.00†	17.000	93.093	5053.36	1123.63	-60.62	1121.99	0.00	
5315.00†	17.000	93.093	5148.99	1152.86	-62.20	1151.19	0.00	
5330.00	17.000	93.093	5163.34	1157.25	-62.43	1155.56	0.00	End of Tangent (S)
5415.00†	15.300	93.093	5244.98	1180.89	-63.71	1179.17	2.00	
5515.00†	13.300	93.093	5341.88	1205.59	-65.04	1203.83	2.00	
5615.00†	11.300	93.093	5439.58	1226.89	-66.19	1225.11	2.00	
5715.00†	9.300	93.093	5537.96	1244.77	-67.15	1242.96	2.00	
5815.00†	7.300	93.093	5636.91	1259.21	-67.93	1257.37	2.00	
5915.00†	5.300	93.093	5736.30	1270.18	-68.52	1268.33	2.00	
6015.00†	3.300	93.093	5836.01	1277.68	-68.93	1275.82	2.00	
6115.00†	1.300	93.093	5935.93	1281.69	-69.15	1279.82	2.00	
6180.00	0.000	93.093	6000.92 <sup>1</sup>	1282.43	-69.18	1280.56	2.00	Drop (S)
6215.00†	0.000	93.093	6035.92	1282.43	-69.18	1280.56	0.00	
6315.00†	0.000	93.093	6135.92	1282.43	-69.18	1280.56	0.00	
6415.00†	0.000	93.093	6235.92	1282.43	-69.18	1280.56	0.00	
6515.00†	0.000	93.093	6335.92	1282.43	-69.18	1280.56	0.00	
6615.00†	0.000	93.093	6435.92	1282.43	-69.18	1280.56	0.00	
6715.00†	0.000	93.093	6535.92	1282.43	-69.18	1280.56	0.00	
6815.00†	0.000	93.093	6635.92	1282.43	-69.18	1280.56	0.00	
6915.00†	0.000	93.093	6735.92	1282.43	-69.18	1280.56	0.00	
7015.00†	0.000	93.093	6835.92	1282.43	-69.18	1280.56	0.00	
7085.08†	0.000	93.093	6906.00	1282.43	-69.18	1280.56	0.00	NIO A TOP
7115.00†	0.000	93.093	6935.92	1282.43	-69.18	1280.56	0.00	
7215.00†	0.000	93.093	7035.92	1282.43	-69.18	1280.56	0.00	
7315.00†	0.000	93.093	7135.92	1282.43	-69.18	1280.56	0.00	
7395.08†	0.000	93.093	7216.00	1282.43	-69.18	1280.56	0.00	CODELL TOP
7415.00†	0.000	93.093	7235.92	1282.43	-69.18	1280.56	0.00	
7515.00†	0.000	93.093	7335.92	1282.43	-69.18	1280.56	0.00	
7615.00†	0.000	93.093	7435.92	1282.43	-69.18	1280.56	0.00	
7715.00†	0.000	93.093	7535.92	1282.43	-69.18	1280.56	0.00	
7815.00†	0.000	93.093	7635.92	1282.43	-69.18	1280.56	0.00	
7818.08†	0.000	93.093	7639.00	1282.43	-69.18	1280.56	0.00	JSAND TOP

# Planned Wellpath Report

GARCIA 21-25 (REV-A.0) PWP

Page 4 of 5

INTEQ

## REFERENCE WELLPATH IDENTIFICATION

Operator	ANADARKO PETROLEUM	Slot	SLOT#05 GARCIA 21-25 (1234'FNL & 1319'FWL)
Area	COLORADO	Well	GARCIA 21-25
Field	WELD COUNTY (ANADARKO)	Wellbore	GARCIA 21-25 PWB
Facility	SEC.25-T4N-R67W		

## WELLPATH DATA (92 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
7915.00†	0.000	93.093	7735.92	1282.43	-69.18	1280.56	0.00	
7974.08	0.000	93.093	7795.00	1282.43	-69.18	1280.56	0.00	End of Tangent

## HOLE & CASING SECTIONS Ref Wellbore: GARCIA 21-25 PWB Ref Wellpath: GARCIA 21-25 (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	750.00	735.00	15.00	750.00	0.00	0.00	0.00	0.00
8.625in Casing Surface	15.00	750.00	735.00	15.00	750.00	0.00	0.00	0.00	0.00
7.875in Open Hole	750.00	7974.08	7224.08	750.00	7795.00	0.00	0.00	-69.18	1280.56

## TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) GARCIA 21-25 GEO TARGET 50' RADIUS (1300'FNL & 2600'FEL, REV-1)		6000.00	-69.18	1280.56	3184306.86	1347917.97	40°17'11.580"N	104°50'21.624"W	circle
GARCIA 21-25 HARDLINE 53'E OF THE GEO TARGET		6000.00	-69.18	1333.56	3184359.86	1347918.37	40°17'11.580"N	104°50'20.940"W	point

## SURVEY PROGRAM Ref Wellbore: GARCIA 21-25 PWB Ref Wellpath: GARCIA 21-25 (REV-A.0) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
15.00	7974.08	MTC (Collar, post-2000) (Standard)		GARCIA 21-25 PWB

# Planned Wellpath Report

GARCIA 21-25 (REV-A.0) PWP

Page 5 of 5

**INTEQ**

## REFERENCE WELLPATH IDENTIFICATION

Operator	ANADARKO PETROLEUM	Slot	SLOT#05 GARCIA 21-25 (1234'FNL & 1319'FWL)
Area	COLORADO	Well	GARCIA 21-25
Field	WELD COUNTY (ANADARKO)	Wellbore	GARCIA 21-25 PWB
Facility	SEC.25-T4N-R67W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
3726.60	17.000	93.093	3630.00	PARKMAN TOP
4249.45	17.000	93.093	4130.00	SUSSEX TOP
4845.49	17.000	93.093	4700.00	SHANNON TOP
7085.08	0.000	93.093	6906.00	NIO A TOP
7395.08	0.000	93.093	7216.00	CODELL TOP
7818.08	0.000	93.093	7639.00	JSAND TOP