



ANADARKO PETROLEUM CORP.

ANADARKO COLORADO NORTHERN ZONE NAD 83

WELD_WASTE 11-21

WASTE 12-21

WASTE 12-21

Plan: WASTE 12-21 (wp01)

Standard Planning Report

05 October, 2010





Project: ANADARKO COLORADO NORTHERN ZONE NAD 83
 Site: WELD_WASTE 11-21
 Well: WASTE 12-21
 Wellbore: WASTE 12-21
 Section:
 SHL:
 Design: WASTE 12-21 (wp01)
 Latitude: 40° 2' 5.438 N
 Longitude: 105° 0' 40.054 W
 GL: 5258.0
 KB: WELL @ 5258.0ft (Original Well Elev)



Weatherford



Azimuths to True North
 Magnetic North: 9.02°
 Magnetic Field
 Strength: 52964.0nT
 Dip Angle: 66.75°
 Date: 10/5/2010
 Model: BGGM2010

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4308.0	4596.8	PK
4818.0	5108.9	SX
7585.0	7875.9	NIO
8008.0	8298.9	CD
8083.0	8373.9	GH
8441.0	8731.9	J

CASING DETAILS

TVD	MD	Name	Size
950.0	955.7	9 5/8"	9-5/8

SECTION DETAILS

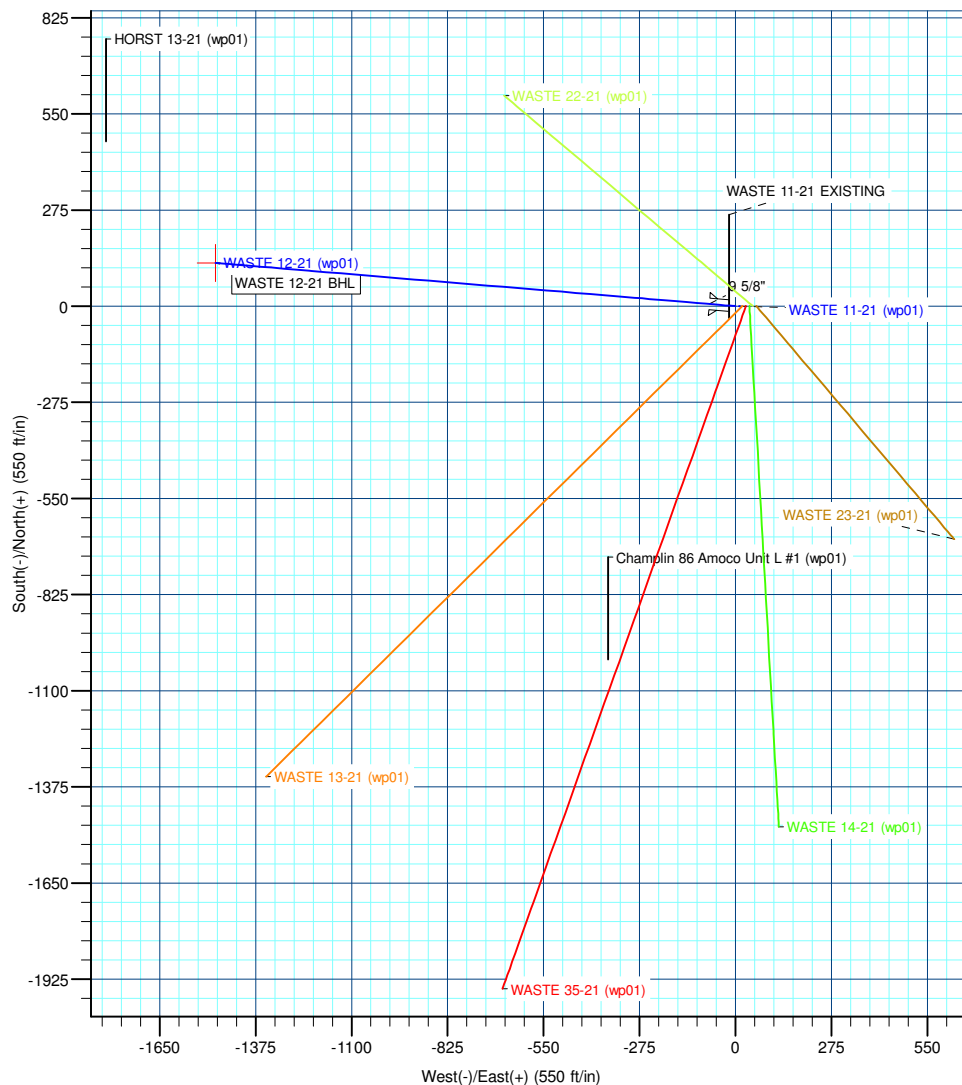
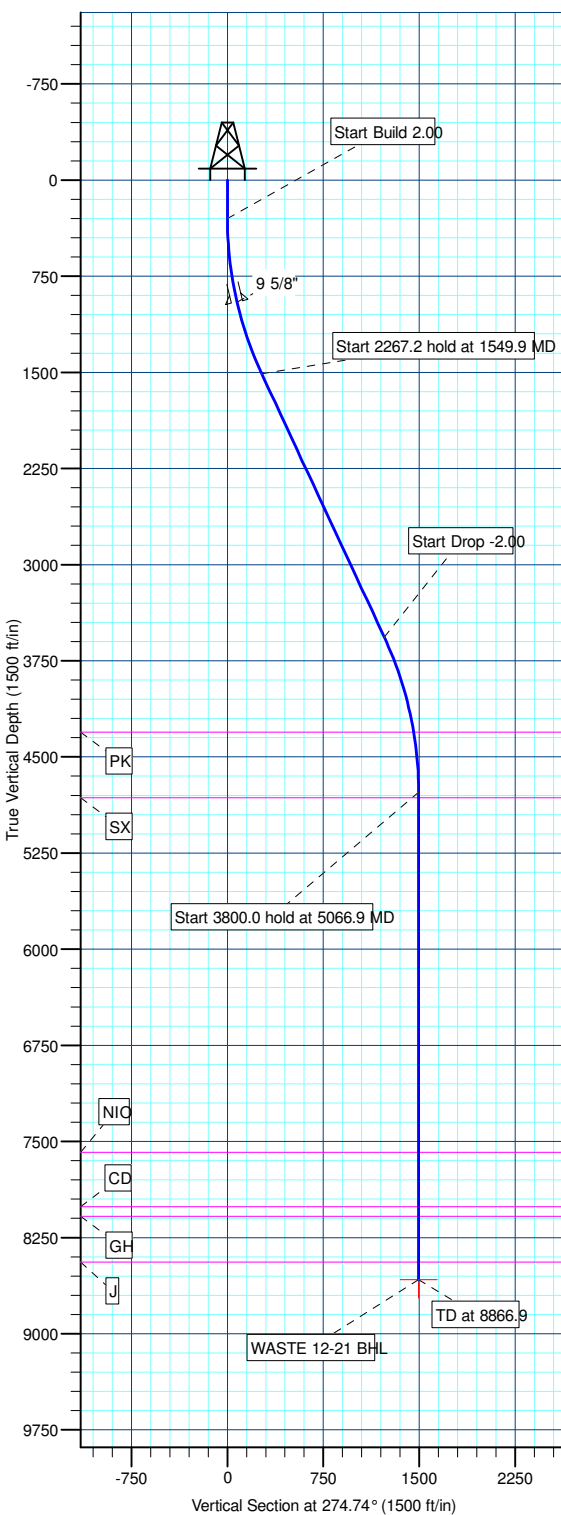
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.0	Start Build 2.00
1549.9	25.00	274.74	1510.6	22.2	-267.4	2.00	274.74	268.4	Start 2267.2 hold at 1549.9 MD
3817.1	25.00	274.74	3565.4	101.4	-1222.2	0.00	0.00	1226.4	Start Drop -2.00
5066.9	0.00	0.00	4776.0	123.5	-1489.7	2.00	180.00	1494.8	Start 3800.0 hold at 5066.9 MD
8866.9	0.00	0.00	8576.0	123.5	-1489.7	0.00	0.00	1494.8	TD at 8866.9

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

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
WASTE 12-21 BHL	8576.0	123.5	-1489.7	40° 2' 6.659 N	105° 0' 59.206 W	Point

WELL DETAILS: WASTE 12-21

+N/-S	+E/-W	Northing	Ground Level: Easting	5258.0 Latitude	Longitude	Slot
0.0	0.0	1255916.95	3136889.14	40° 2' 5.438 N	105° 0' 40.054 W	



Plan: WASTE 12-21 (wp01) (WASTE 12-21/WASTE 12-21)

Created By: Jason Daguitera Date: 17:02, October 05 2010

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well WASTE 12-21
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 5258.0ft (Original Well Elev)
Project:	ANADARKO COLORADO NORTHERN ZONE NAD 83	MD Reference:	WELL @ 5258.0ft (Original Well Elev)
Site:	WELD_WASTE 11-21	North Reference:	True
Well:	WASTE 12-21	Survey Calculation Method:	Minimum Curvature
Wellbore:	WASTE 12-21		
Design:	WASTE 12-21 (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						WELD_WASTE 11-21											
Site Position:			Northing:			1,255,917.01 ft			Latitude:			40° 2' 5.438 N					
From:			Lat/Long			Easting:			3,136,898.94 ft			Longitude:			105° 0' 39.928 W		
Position Uncertainty:			0.0 ft			Slot Radius:			"			Grid Convergence:			0.32 °		

Well	WASTE 12-21					
Well Position	+N/-S	0.0 ft	Northing:	1,255,916.95 ft	Latitude:	40° 2' 5.438 N
	+E/-W	-9.8 ft	Easting:	3,136,889.14 ft	Longitude:	105° 0' 40.054 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,258.0 ft

Wellbore	WASTE 12-21				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	10/5/2010	9.02	66.75	52,964

Design	WASTE 12-21 (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	274.74

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	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,549.9	25.00	274.74	1,510.6	22.2	-267.4	2.00	2.00	0.00	274.74	
3,817.1	25.00	274.74	3,565.4	101.4	-1,222.2	0.00	0.00	0.00	0.00	
5,066.9	0.00	0.00	4,776.0	123.5	-1,489.7	2.00	-2.00	0.00	180.00	
8,866.9	0.00	0.00	8,576.0	123.5	-1,489.7	0.00	0.00	0.00	0.00	WASTE 12-21 BHL

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well WASTE 12-21
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 5258.0ft (Original Well Elev)
Project:	ANADARKO COLORADO NORTHERN ZONE NAD 83	MD Reference:	WELL @ 5258.0ft (Original Well Elev)
Site:	WELD_WASTE 11-21	North Reference:	True
Well:	WASTE 12-21	Survey Calculation Method:	Minimum Curvature
Wellbore:	WASTE 12-21		
Design:	WASTE 12-21 (wp01)		

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 2.00									
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	2.00	274.74	400.0	0.1	-1.7	1.7	2.00	2.00	0.00
500.0	4.00	274.74	499.8	0.6	-7.0	7.0	2.00	2.00	0.00
600.0	6.00	274.74	599.5	1.3	-15.6	15.7	2.00	2.00	0.00
700.0	8.00	274.74	698.7	2.3	-27.8	27.9	2.00	2.00	0.00
800.0	10.00	274.74	797.5	3.6	-43.4	43.5	2.00	2.00	0.00
900.0	12.00	274.74	895.6	5.2	-62.4	62.6	2.00	2.00	0.00
9 5/8"									
955.7	13.11	274.74	950.0	6.2	-74.5	74.7	2.00	2.00	0.00
1,000.0	14.00	274.74	993.1	7.0	-84.8	85.1	2.00	2.00	0.00
1,100.0	16.00	274.74	1,089.6	9.2	-110.6	111.0	2.00	2.00	0.00
1,200.0	18.00	274.74	1,185.3	11.6	-139.7	140.2	2.00	2.00	0.00
1,300.0	20.00	274.74	1,279.8	14.3	-172.2	172.8	2.00	2.00	0.00
1,400.0	22.00	274.74	1,373.2	17.2	-207.9	208.6	2.00	2.00	0.00
1,500.0	24.00	274.74	1,465.2	20.5	-246.8	247.7	2.00	2.00	0.00
Start 2267.2 hold at 1549.9 MD									
1,549.9	25.00	274.74	1,510.6	22.2	-267.4	268.4	2.00	2.00	0.00
1,600.0	25.00	274.74	1,556.0	23.9	-288.5	289.5	0.00	0.00	0.00
1,700.0	25.00	274.74	1,646.7	27.4	-330.7	331.8	0.00	0.00	0.00
1,800.0	25.00	274.74	1,737.3	30.9	-372.8	374.1	0.00	0.00	0.00
1,900.0	25.00	274.74	1,827.9	34.4	-414.9	416.3	0.00	0.00	0.00
2,000.0	25.00	274.74	1,918.6	37.9	-457.0	458.6	0.00	0.00	0.00
2,100.0	25.00	274.74	2,009.2	41.4	-499.1	500.8	0.00	0.00	0.00
2,200.0	25.00	274.74	2,099.8	44.9	-541.2	543.1	0.00	0.00	0.00
2,300.0	25.00	274.74	2,190.5	48.4	-583.3	585.3	0.00	0.00	0.00
2,400.0	25.00	274.74	2,281.1	51.9	-625.5	627.6	0.00	0.00	0.00
2,500.0	25.00	274.74	2,371.7	55.4	-667.6	669.9	0.00	0.00	0.00
2,600.0	25.00	274.74	2,462.4	58.9	-709.7	712.1	0.00	0.00	0.00
2,700.0	25.00	274.74	2,553.0	62.3	-751.8	754.4	0.00	0.00	0.00
2,800.0	25.00	274.74	2,643.6	65.8	-793.9	796.6	0.00	0.00	0.00
2,900.0	25.00	274.74	2,734.3	69.3	-836.0	838.9	0.00	0.00	0.00
3,000.0	25.00	274.74	2,824.9	72.8	-878.1	881.1	0.00	0.00	0.00
3,100.0	25.00	274.74	2,915.5	76.3	-920.2	923.4	0.00	0.00	0.00
3,200.0	25.00	274.74	3,006.2	79.8	-962.4	965.7	0.00	0.00	0.00
3,300.0	25.00	274.74	3,096.8	83.3	-1,004.5	1,007.9	0.00	0.00	0.00
3,400.0	25.00	274.74	3,187.4	86.8	-1,046.6	1,050.2	0.00	0.00	0.00
3,500.0	25.00	274.74	3,278.1	90.3	-1,088.7	1,092.4	0.00	0.00	0.00
3,600.0	25.00	274.74	3,368.7	93.8	-1,130.8	1,134.7	0.00	0.00	0.00
3,700.0	25.00	274.74	3,459.3	97.3	-1,172.9	1,176.9	0.00	0.00	0.00
3,800.0	25.00	274.74	3,549.9	100.8	-1,215.0	1,219.2	0.00	0.00	0.00
Start Drop -2.00									
3,817.1	25.00	274.74	3,565.4	101.4	-1,222.2	1,226.4	0.00	0.00	0.00
3,900.0	23.34	274.74	3,641.1	104.2	-1,256.1	1,260.4	2.00	-2.00	0.00
4,000.0	21.34	274.74	3,733.6	107.3	-1,293.9	1,298.4	2.00	-2.00	0.00
4,100.0	19.34	274.74	3,827.3	110.2	-1,328.6	1,333.1	2.00	-2.00	0.00
4,200.0	17.34	274.74	3,922.2	112.8	-1,359.9	1,364.6	2.00	-2.00	0.00
4,300.0	15.34	274.74	4,018.2	115.1	-1,388.0	1,392.7	2.00	-2.00	0.00
4,400.0	13.34	274.74	4,115.1	117.2	-1,412.6	1,417.5	2.00	-2.00	0.00
4,500.0	11.34	274.74	4,212.8	118.9	-1,433.9	1,438.9	2.00	-2.00	0.00

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Project:	ANADARKO COLORADO NORTHERN ZONE NAD 83	MD Reference:	WELL @ 5258.0ft (Original Well Elev)
Site:	WELD_WASTE 11-21	North Reference:	True
Well:	WASTE 12-21	Survey Calculation Method:	Minimum Curvature
Wellbore:	WASTE 12-21		
Design:	WASTE 12-21 (wp01)		

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)
PK									
4,596.8	9.40	274.74	4,308.0	120.4	-1,451.3	1,456.3	2.00	-2.00	0.00
4,600.0	9.34	274.74	4,311.1	120.4	-1,451.8	1,456.8	2.00	-2.00	0.00
4,700.0	7.34	274.74	4,410.1	121.6	-1,466.3	1,471.3	2.00	-2.00	0.00
4,800.0	5.34	274.74	4,509.5	122.5	-1,477.3	1,482.3	2.00	-2.00	0.00
4,900.0	3.34	274.74	4,609.2	123.1	-1,484.8	1,489.9	2.00	-2.00	0.00
5,000.0	1.34	274.74	4,709.1	123.5	-1,488.9	1,494.0	2.00	-2.00	0.00
Start 3800.0 hold at 5066.9 MD									
5,066.9	0.00	0.00	4,776.0	123.5	-1,489.7	1,494.8	2.00	-2.00	127.40
5,100.0	0.00	0.00	4,809.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
SX									
5,108.9	0.00	0.00	4,818.0	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
5,200.0	0.00	0.00	4,909.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
5,300.0	0.00	0.00	5,009.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
5,400.0	0.00	0.00	5,109.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
5,500.0	0.00	0.00	5,209.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
5,600.0	0.00	0.00	5,309.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
5,700.0	0.00	0.00	5,409.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
5,800.0	0.00	0.00	5,509.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
5,900.0	0.00	0.00	5,609.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
6,000.0	0.00	0.00	5,709.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
6,100.0	0.00	0.00	5,809.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
6,200.0	0.00	0.00	5,909.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
6,300.0	0.00	0.00	6,009.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
6,400.0	0.00	0.00	6,109.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
6,500.0	0.00	0.00	6,209.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
6,600.0	0.00	0.00	6,309.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
6,700.0	0.00	0.00	6,409.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
6,800.0	0.00	0.00	6,509.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
6,900.0	0.00	0.00	6,609.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
7,000.0	0.00	0.00	6,709.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
7,100.0	0.00	0.00	6,809.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
7,200.0	0.00	0.00	6,909.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
7,300.0	0.00	0.00	7,009.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
7,400.0	0.00	0.00	7,109.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
7,500.0	0.00	0.00	7,209.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
7,600.0	0.00	0.00	7,309.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
7,700.0	0.00	0.00	7,409.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
7,800.0	0.00	0.00	7,509.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
NIO									
7,875.9	0.00	0.00	7,585.0	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
7,900.0	0.00	0.00	7,609.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
8,000.0	0.00	0.00	7,709.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
8,100.0	0.00	0.00	7,809.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
8,200.0	0.00	0.00	7,909.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
CD									
8,298.9	0.00	0.00	8,008.0	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
8,300.0	0.00	0.00	8,009.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
GH									
8,373.9	0.00	0.00	8,083.0	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
8,400.0	0.00	0.00	8,109.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00
8,500.0	0.00	0.00	8,209.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well WASTE 12-21
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 5258.0ft (Original Well Elev)
Project:	ANADARKO COLORADO NORTHERN ZONE NAD 83	MD Reference:	WELL @ 5258.0ft (Original Well Elev)
Site:	WELD_WASTE 11-21	North Reference:	True
Well:	WASTE 12-21	Survey Calculation Method:	Minimum Curvature
Wellbore:	WASTE 12-21		
Design:	WASTE 12-21 (wp01)		

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)	
8,600.0	0.00	0.00	8,309.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00	
8,700.0	0.00	0.00	8,409.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00	
J										
8,731.9	0.00	0.00	8,441.0	123.5	-1,489.7	1,494.8	0.00	0.00	0.00	
8,800.0	0.00	0.00	8,509.1	123.5	-1,489.7	1,494.8	0.00	0.00	0.00	
TD at 8866.9										
8,866.9	0.00	0.00	8,576.0	123.5	-1,489.7	1,494.8	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										
WASTE 12-21 BHL	0.00	0.00	8,576.0	123.5	-1,489.7	1,256,032.27	3,135,398.83	40° 2' 6.659 N	105° 0' 59.206 W	
- plan hits target center										
- Point										

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")		
955.7	950.0	9 5/8"	9-5/8	12-1/4		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,596.8	4,308.0	PK				
8,731.9	8,441.0	J				
5,108.9	4,818.0	SX				
8,373.9	8,083.0	GH				
8,298.9	8,008.0	CD				
7,875.9	7,585.0	NIO				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment	
300.0	300.0	0.0	0.0	Start Build 2.00	
1,549.9	1,510.6	22.2	-267.4	Start 2267.2 hold at 1549.9 MD	
3,817.1	3,565.4	101.4	-1,222.2	Start Drop -2.00	
5,066.9	4,776.0	123.5	-1,489.7	Start 3800.0 hold at 5066.9 MD	
8,866.9	8,576.0	123.5	-1,489.7	TD at 8866.9	



ANADARKO PETROLEUM CORP.

**ANADARKO COLORADO NORTHERN ZONE NAD 83
WELD_WASTE 11-21
WASTE 12-21**

**WASTE 12-21
WASTE 12-21 (wp01)**

Anticollision Summary Report

05 October, 2010



Company:	ANADARKO PETROLEUM CORP.	Local Co-ordinate Reference:	Well WASTE 12-21
Project:	ANADARKO COLORADO NORTHERN ZONE NAD 83	TVD Reference:	WELL @ 5258.0ft (Original Well Elev)
Reference Site:	WELD_WASTE 11-21	MD Reference:	WELL @ 5258.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	WASTE 12-21	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	WASTE 12-21	Database:	EDM 2003.21 Single User Db
Reference Design:	WASTE 12-21 (wp01)	Offset TVD Reference:	Offset Datum

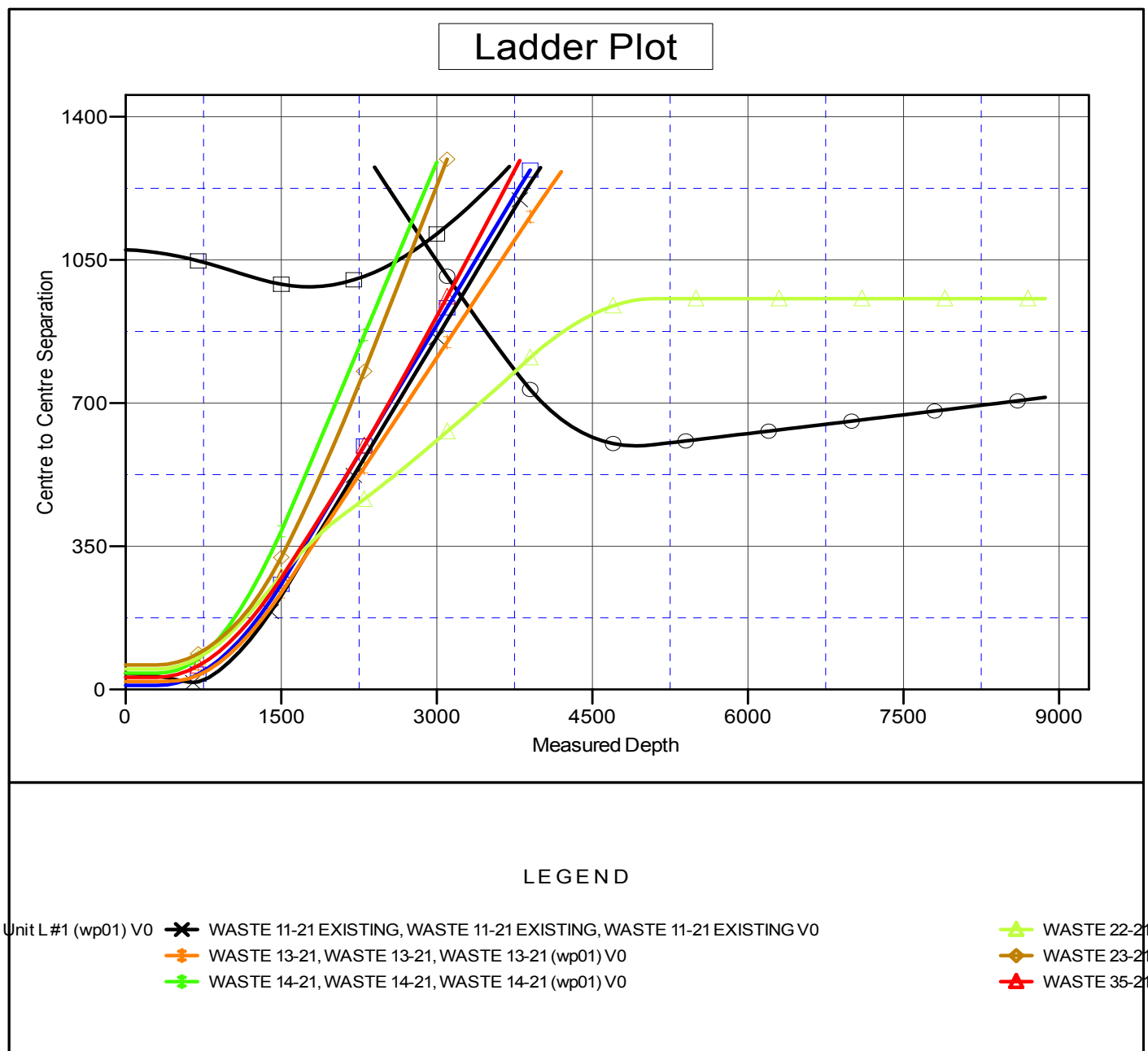
Reference	WASTE 12-21 (wp01)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,300.8ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	10/5/2010	
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	8,866.9	WASTE 12-21 (wp01) (WASTE 12-21)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
WELD_WASTE 11-21						
WASTE 11-21 - WASTE 11-21 - WASTE 11-21 (wp01)	300.0	300.0	9.8	8.7	8.721 CC, ES	
WASTE 13-21 - WASTE 13-21 - WASTE 13-21 (wp01)	300.0	300.0	19.9	18.8	17.693 CC	
WASTE 14-21 - WASTE 14-21 - WASTE 14-21 (wp01)	300.0	300.0	40.0	38.9	35.631 CC, ES	
WASTE 22-21 - WASTE 22-21 - WASTE 22-21 (wp01)	300.0	300.0	49.8	48.7	44.351 CC, ES	
WASTE 23-21 - WASTE 23-21 - WASTE 23-21 (wp01)	300.0	300.0	59.9	58.8	53.321 CC, ES	
WASTE 35-21 - WASTE 35-21 - WASTE 35-21 (wp01)	300.0	300.0	30.0	28.8	26.662 CC, ES	
WASTE 11-21 - WASTE 11-21 - WASTE 11-21 (wp01)	400.0	400.0	11.5	10.0	7.365 SF	
WASTE 13-21 - WASTE 13-21 - WASTE 13-21 (wp01)	400.0	400.6	20.1	18.6	13.011 ES	
WASTE 35-21 - WASTE 35-21 - WASTE 35-21 (wp01)	500.0	499.8	36.9	34.9	18.372 SF	
WASTE 13-21 - WASTE 13-21 - WASTE 13-21 (wp01)	600.0	601.0	26.1	23.5	10.269 SF	
WASTE 14-21 - WASTE 14-21 - WASTE 14-21 (wp01)	600.0	597.9	58.9	56.5	23.886 SF	
WASTE 11-21 EXISTING - WASTE 11-21 EXISTING - WASTE 11-21 EXISTING (wp01)	650.6	644.6	17.4	14.7	6.414 CC, ES	
WASTE 11-21 EXISTING - WASTE 11-21 EXISTING - WASTE 11-21 EXISTING (wp01)	700.0	693.6	18.7	15.7	6.312 SF	
WASTE 23-21 - WASTE 23-21 - WASTE 23-21 (wp01)	700.0	698.7	87.7	84.8	30.168 SF	
Champlin 86 Amoco Unit L #1 - Champlin 86 Amoco Unit L #1 (wp01)	1,763.7	1,716.7	984.4	972.4	82.497 CC	
Champlin 86 Amoco Unit L #1 - Champlin 86 Amoco Unit L #1 (wp01)	1,800.0	1,749.6	984.5	972.1	79.892 ES	
Champlin 86 Amoco Unit L #1 - Champlin 86 Amoco Unit L #1 (wp01)	3,700.0	3,472.9	1,278.2	1,249.6	44.595 SF	
HORST 13-21 - HORST 13-21 - HORST 13-21 (wp01)	4,926.1	4,573.3	595.6	558.3	15.973 CC, ES	
HORST 13-21 - HORST 13-21 - HORST 13-21 (wp01)	8,866.9	8,510.0	714.0	662.3	13.808 SF	
WASTE 22-21 - WASTE 22-21 - WASTE 22-21 (wp01)	8,866.9	8,726.1	955.4	898.2	16.710 SF	

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Reference Well:	WASTE 12-21	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	WASTE 12-21	Database:	EDM 2003.21 Single User Db
Reference Design:	WASTE 12-21 (wp01)	Offset TVD Reference:	Offset Datum

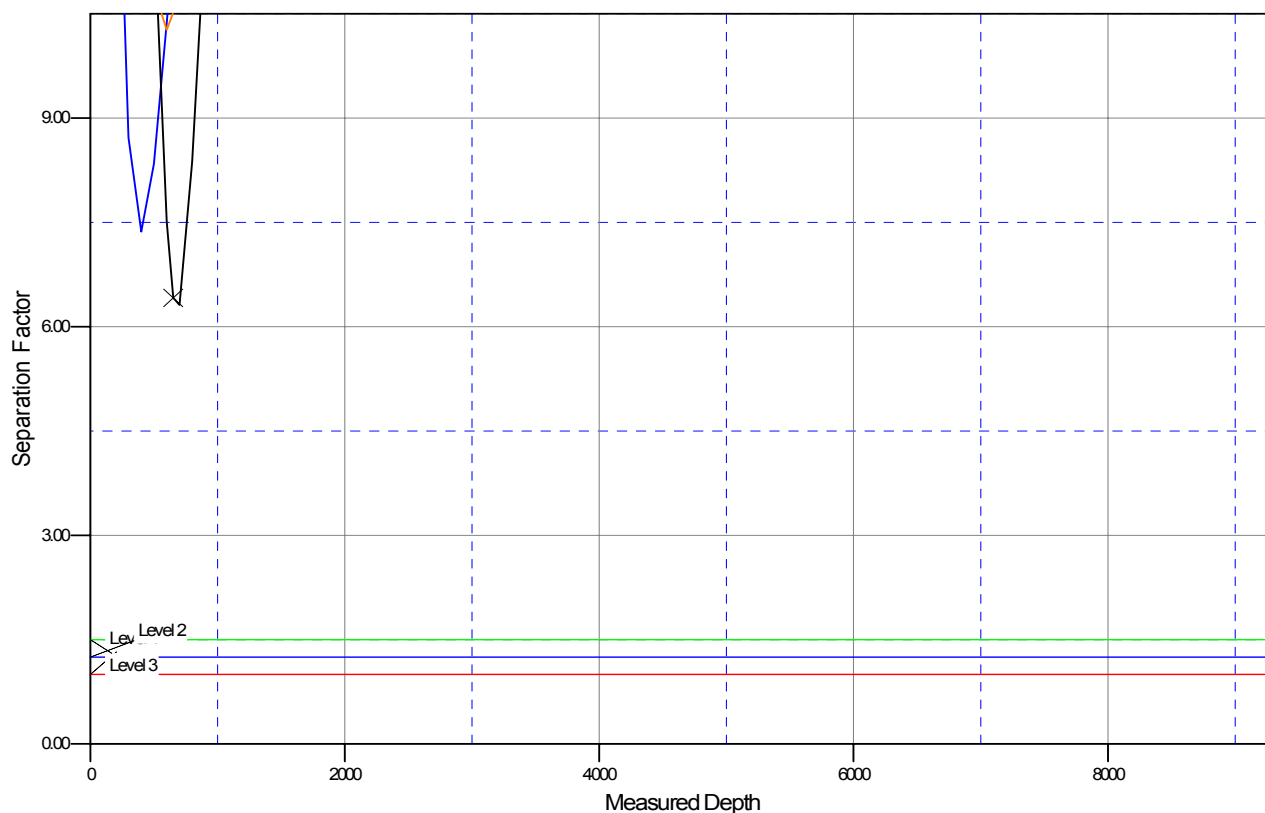
Reference Depths are relative to WELL @ 5258.0ft (Original Well Elev) Coordinates are relative to: WASTE 12-21
Offset Depths are relative to Offset Datum
Central Meridian is 105° 30' 0.000 W °
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.32°



Company:	ANADARKO PETROLEUM CORP.	Local Co-ordinate Reference:	Well WASTE 12-21
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Reference Design:	WASTE 12-21 (wp01)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 5258.0ft (Original Well Elev) Coordinates are relative to: WASTE 12-21
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is 105° 30' 0.000 W ° Grid Convergence at Surface is: 0.32°

Separation Factor Plot



LEGEND

Unit L #1 (wp01) V0	✕ WASTE 11-21 EXISTING, WASTE 11-21 EXISTING, WASTE 11-21 EXISTING V0	▲ WASTE 22-21, WASTE 22-21, WASTE 22-21 (wp01) V0
	○ WASTE 13-21, WASTE 13-21, WASTE 13-21 (wp01) V0	◆ WASTE 23-21, WASTE 23-21, WASTE 23-21 (wp01) V0
	● WASTE 14-21, WASTE 14-21, WASTE 14-21 (wp01) V0	▲ WASTE 35-21, WASTE 35-21, WASTE 35-21 (wp01) V0