



ANADARKO PETROLEUM CORP.

ANADARKO COLORADO NORTHERN ZONE NAD 83

REI 17-17

REI 27-17

REI 27-17

Plan: REI 27-17 (wp01)

Standard Planning Report - Geographic

25 October, 2010





Project: ANADARKO COLORADO NORTHERN ZONE NAD 83
Site: REI 17-17
Well: REI 27-17
Wellbore: REI 27-17
Section:
SHL:
Design: REI 27-17 (wp01)
Latitude: 40° 13' 46.592 N
Longitude: 104° 41' 1.169 W
GL: 4898.0
KB: WELL @ 4898.0ft (Original Well Elev)



Weatherford®



Azimuths to True North
Magnetic North: 8.85°

Magnetic Field
Strength: 53099.2snT
Dip Angle: 66.96°
Date: 10/25/2010
Model: BGGM2010

FORMATION TOP DETAILS

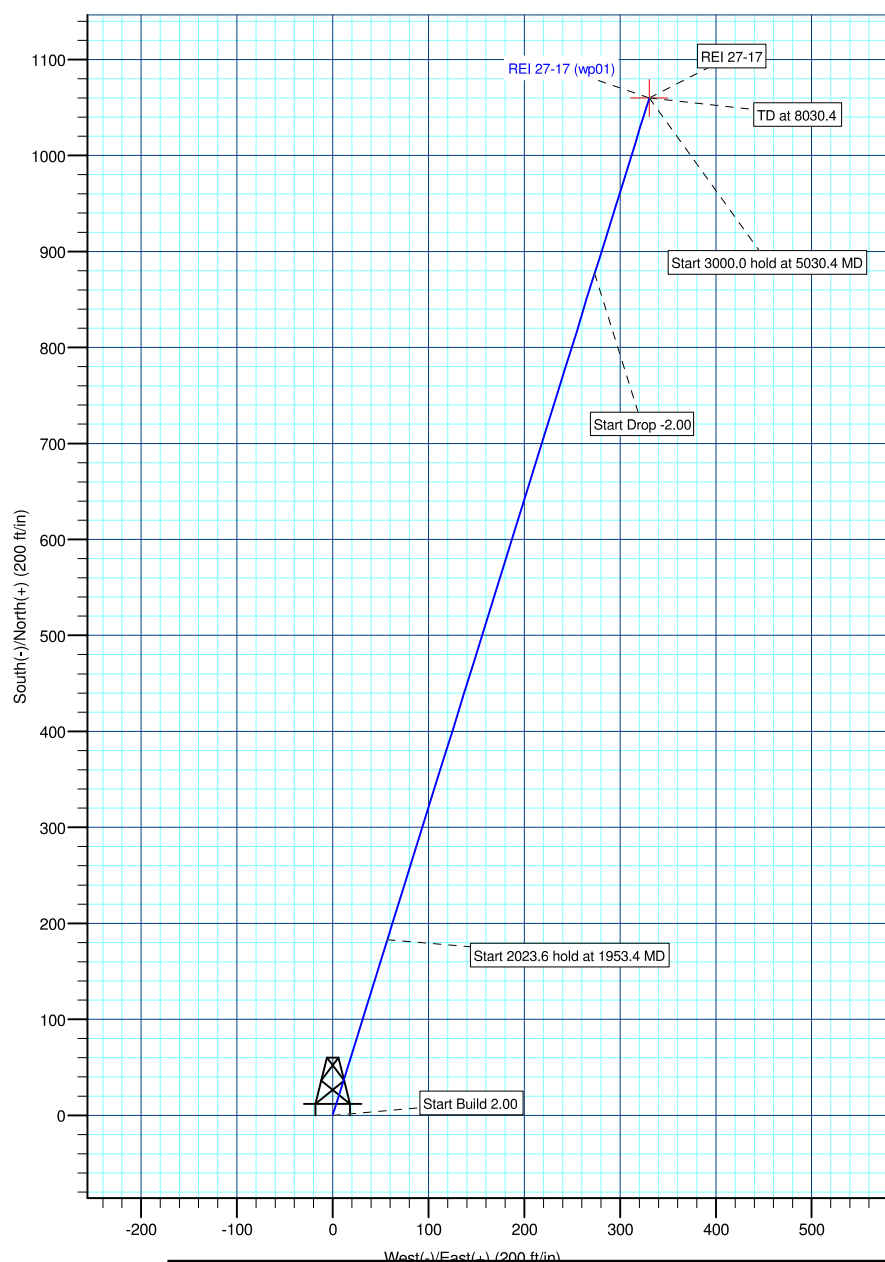
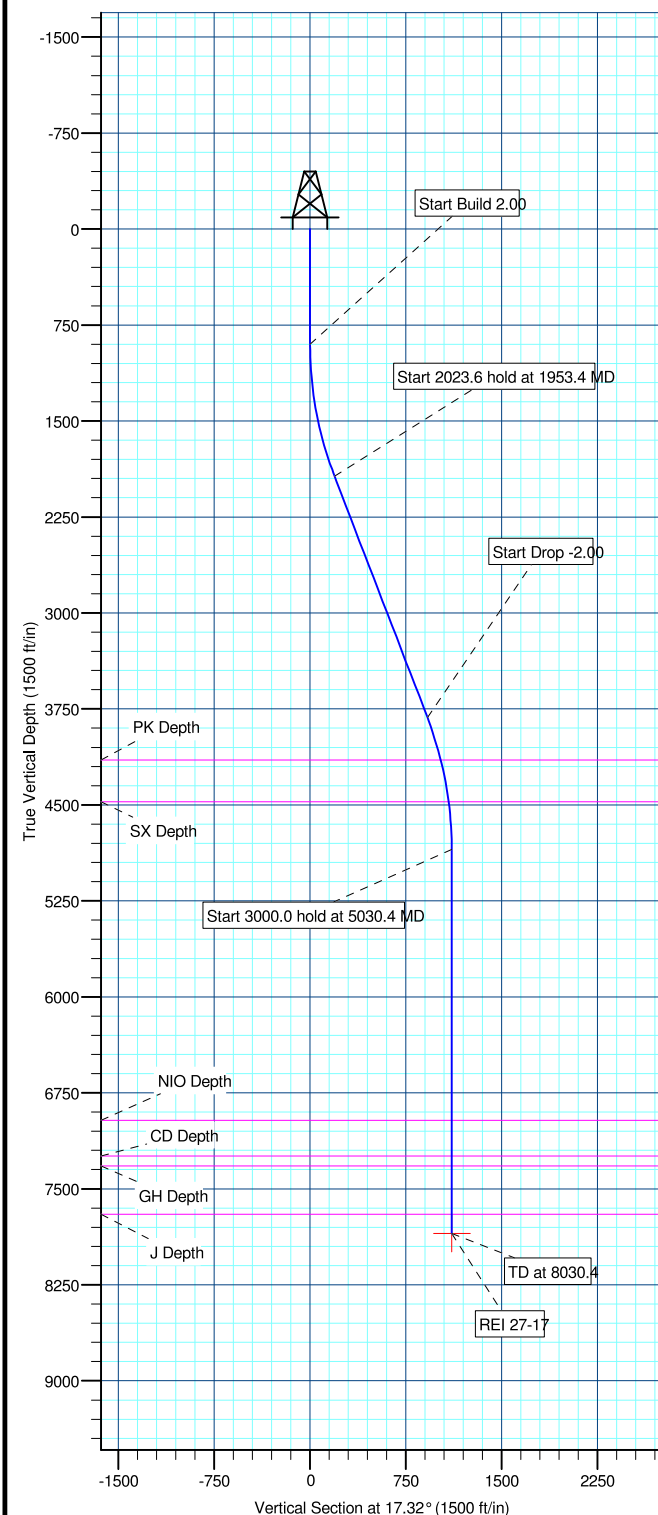
TVDPath	MDPath	Formation
4148.0	4323.3	PK Depth
4475.0	4656.4	SX Depth
6965.0	7147.4	NIO Depth
7244.0	7426.4	CD Depth
7322.0	7504.4	GH Depth
7698.0	7880.4	J Depth

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
900.0	0.00	0.00	900.0	0.0	0.0	0.00	0.00	0.0	Start Build 2.00
1953.4	21.07	17.32	1929.8	182.8	57.0	2.00	17.32	191.5	Start 2023.6 hold at 1953.4 MD
3977.0	21.07	17.32	3818.2	877.3	273.6	0.00	0.00	918.9	Start Drop -2.00
5030.4	0.00	0.00	4848.0	1060.1	330.6	2.00	180.00	1110.4	Start 3000.0 hold at 5030.4 MD
8030.4	0.00	0.00	7848.0	1060.1	330.6	0.00	0.00	1110.4	TD at 8030.4

WELL DETAILS: REI 27-17

+N/-S	+E/-W	Northing	Ground Level: Easting	4898.0 Latitude	Longitude	Slot
0.0	0.0	1327537.70	3227927.92	40° 13' 46.592 N	104° 41' 1.169 W	



Plan: REI 27-17 (wp01) (REI 27-17/REI 27-17)

Created By: Jason Daguitera Date: 10:37, October 25 2010

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well REI 27-17
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 4898.0ft (Original Well Elev)
Project:	ANADARKO COLORADO NORTHERN ZONE NAD 83	MD Reference:	WELL @ 4898.0ft (Original Well Elev)
Site:	REI 17-17	North Reference:	True
Well:	REI 27-17	Survey Calculation Method:	Minimum Curvature
Wellbore:	REI 27-17		
Design:	REI 27-17 (wp01)		

Project	ANADARKO COLORADO NORTHERN 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		REI 17-17			
Site Position:		Northing:	1,327,522.82ft	Latitude:	40° 13' 46.445 N
From:	Lat/Long	Easting:	3,227,933.36ft	Longitude:	104° 41' 1.100 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.53 °

Well	REI 27-17					
Well Position	+N/-S	14.9 ft	Northing:	1,327,537.70 ft	Latitude:	40° 13' 46.592 N
	+E/-W	-5.3 ft	Easting:	3,227,927.92 ft	Longitude:	104° 41' 1.169 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,898.0ft

Wellbore	REI 27-17				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	10/25/2010	8.85	66.96	53,099

Design	REI 27-17 (wp01)			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	17.32

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,953.4	21.07	17.32	1,929.8	182.8	57.0	2.00	2.00	0.00	17.32	
3,977.0	21.07	17.32	3,818.2	877.3	273.6	0.00	0.00	0.00	0.00	
5,030.4	0.00	0.00	4,848.0	1,060.1	330.6	2.00	-2.00	0.00	180.00	
8,030.4	0.00	0.00	7,848.0	1,060.1	330.6	0.00	0.00	0.00	0.00	REI 27-17

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well REI 27-17
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 4898.0ft (Original Well Elev)
Project:	ANADARKO COLORADO NORTHERN ZONE NAD 83	MD Reference:	WELL @ 4898.0ft (Original Well Elev)
Site:	REI 17-17	North Reference:	True
Well:	REI 27-17	Survey Calculation Method:	Minimum Curvature
Wellbore:	REI 27-17		
Design:	REI 27-17 (wp01)		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	1,327,537.70	3,227,927.92	40° 13' 46.592 N	104° 41' 1.169 W
100.0	0.00	0.00	100.0	0.0	0.0	1,327,537.70	3,227,927.92	40° 13' 46.592 N	104° 41' 1.169 W
200.0	0.00	0.00	200.0	0.0	0.0	1,327,537.70	3,227,927.92	40° 13' 46.592 N	104° 41' 1.169 W
300.0	0.00	0.00	300.0	0.0	0.0	1,327,537.70	3,227,927.92	40° 13' 46.592 N	104° 41' 1.169 W
400.0	0.00	0.00	400.0	0.0	0.0	1,327,537.70	3,227,927.92	40° 13' 46.592 N	104° 41' 1.169 W
500.0	0.00	0.00	500.0	0.0	0.0	1,327,537.70	3,227,927.92	40° 13' 46.592 N	104° 41' 1.169 W
600.0	0.00	0.00	600.0	0.0	0.0	1,327,537.70	3,227,927.92	40° 13' 46.592 N	104° 41' 1.169 W
700.0	0.00	0.00	700.0	0.0	0.0	1,327,537.70	3,227,927.92	40° 13' 46.592 N	104° 41' 1.169 W
750.0	0.00	0.00	750.0	0.0	0.0	1,327,537.70	3,227,927.92	40° 13' 46.592 N	104° 41' 1.169 W
9 5/8"									
800.0	0.00	0.00	800.0	0.0	0.0	1,327,537.70	3,227,927.92	40° 13' 46.592 N	104° 41' 1.169 W
900.0	0.00	0.00	900.0	0.0	0.0	1,327,537.70	3,227,927.92	40° 13' 46.592 N	104° 41' 1.169 W
Start Build 2.00									
1,000.0	2.00	17.32	1,000.0	1.7	0.5	1,327,539.37	3,227,928.42	40° 13' 46.609 N	104° 41' 1.162 W
1,100.0	4.00	17.32	1,099.8	6.7	2.1	1,327,544.38	3,227,929.93	40° 13' 46.658 N	104° 41' 1.142 W
1,200.0	6.00	17.32	1,199.5	15.0	4.7	1,327,552.72	3,227,932.45	40° 13' 46.740 N	104° 41' 1.109 W
1,300.0	8.00	17.32	1,298.7	26.6	8.3	1,327,564.39	3,227,935.97	40° 13' 46.855 N	104° 41' 1.062 W
1,400.0	10.00	17.32	1,397.5	41.5	13.0	1,327,579.37	3,227,940.49	40° 13' 47.003 N	104° 41' 1.002 W
1,500.0	12.00	17.32	1,495.6	59.8	18.6	1,327,597.63	3,227,946.00	40° 13' 47.183 N	104° 41' 0.929 W
1,600.0	14.00	17.32	1,593.1	81.2	25.3	1,327,619.17	3,227,952.50	40° 13' 47.395 N	104° 41' 0.842 W
1,700.0	16.00	17.32	1,689.6	105.9	33.0	1,327,643.94	3,227,959.98	40° 13' 47.639 N	104° 41' 0.743 W
1,800.0	18.00	17.32	1,785.3	133.9	41.7	1,327,671.93	3,227,968.42	40° 13' 47.915 N	104° 41' 0.631 W
1,900.0	20.00	17.32	1,879.8	164.9	51.4	1,327,703.10	3,227,977.83	40° 13' 48.222 N	104° 41' 0.506 W
1,953.4	21.07	17.32	1,929.8	182.8	57.0	1,327,721.03	3,227,983.24	40° 13' 48.399 N	104° 41' 0.434 W
Start 2023.6 hold at 1953.4 MD									
2,000.0	21.07	17.32	1,973.3	198.8	62.0	1,327,737.07	3,227,988.08	40° 13' 48.557 N	104° 41' 0.369 W
2,100.0	21.07	17.32	2,066.6	233.1	72.7	1,327,771.48	3,227,998.46	40° 13' 48.896 N	104° 41' 0.231 W
2,200.0	21.07	17.32	2,159.9	267.4	83.4	1,327,805.90	3,228,008.85	40° 13' 49.235 N	104° 41' 0.093 W
2,300.0	21.07	17.32	2,253.3	301.8	94.1	1,327,840.31	3,228,019.23	40° 13' 49.574 N	104° 40' 59.956 W
2,400.0	21.07	17.32	2,346.6	336.1	104.8	1,327,874.73	3,228,029.62	40° 13' 49.913 N	104° 40' 59.818 W
2,500.0	21.07	17.32	2,439.9	370.4	115.5	1,327,909.14	3,228,040.00	40° 13' 50.253 N	104° 40' 59.680 W
2,600.0	21.07	17.32	2,533.2	404.7	126.2	1,327,943.55	3,228,050.39	40° 13' 50.592 N	104° 40' 59.542 W
2,700.0	21.07	17.32	2,626.5	439.0	136.9	1,327,977.97	3,228,060.77	40° 13' 50.931 N	104° 40' 59.404 W
2,800.0	21.07	17.32	2,719.8	473.3	147.6	1,328,012.38	3,228,071.16	40° 13' 51.270 N	104° 40' 59.266 W
2,900.0	21.07	17.32	2,813.1	507.7	158.3	1,328,046.80	3,228,081.54	40° 13' 51.609 N	104° 40' 59.128 W
3,000.0	21.07	17.32	2,906.5	542.0	169.0	1,328,081.21	3,228,091.93	40° 13' 51.948 N	104° 40' 58.990 W
3,100.0	21.07	17.32	2,999.8	576.3	179.7	1,328,115.63	3,228,102.31	40° 13' 52.287 N	104° 40' 58.852 W
3,200.0	21.07	17.32	3,093.1	610.6	190.4	1,328,150.04	3,228,112.70	40° 13' 52.627 N	104° 40' 58.714 W
3,300.0	21.07	17.32	3,186.4	644.9	201.1	1,328,184.45	3,228,123.08	40° 13' 52.966 N	104° 40' 58.576 W
3,400.0	21.07	17.32	3,279.7	679.2	211.8	1,328,218.87	3,228,133.47	40° 13' 53.305 N	104° 40' 58.438 W
3,500.0	21.07	17.32	3,373.0	713.6	222.5	1,328,253.28	3,228,143.85	40° 13' 53.644 N	104° 40' 58.300 W
3,600.0	21.07	17.32	3,466.4	747.9	233.2	1,328,287.70	3,228,154.24	40° 13' 53.983 N	104° 40' 58.162 W
3,700.0	21.07	17.32	3,559.7	782.2	243.9	1,328,322.11	3,228,164.62	40° 13' 54.322 N	104° 40' 58.024 W
3,800.0	21.07	17.32	3,653.0	816.5	254.6	1,328,356.52	3,228,175.01	40° 13' 54.661 N	104° 40' 57.886 W
3,900.0	21.07	17.32	3,746.3	850.8	265.3	1,328,390.94	3,228,185.39	40° 13' 55.001 N	104° 40' 57.748 W
3,977.0	21.07	17.32	3,818.2	877.3	273.6	1,328,417.45	3,228,193.39	40° 13' 55.262 N	104° 40' 57.641 W
Start Drop -2.00									
4,000.0	20.61	17.32	3,839.7	885.1	276.0	1,328,425.27	3,228,195.75	40° 13' 55.339 N	104° 40' 57.610 W
4,100.0	18.61	17.32	3,933.8	917.1	286.0	1,328,457.40	3,228,205.45	40° 13' 55.655 N	104° 40' 57.481 W
4,200.0	16.61	17.32	4,029.2	946.0	295.0	1,328,486.36	3,228,214.19	40° 13' 55.941 N	104° 40' 57.365 W
4,300.0	14.61	17.32	4,125.5	971.7	303.0	1,328,512.11	3,228,221.96	40° 13' 56.195 N	104° 40' 57.262 W
4,323.3	14.14	17.32	4,148.0	977.2	304.7	1,328,517.64	3,228,223.63	40° 13' 56.249 N	104° 40' 57.240 W
PK Depth									

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well REI 27-17
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 4898.0ft (Original Well Elev)
Project:	ANADARKO COLORADO NORTHERN ZONE NAD 83	MD Reference:	WELL @ 4898.0ft (Original Well Elev)
Site:	REI 17-17	North Reference:	True
Well:	REI 27-17	Survey Calculation Method:	Minimum Curvature
Wellbore:	REI 27-17		
Design:	REI 27-17 (wp01)		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
4,400.0	12.61	17.32	4,222.7	994.1	310.0	1,328,534.64	3,228,228.76	40° 13' 56.417 N	104° 40' 57.172 W
4,500.0	10.61	17.32	4,320.6	1,013.3	316.0	1,328,553.90	3,228,234.57	40° 13' 56.606 N	104° 40' 57.094 W
4,600.0	8.61	17.32	4,419.2	1,029.3	321.0	1,328,569.88	3,228,239.39	40° 13' 56.764 N	104° 40' 57.030 W
4,656.4	7.48	17.32	4,475.0	1,036.8	323.3	1,328,577.43	3,228,241.67	40° 13' 56.838 N	104° 40' 57.000 W
SX Depth									
4,700.0	6.61	17.32	4,518.3	1,041.9	324.9	1,328,582.56	3,228,243.22	40° 13' 56.889 N	104° 40' 56.979 W
4,800.0	4.61	17.32	4,617.8	1,051.2	327.8	1,328,591.91	3,228,246.04	40° 13' 56.981 N	104° 40' 56.942 W
4,900.0	2.61	17.32	4,717.6	1,057.2	329.7	1,328,597.94	3,228,247.86	40° 13' 57.040 N	104° 40' 56.918 W
5,000.0	0.61	17.32	4,817.6	1,059.9	330.5	1,328,600.62	3,228,248.67	40° 13' 57.067 N	104° 40' 56.907 W
5,030.4	0.00	0.00	4,848.0	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
Start 3000.0 hold at 5030.4 MD									
5,100.0	0.00	0.00	4,917.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
5,200.0	0.00	0.00	5,017.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
5,300.0	0.00	0.00	5,117.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
5,400.0	0.00	0.00	5,217.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
5,500.0	0.00	0.00	5,317.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
5,600.0	0.00	0.00	5,417.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
5,700.0	0.00	0.00	5,517.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
5,800.0	0.00	0.00	5,617.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
5,900.0	0.00	0.00	5,717.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
6,000.0	0.00	0.00	5,817.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
6,100.0	0.00	0.00	5,917.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
6,200.0	0.00	0.00	6,017.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
6,300.0	0.00	0.00	6,117.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
6,400.0	0.00	0.00	6,217.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
6,500.0	0.00	0.00	6,317.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
6,600.0	0.00	0.00	6,417.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
6,700.0	0.00	0.00	6,517.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
6,800.0	0.00	0.00	6,617.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
6,900.0	0.00	0.00	6,717.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
7,000.0	0.00	0.00	6,817.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
7,100.0	0.00	0.00	6,917.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
7,147.4	0.00	0.00	6,965.0	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
NIO Depth									
7,200.0	0.00	0.00	7,017.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
7,300.0	0.00	0.00	7,117.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
7,400.0	0.00	0.00	7,217.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
7,426.4	0.00	0.00	7,244.0	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
CD Depth									
7,500.0	0.00	0.00	7,317.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
7,504.4	0.00	0.00	7,322.0	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
GH Depth									
7,600.0	0.00	0.00	7,417.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
7,700.0	0.00	0.00	7,517.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
7,800.0	0.00	0.00	7,617.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
7,880.4	0.00	0.00	7,698.0	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
J Depth									
7,900.0	0.00	0.00	7,717.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
8,000.0	0.00	0.00	7,817.6	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
8,030.4	0.00	0.00	7,848.0	1,060.1	330.6	1,328,600.78	3,228,248.71	40° 13' 57.068 N	104° 40' 56.906 W
TD at 8030.4 - REI 27-17									

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well REI 27-17
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 4898.0ft (Original Well Elev)
Project:	ANADARKO COLORADO NORTHERN ZONE NAD 83	MD Reference:	WELL @ 4898.0ft (Original Well Elev)
Site:	REI 17-17	North Reference:	True
Well:	REI 27-17	Survey Calculation Method:	Minimum Curvature
Wellbore:	REI 27-17		
Design:	REI 27-17 (wp01)		

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
750.0	750.0	9 5/8"	9-5/8	12-1/4

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
7,504.4	7,322.0	GH Depth			
4,656.4	4,475.0	SX Depth			
7,880.4	7,698.0	J Depth			
7,147.4	6,965.0	NIO Depth			
4,323.3	4,148.0	PK Depth			
7,426.4	7,244.0	CD Depth			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
900.0	900.0	0.0	0.0	Start Build 2.00
1,953.4	1,929.8	182.8	57.0	Start 2023.6 hold at 1953.4 MD
3,977.0	3,818.2	877.3	273.6	Start Drop -2.00
5,030.4	4,848.0	1,060.1	330.6	Start 3000.0 hold at 5030.4 MD
8,030.4	7,848.0	1,060.1	330.6	TD at 8030.4