

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_DECHANT 28-36HZ PAD

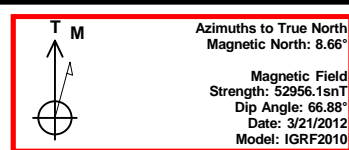
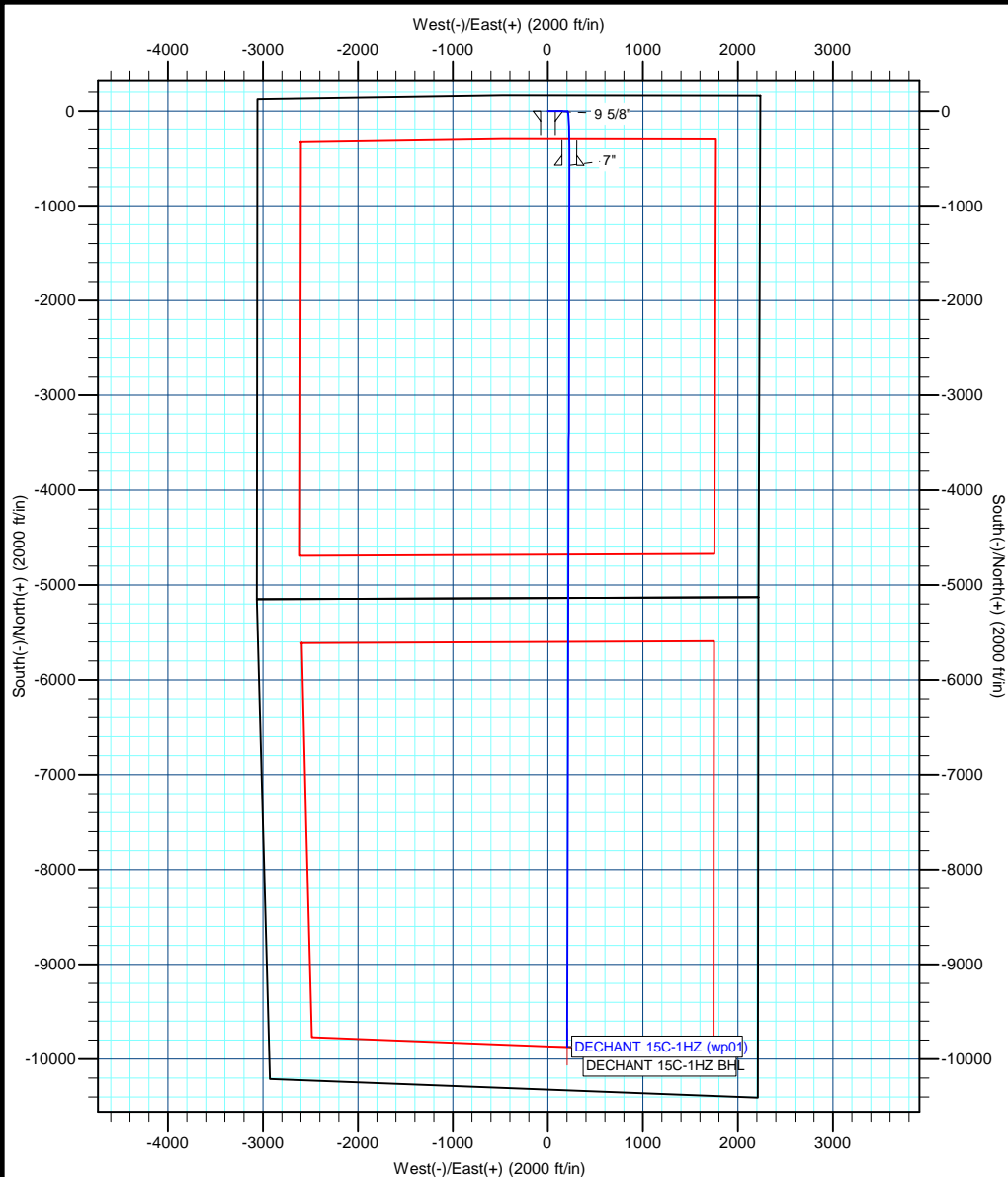
DECHANT 15C-1HZ

DECHANT 15C-1HZ

Plan: DECHANT 15C-1HZ (wp01)

Standard Planning Report

21 March, 2012



Project: COLORADO NORTHERN ZONE - 83
Site: WELD DECHANT 28-36HZ PAD
Well: DECHANT 15C-1HZ
Wellbore: DECHANT 15C-1HZ
Section:
SHL:
Design: DECHANT 15C-1HZ (wp01)
Latitude: 40.188435
Longitude: -104.610819
GL: 4808.00
KB: GL + RKB @ 4825.00ft

WELL DETAILS: DECHANT 15C-1HZ

+N/-S	+E/-W	Northing	Ground Level: Easting	4808.00 Latitude	Longitude	Slot
0.00	0.00	1312735.01	3248414.78	40.188435	-104.610819	

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00
1007.12	2.14	90.63	1007.09	-0.02	2.00	2.00	90.63	0.06
6493.48	2.14	90.63	6489.62	-2.28	207.08	0.00	0.00	6.50
7393.01	89.97	180.15	7062.00	-575.00	227.00	10.00	89.52	579.51
7393.94	89.97	180.16	7062.00	-575.93	227.00	1.00	101.10	580.45
6688.64	89.97	180.16	7067.00	-9870.59	201.51	0.00	0.00	9872.65

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

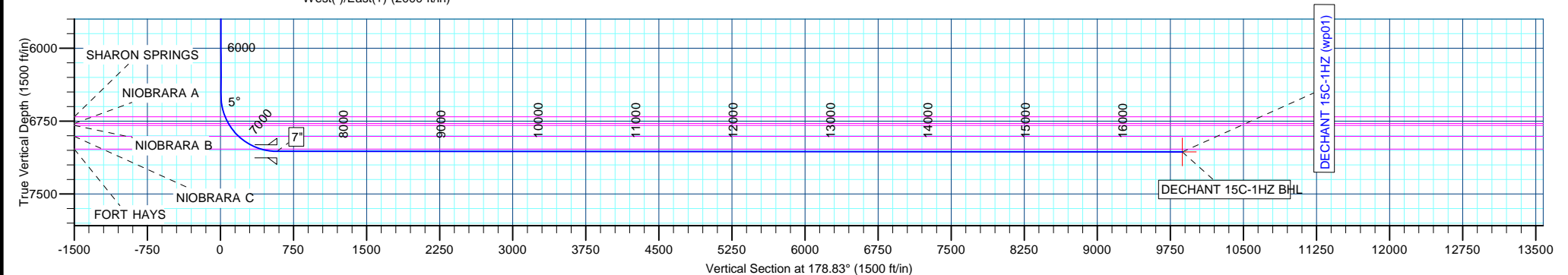
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
DECHANT 15C-1HZ BHL	7067.00	-9870.59	201.51	40.161339	-104.610098	Point

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3793.00	3794.97	PARKMAN
4363.00	4365.37	SUSSEX
6706.00	6715.54	SHARON SPRINGS
6774.00	6791.32	NIOBRARA A
6794.00	6814.66	NIOBRARA B
6906.00	6960.11	NIOBRARA C
7038.00	7226.82	FORT HAYS

CASING DETAILS

TVD	MD	Name	Size
700.00	700.00	9 5/8"	9-5/8
7062.00	7393.01	7"	7



Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well DECHANT 15C-1HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL + RKB @ 4825.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL + RKB @ 4825.00ft
Site:	WELD_DECHANT 28-36HZ PAD	North Reference:	True
Well:	DECHANT 15C-1HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	DECHANT 15C-1HZ		
Design:	DECHANT 15C-1HZ (wp01)		

Project	COLORADO NORTHERN ZONE - 83		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	WELD_DECHANT 28-36HZ PAD			
Site Position:		Northing:	1,312,719.83 usft	Latitude: 40.188394
From:	Lat/Long	Easting:	3,248,388.95 usft	Longitude: -104.610912
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence: 0.57 °

Well	DECHANT 15C-1HZ			
Well Position	+N/-S	14.93 ft	Northing:	1,312,735.01 usft
	+E/-W	25.98 ft	Easting:	3,248,414.78 usft
Position Uncertainty		0.00 ft	Wellhead Elevation:	Latitude: 40.188435
				Longitude: -104.610819
				Ground Level: 4,808.00 ft

Wellbore	DECHANT 15C-1HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/21/2012	8.66	66.88	52,956

Design	DECHANT 15C-1HZ (wp01)			
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	178.83

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,007.12	2.14	90.63	1,007.09	-0.02	2.00	2.00	2.00	0.00	90.63	
6,493.48	2.14	90.63	6,489.62	-2.28	207.08	0.00	0.00	0.00	0.00	
7,393.01	89.97	180.15	7,062.00	-575.00	227.00	10.00	9.76	9.95	89.52	
7,393.95	89.97	180.16	7,062.00	-575.93	227.00	1.00	-0.19	0.98	101.10	
16,688.64	89.97	180.16	7,067.00	-9,870.59	201.51	0.00	0.00	0.00	0.00	DECHANT 15C-1HZ I

Anadarko Petroleum Corp

Planning Report

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Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL + RKB @ 4825.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL + RKB @ 4825.00ft
Site:	WELD_DECHANT 28-36HZ PAD	North Reference:	True
Well:	DECHANT 15C-1HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	DECHANT 15C-1HZ		
Design:	DECHANT 15C-1HZ (wp01)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
1,000.00	2.00	90.63	999.98	-0.02	1.75	0.05	2.00	2.00	0.00
1,007.12	2.14	90.63	1,007.09	-0.02	2.00	0.06	2.00	2.00	0.00
Start 5486.37 hold at 1007.12 MD									
1,100.00	2.14	90.63	1,099.91	-0.06	5.47	0.17	0.00	0.00	0.00
1,200.00	2.14	90.63	1,199.84	-0.10	9.21	0.29	0.00	0.00	0.00
1,300.00	2.14	90.63	1,299.77	-0.14	12.95	0.41	0.00	0.00	0.00
1,400.00	2.14	90.63	1,399.70	-0.18	16.69	0.52	0.00	0.00	0.00
1,500.00	2.14	90.63	1,499.63	-0.22	20.43	0.64	0.00	0.00	0.00
1,600.00	2.14	90.63	1,599.56	-0.27	24.16	0.76	0.00	0.00	0.00
1,700.00	2.14	90.63	1,699.49	-0.31	27.90	0.88	0.00	0.00	0.00
1,800.00	2.14	90.63	1,799.42	-0.35	31.64	0.99	0.00	0.00	0.00
1,900.00	2.14	90.63	1,899.35	-0.39	35.38	1.11	0.00	0.00	0.00
2,000.00	2.14	90.63	1,999.28	-0.43	39.12	1.23	0.00	0.00	0.00
2,100.00	2.14	90.63	2,099.21	-0.47	42.85	1.35	0.00	0.00	0.00
2,200.00	2.14	90.63	2,199.14	-0.51	46.59	1.46	0.00	0.00	0.00
2,300.00	2.14	90.63	2,299.07	-0.55	50.33	1.58	0.00	0.00	0.00
2,400.00	2.14	90.63	2,399.00	-0.59	54.07	1.70	0.00	0.00	0.00
2,500.00	2.14	90.63	2,498.93	-0.64	57.81	1.82	0.00	0.00	0.00
2,600.00	2.14	90.63	2,598.86	-0.68	61.54	1.93	0.00	0.00	0.00
2,700.00	2.14	90.63	2,698.79	-0.72	65.28	2.05	0.00	0.00	0.00
2,800.00	2.14	90.63	2,798.72	-0.76	69.02	2.17	0.00	0.00	0.00
2,900.00	2.14	90.63	2,898.65	-0.80	72.76	2.29	0.00	0.00	0.00
3,000.00	2.14	90.63	2,998.58	-0.84	76.49	2.40	0.00	0.00	0.00
3,100.00	2.14	90.63	3,098.51	-0.88	80.23	2.52	0.00	0.00	0.00
3,200.00	2.14	90.63	3,198.44	-0.92	83.97	2.64	0.00	0.00	0.00
3,300.00	2.14	90.63	3,298.37	-0.96	87.71	2.75	0.00	0.00	0.00
3,400.00	2.14	90.63	3,398.30	-1.01	91.45	2.87	0.00	0.00	0.00
3,500.00	2.14	90.63	3,498.23	-1.05	95.18	2.99	0.00	0.00	0.00
3,600.00	2.14	90.63	3,598.16	-1.09	98.92	3.11	0.00	0.00	0.00
3,700.00	2.14	90.63	3,698.09	-1.13	102.66	3.22	0.00	0.00	0.00
3,794.97	2.14	90.63	3,793.00	-1.17	106.21	3.34	0.00	0.00	0.00
PARKMAN									
3,800.00	2.14	90.63	3,798.02	-1.17	106.40	3.34	0.00	0.00	0.00
3,900.00	2.14	90.63	3,897.95	-1.21	110.14	3.46	0.00	0.00	0.00
4,000.00	2.14	90.63	3,997.88	-1.25	113.87	3.58	0.00	0.00	0.00
4,100.00	2.14	90.63	4,097.81	-1.29	117.61	3.69	0.00	0.00	0.00
4,200.00	2.14	90.63	4,197.74	-1.33	121.35	3.81	0.00	0.00	0.00
4,300.00	2.14	90.63	4,297.67	-1.38	125.09	3.93	0.00	0.00	0.00
4,365.37	2.14	90.63	4,363.00	-1.40	127.53	4.01	0.00	0.00	0.00
SUSSEX									
4,400.00	2.14	90.63	4,397.60	-1.42	128.83	4.05	0.00	0.00	0.00
4,500.00	2.14	90.63	4,497.53	-1.46	132.56	4.16	0.00	0.00	0.00

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well DECHANT 15C-1HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL + RKB @ 4825.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL + RKB @ 4825.00ft
Site:	WELD_DECHANT 28-36HZ PAD	North Reference:	True
Well:	DECHANT 15C-1HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	DECHANT 15C-1HZ		
Design:	DECHANT 15C-1HZ (wp01)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,600.00	2.14	90.63	4,597.46	-1.50	136.30	4.28	0.00	0.00	0.00
4,700.00	2.14	90.63	4,697.39	-1.54	140.04	4.40	0.00	0.00	0.00
4,800.00	2.14	90.63	4,797.32	-1.58	143.78	4.52	0.00	0.00	0.00
4,900.00	2.14	90.63	4,897.25	-1.62	147.52	4.63	0.00	0.00	0.00
5,000.00	2.14	90.63	4,997.18	-1.66	151.25	4.75	0.00	0.00	0.00
5,100.00	2.14	90.63	5,097.11	-1.71	154.99	4.87	0.00	0.00	0.00
5,200.00	2.14	90.63	5,197.04	-1.75	158.73	4.99	0.00	0.00	0.00
5,300.00	2.14	90.63	5,296.97	-1.79	162.47	5.10	0.00	0.00	0.00
5,400.00	2.14	90.63	5,396.90	-1.83	166.21	5.22	0.00	0.00	0.00
5,500.00	2.14	90.63	5,496.83	-1.87	169.94	5.34	0.00	0.00	0.00
5,600.00	2.14	90.63	5,596.77	-1.91	173.68	5.46	0.00	0.00	0.00
5,700.00	2.14	90.63	5,696.70	-1.95	177.42	5.57	0.00	0.00	0.00
5,800.00	2.14	90.63	5,796.63	-1.99	181.16	5.69	0.00	0.00	0.00
5,900.00	2.14	90.63	5,896.56	-2.03	184.90	5.81	0.00	0.00	0.00
6,000.00	2.14	90.63	5,996.49	-2.08	188.63	5.92	0.00	0.00	0.00
6,100.00	2.14	90.63	6,096.42	-2.12	192.37	6.04	0.00	0.00	0.00
6,200.00	2.14	90.63	6,196.35	-2.16	196.11	6.16	0.00	0.00	0.00
6,300.00	2.14	90.63	6,296.28	-2.20	199.85	6.28	0.00	0.00	0.00
6,400.00	2.14	90.63	6,396.21	-2.24	203.58	6.39	0.00	0.00	0.00
6,493.48	2.14	90.63	6,489.62	-2.28	207.08	6.50	0.00	0.00	0.00
Start DLS 10.00 TFO 89.52									
6,500.00	2.24	107.52	6,496.14	-2.32	207.32	6.55	10.00	1.57	259.06
6,600.00	10.88	168.93	6,595.45	-12.19	211.01	16.50	10.00	8.64	61.41
6,700.00	20.78	174.49	6,691.55	-39.18	214.54	43.55	10.00	9.90	5.56
6,715.54	22.32	174.92	6,706.00	-44.86	215.06	49.24	10.00	9.95	2.77
SHARON SPRINGS									
6,791.32	29.87	176.41	6,774.00	-78.08	217.52	82.50	10.00	9.96	1.97
NIOBRARA A									
6,800.00	30.74	176.54	6,781.50	-82.45	217.79	86.88	10.00	9.97	1.47
6,814.66	32.20	176.74	6,794.00	-90.09	218.24	94.53	10.00	9.97	1.37
NIOBRARA B									
6,900.00	40.72	177.66	6,862.58	-140.70	220.67	145.17	10.00	9.98	1.07
6,960.11	46.72	178.13	6,906.00	-182.19	222.19	186.69	10.00	9.99	0.79
NIOBRARA C									
7,000.00	50.70	178.39	6,932.32	-212.14	223.09	216.65	10.00	9.99	0.66
7,100.00	60.69	178.95	6,988.60	-294.62	224.98	299.16	10.00	9.99	0.55
7,200.00	70.68	179.40	7,029.72	-385.63	226.29	390.17	10.00	9.99	0.45
7,226.82	73.36	179.51	7,038.00	-411.14	226.53	415.68	10.00	9.99	0.41
FORT HAYS									
7,300.00	80.68	179.80	7,054.43	-482.40	226.96	486.93	10.00	9.99	0.39
7,393.01	89.97	180.15	7,062.00	-575.00	227.00	579.51	10.00	9.99	0.38
Start DLS 1.00 TFO 101.10 - 7"									
7,393.95	89.97	180.16	7,062.00	-575.93	227.00	580.45	0.99	-0.17	0.98
Start 9294.69 hold at 7393.94 MD									
7,400.00	89.97	180.16	7,062.00	-581.99	226.98	586.50	0.00	0.00	0.00
7,500.00	89.97	180.16	7,062.06	-681.99	226.71	686.47	0.00	0.00	0.00
7,600.00	89.97	180.16	7,062.11	-781.99	226.43	786.45	0.00	0.00	0.00
7,700.00	89.97	180.16	7,062.17	-881.99	226.16	886.42	0.00	0.00	0.00
7,800.00	89.97	180.16	7,062.22	-981.99	225.88	986.39	0.00	0.00	0.00
7,900.00	89.97	180.16	7,062.27	-1,081.99	225.61	1,086.37	0.00	0.00	0.00
8,000.00	89.97	180.16	7,062.33	-1,181.99	225.34	1,186.34	0.00	0.00	0.00
8,100.00	89.97	180.16	7,062.38	-1,281.98	225.06	1,286.31	0.00	0.00	0.00
8,200.00	89.97	180.16	7,062.43	-1,381.98	224.79	1,386.28	0.00	0.00	0.00

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Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL + RKB @ 4825.00ft
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Well:	DECHANT 15C-1HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	DECHANT 15C-1HZ		
Design:	DECHANT 15C-1HZ (wp01)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,300.00	89.97	180.16	7,062.49	-1,481.98	224.51	1,486.26	0.00	0.00	0.00
8,400.00	89.97	180.16	7,062.54	-1,581.98	224.24	1,586.23	0.00	0.00	0.00
8,500.00	89.97	180.16	7,062.60	-1,681.98	223.96	1,686.20	0.00	0.00	0.00
8,600.00	89.97	180.16	7,062.65	-1,781.98	223.69	1,786.18	0.00	0.00	0.00
8,700.00	89.97	180.16	7,062.70	-1,881.98	223.42	1,886.15	0.00	0.00	0.00
8,800.00	89.97	180.16	7,062.76	-1,981.98	223.14	1,986.12	0.00	0.00	0.00
8,900.00	89.97	180.16	7,062.81	-2,081.98	222.87	2,086.10	0.00	0.00	0.00
9,000.00	89.97	180.16	7,062.86	-2,181.98	222.59	2,186.07	0.00	0.00	0.00
9,100.00	89.97	180.16	7,062.92	-2,281.98	222.32	2,286.04	0.00	0.00	0.00
9,200.00	89.97	180.16	7,062.97	-2,381.98	222.05	2,386.02	0.00	0.00	0.00
9,300.00	89.97	180.16	7,063.03	-2,481.98	221.77	2,485.99	0.00	0.00	0.00
9,400.00	89.97	180.16	7,063.08	-2,581.98	221.50	2,585.96	0.00	0.00	0.00
9,500.00	89.97	180.16	7,063.13	-2,681.98	221.22	2,685.94	0.00	0.00	0.00
9,600.00	89.97	180.16	7,063.19	-2,781.98	220.95	2,785.91	0.00	0.00	0.00
9,700.00	89.97	180.16	7,063.24	-2,881.98	220.67	2,885.88	0.00	0.00	0.00
9,800.00	89.97	180.16	7,063.29	-2,981.98	220.40	2,985.86	0.00	0.00	0.00
9,900.00	89.97	180.16	7,063.35	-3,081.98	220.13	3,085.83	0.00	0.00	0.00
10,000.00	89.97	180.16	7,063.40	-3,181.98	219.85	3,185.80	0.00	0.00	0.00
10,100.00	89.97	180.16	7,063.46	-3,281.98	219.58	3,285.78	0.00	0.00	0.00
10,200.00	89.97	180.16	7,063.51	-3,381.98	219.30	3,385.75	0.00	0.00	0.00
10,300.00	89.97	180.16	7,063.56	-3,481.98	219.03	3,485.72	0.00	0.00	0.00
10,400.00	89.97	180.16	7,063.62	-3,581.98	218.76	3,585.69	0.00	0.00	0.00
10,500.00	89.97	180.16	7,063.67	-3,681.98	218.48	3,685.67	0.00	0.00	0.00
10,600.00	89.97	180.16	7,063.73	-3,781.98	218.21	3,785.64	0.00	0.00	0.00
10,700.00	89.97	180.16	7,063.78	-3,881.97	217.93	3,885.61	0.00	0.00	0.00
10,800.00	89.97	180.16	7,063.83	-3,981.97	217.66	3,985.59	0.00	0.00	0.00
10,900.00	89.97	180.16	7,063.89	-4,081.97	217.38	4,085.56	0.00	0.00	0.00
11,000.00	89.97	180.16	7,063.94	-4,181.97	217.11	4,185.53	0.00	0.00	0.00
11,100.00	89.97	180.16	7,063.99	-4,281.97	216.84	4,285.51	0.00	0.00	0.00
11,200.00	89.97	180.16	7,064.05	-4,381.97	216.56	4,385.48	0.00	0.00	0.00
11,300.00	89.97	180.16	7,064.10	-4,481.97	216.29	4,485.45	0.00	0.00	0.00
11,400.00	89.97	180.16	7,064.16	-4,581.97	216.01	4,585.43	0.00	0.00	0.00
11,500.00	89.97	180.16	7,064.21	-4,681.97	215.74	4,685.40	0.00	0.00	0.00
11,600.00	89.97	180.16	7,064.26	-4,781.97	215.47	4,785.37	0.00	0.00	0.00
11,700.00	89.97	180.16	7,064.32	-4,881.97	215.19	4,885.35	0.00	0.00	0.00
11,800.00	89.97	180.16	7,064.37	-4,981.97	214.92	4,985.32	0.00	0.00	0.00
11,900.00	89.97	180.16	7,064.42	-5,081.97	214.64	5,085.29	0.00	0.00	0.00
12,000.00	89.97	180.16	7,064.48	-5,181.97	214.37	5,185.27	0.00	0.00	0.00
12,100.00	89.97	180.16	7,064.53	-5,281.97	214.09	5,285.24	0.00	0.00	0.00
12,200.00	89.97	180.16	7,064.59	-5,381.97	213.82	5,385.21	0.00	0.00	0.00
12,300.00	89.97	180.16	7,064.64	-5,481.97	213.55	5,485.19	0.00	0.00	0.00
12,400.00	89.97	180.16	7,064.69	-5,581.97	213.27	5,585.16	0.00	0.00	0.00
12,500.00	89.97	180.16	7,064.75	-5,681.97	213.00	5,685.13	0.00	0.00	0.00
12,600.00	89.97	180.16	7,064.80	-5,781.97	212.72	5,785.10	0.00	0.00	0.00
12,700.00	89.97	180.16	7,064.85	-5,881.97	212.45	5,885.08	0.00	0.00	0.00
12,800.00	89.97	180.16	7,064.91	-5,981.97	212.18	5,985.05	0.00	0.00	0.00
12,900.00	89.97	180.16	7,064.96	-6,081.97	211.90	6,085.02	0.00	0.00	0.00
13,000.00	89.97	180.16	7,065.02	-6,181.97	211.63	6,185.00	0.00	0.00	0.00
13,100.00	89.97	180.16	7,065.07	-6,281.97	211.35	6,284.97	0.00	0.00	0.00
13,200.00	89.97	180.16	7,065.12	-6,381.97	211.08	6,384.94	0.00	0.00	0.00
13,300.00	89.97	180.16	7,065.18	-6,481.96	210.80	6,484.92	0.00	0.00	0.00
13,400.00	89.97	180.16	7,065.23	-6,581.96	210.53	6,584.89	0.00	0.00	0.00
13,500.00	89.97	180.16	7,065.29	-6,681.96	210.26	6,684.86	0.00	0.00	0.00
13,600.00	89.97	180.16	7,065.34	-6,781.96	209.98	6,784.84	0.00	0.00	0.00

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well DECHANT 15C-1HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL + RKB @ 4825.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL + RKB @ 4825.00ft
Site:	WELD_DECHANT 28-36HZ PAD	North Reference:	True
Well:	DECHANT 15C-1HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	DECHANT 15C-1HZ		
Design:	DECHANT 15C-1HZ (wp01)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,700.00	89.97	180.16	7,065.39	-6,881.96	209.71	6,884.81	0.00	0.00	0.00
13,800.00	89.97	180.16	7,065.45	-6,981.96	209.43	6,984.78	0.00	0.00	0.00
13,900.00	89.97	180.16	7,065.50	-7,081.96	209.16	7,084.76	0.00	0.00	0.00
14,000.00	89.97	180.16	7,065.55	-7,181.96	208.89	7,184.73	0.00	0.00	0.00
14,100.00	89.97	180.16	7,065.61	-7,281.96	208.61	7,284.70	0.00	0.00	0.00
14,200.00	89.97	180.16	7,065.66	-7,381.96	208.34	7,384.68	0.00	0.00	0.00
14,300.00	89.97	180.16	7,065.72	-7,481.96	208.06	7,484.65	0.00	0.00	0.00
14,400.00	89.97	180.16	7,065.77	-7,581.96	207.79	7,584.62	0.00	0.00	0.00
14,500.00	89.97	180.16	7,065.82	-7,681.96	207.51	7,684.60	0.00	0.00	0.00
14,600.00	89.97	180.16	7,065.88	-7,781.96	207.24	7,784.57	0.00	0.00	0.00
14,700.00	89.97	180.16	7,065.93	-7,881.96	206.97	7,884.54	0.00	0.00	0.00
14,800.00	89.97	180.16	7,065.98	-7,981.96	206.69	7,984.51	0.00	0.00	0.00
14,900.00	89.97	180.16	7,066.04	-8,081.96	206.42	8,084.49	0.00	0.00	0.00
15,000.00	89.97	180.16	7,066.09	-8,181.96	206.14	8,184.46	0.00	0.00	0.00
15,100.00	89.97	180.16	7,066.15	-8,281.96	205.87	8,284.43	0.00	0.00	0.00
15,200.00	89.97	180.16	7,066.20	-8,381.96	205.59	8,384.41	0.00	0.00	0.00
15,300.00	89.97	180.16	7,066.25	-8,481.96	205.32	8,484.38	0.00	0.00	0.00
15,400.00	89.97	180.16	7,066.31	-8,581.96	205.05	8,584.35	0.00	0.00	0.00
15,500.00	89.97	180.16	7,066.36	-8,681.96	204.77	8,684.33	0.00	0.00	0.00
15,600.00	89.97	180.16	7,066.41	-8,781.96	204.50	8,784.30	0.00	0.00	0.00
15,700.00	89.97	180.16	7,066.47	-8,881.96	204.22	8,884.27	0.00	0.00	0.00
15,800.00	89.97	180.16	7,066.52	-8,981.96	203.95	8,984.25	0.00	0.00	0.00
15,900.00	89.97	180.16	7,066.58	-9,081.95	203.68	9,084.22	0.00	0.00	0.00
16,000.00	89.97	180.16	7,066.63	-9,181.95	203.40	9,184.19	0.00	0.00	0.00
16,100.00	89.97	180.16	7,066.68	-9,281.95	203.13	9,284.17	0.00	0.00	0.00
16,200.00	89.97	180.16	7,066.74	-9,381.95	202.85	9,384.14	0.00	0.00	0.00
16,300.00	89.97	180.16	7,066.79	-9,481.95	202.58	9,484.11	0.00	0.00	0.00
16,400.00	89.97	180.16	7,066.84	-9,581.95	202.30	9,584.09	0.00	0.00	0.00
16,500.00	89.97	180.16	7,066.90	-9,681.95	202.03	9,684.06	0.00	0.00	0.00
16,600.00	89.97	180.16	7,066.95	-9,781.95	201.76	9,784.03	0.00	0.00	0.00
16,688.64	89.97	180.16	7,067.00	-9,870.59	201.51	9,872.65	0.00	0.00	0.00
TD at 16688.64 - DECHANT 15C-1HZ BHL									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
DECHANT 15C-1HZ BH	0.00	0.00	7,067.00	-9,870.59	201.51	1,302,866.96	3,248,715.26	40.161339	-104.610098
- plan hits target center									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
700.00	700.00	9 5/8"	9-5/8	12-1/4	
7,393.01	7,062.00	7"	7	8-3/4	

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well DECHANT 15C-1HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL + RKB @ 4825.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL + RKB @ 4825.00ft
Site:	WELD_DECHANT 28-36HZ PAD	North Reference:	True
Well:	DECHANT 15C-1HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	DECHANT 15C-1HZ		
Design:	DECHANT 15C-1HZ (wp01)		

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,794.97	3,793.00	PARKMAN		0.00	
4,365.37	4,363.00	SUSSEX		0.00	
6,715.54	6,706.00	SHARON SPRINGS		0.00	
6,791.32	6,774.00	NIOBRARA A		0.00	
6,814.66	6,794.00	NIOBRARA B		0.00	
6,960.11	6,906.00	NIOBRARA C		0.00	
7,226.82	7,038.00	FORT HAYS		0.00	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
900.00	900.00	0.00	0.00	Start Build 2.00	
1,007.12	1,007.09	-0.02	2.00	Start 5486.37 hold at 1007.12 MD	
6,493.48	6,489.62	-2.28	207.08	Start DLS 10.00 TFO 89.52	
7,393.01	7,062.00	-575.00	227.00	Start DLS 1.00 TFO 101.10	
7,393.95	7,062.00	-575.93	227.00	Start 9294.69 hold at 7393.94 MD	
16,688.64	7,067.00	-9,870.59	201.51	TD at 16688.64	