

PETROLEUM DEVELOPMENT CORP Weld County CO

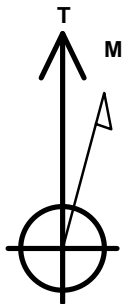
Well Name: **Diana 6T-321**

Surface Location: Diana 6T-HZ Pad Sec.6-T6N-R65W
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
 Ground Elevation: 4795.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1429836.30	3221518.76	40.510570	-104.703320	
RKB -15' WELL @ 4810.0ft (RKB -15')						

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
BHL 500'FNL, 1096'FEL	7100.0	4517.6	703.4	Point



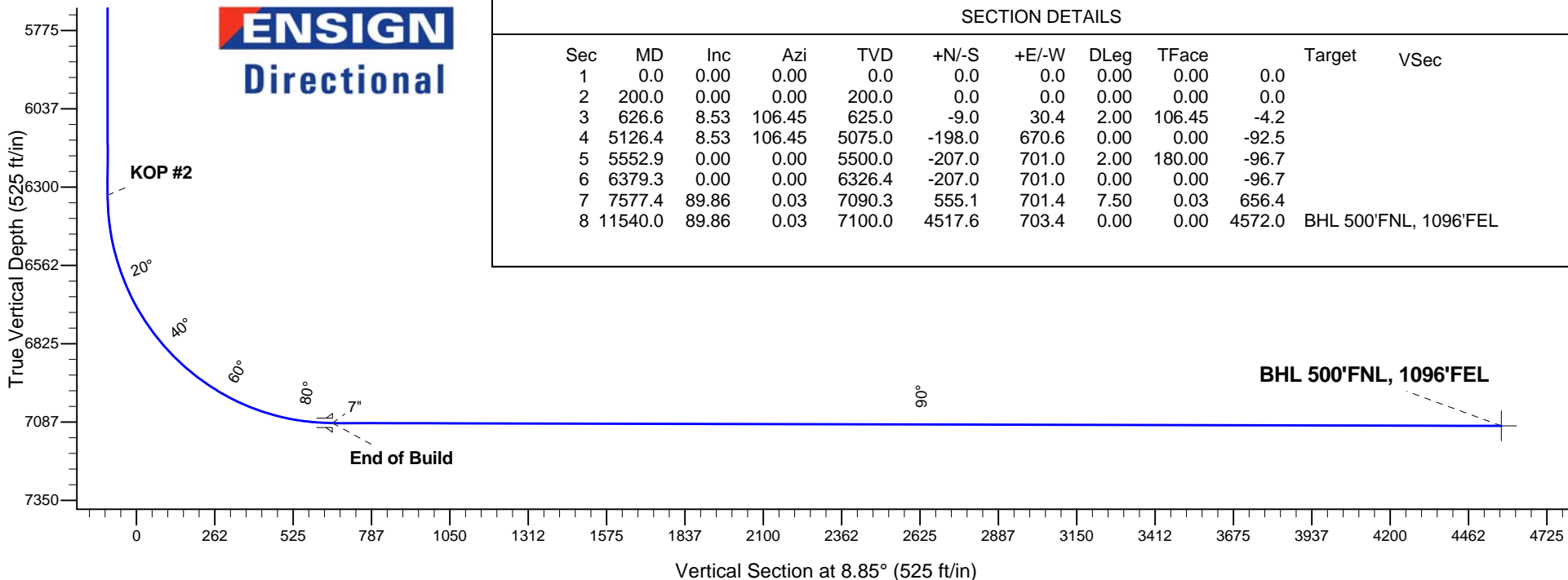
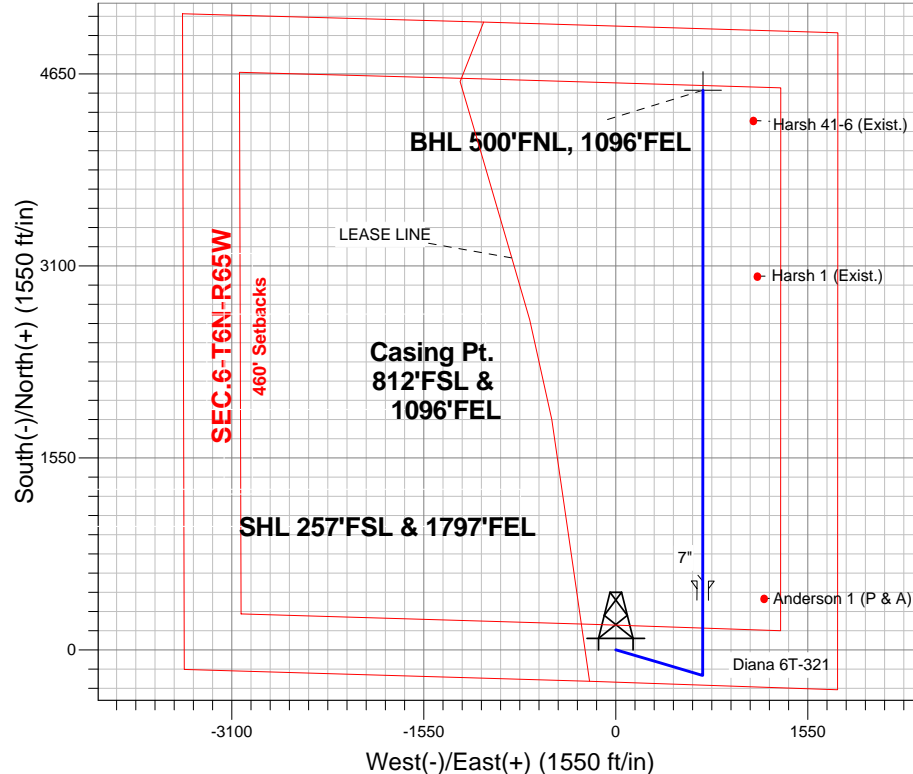
Azimuths to True North
 Magnetic North: 8.56°

Magnetic Field
 Strength: 52973.5snT
 Dip Angle: 67.08°
 Date: 7/25/2013
 Model: IGRF2010

ANNOTATIONS

TVD	MD	Annotation
200.0	200.0	KOP #1
6326.4	6379.3	KOP #2
7090.3	7577.4	End of Build

Diana 6T-HZ Pad Sec.6-T6N-R65W
 Diana 6T-321
 Plan #2 (7-25-13)
 14:35, July 25 2013



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	Target	VSec
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	626.6	8.53	106.45	625.0	-9.0	30.4	2.00	106.45	-4.2	
4	5126.4	8.53	106.45	5075.0	-198.0	670.6	0.00	0.00	-92.5	
5	5552.9	0.00	0.00	5500.0	-207.0	701.0	2.00	180.00	-96.7	
6	6379.3	0.00	0.00	6326.4	-207.0	701.0	0.00	0.00	-96.7	
7	7577.4	89.86	0.03	7090.3	555.1	701.4	7.50	0.03	656.4	
8	11540.0	89.86	0.03	7100.0	4517.6	703.4	0.00	0.00	4572.0	BHL 500'FNL, 1096'FEL



PETROLEUM DEVELOPMENT CORP Weld County CO

SEC.6-T6N-R65W

Diana 6T-HZ Pad Sec.6-T6N-R65W

Diana 6T-321

Wellbore #1

Plan: Plan #2 (7-25-13)

Standard Planning Report

25 July, 2013

Database:	Landmark	Local Co-ordinate Reference:	Well Diana 6T-321
Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4810.0ft (RKB -15')
Project:	SEC.6-T6N-R65W	MD Reference:	WELL @ 4810.0ft (RKB -15')
Site:	Diana 6T-HZ Pad Sec.6-T6N-R65W	North Reference:	True
Well:	Diana 6T-321	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (7-25-13)		

Project	SEC.6-T6N-R65W, Weld County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	Diana 6T-HZ Pad Sec.6-T6N-R65W		
Site Position:		Northing:	1,429,839.15 ft
From:	Lat/Long	Easting:	3,221,429.75 ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40.510580
		Longitude:	-104.703640
		Grid Convergence:	0.51 °

Well	Diana 6T-321		
Well Position	+N/-S	-3.7 ft	Northing:
	+E/-W	89.0 ft	Easting:
Position Uncertainty		0.0 ft	Wellhead Elevation:
			ft
			Latitude:
			40.510570
			Longitude:
			-104.703320
			Ground Level:
			4,795.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/25/2013	8.56	67.08	52,974

Design	Plan #2 (7-25-13)			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	8.85

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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
626.6	8.53	106.45	625.0	-9.0	30.4	2.00	2.00	0.00	106.45	
5,126.4	8.53	106.45	5,075.0	-198.0	670.6	0.00	0.00	0.00	0.00	
5,552.9	0.00	0.00	5,500.0	-207.0	701.0	2.00	-2.00	0.00	180.00	
6,379.3	0.00	0.00	6,326.4	-207.0	701.0	0.00	0.00	0.00	0.00	
7,577.4	89.86	0.03	7,090.3	555.1	701.4	7.50	7.50	0.00	0.03	
11,540.0	89.86	0.03	7,100.0	4,517.6	703.4	0.00	0.00	0.00	0.00	BHL 500'FNL, 1096

Database:	Landmark	Local Co-ordinate Reference:	Well Diana 6T-321
Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4810.0ft (RKB -15')
Project:	SEC.6-T6N-R65W	MD Reference:	WELL @ 4810.0ft (RKB -15')
Site:	Diana 6T-HZ Pad Sec.6-T6N-R65W	North Reference:	True
Well:	Diana 6T-321	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (7-25-13)		

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
KOP #1									
300.0	2.00	106.45	300.0	-0.5	1.7	-0.2	2.00	2.00	0.00
400.0	4.00	106.45	399.8	-2.0	6.7	-0.9	2.00	2.00	0.00
500.0	6.00	106.45	499.5	-4.4	15.1	-2.1	2.00	2.00	0.00
600.0	8.00	106.45	598.7	-7.9	26.7	-3.7	2.00	2.00	0.00
626.6	8.53	106.45	625.0	-9.0	30.4	-4.2	2.00	2.00	0.00
700.0	8.53	106.45	697.6	-12.1	40.8	-5.6	0.00	0.00	0.00
800.0	8.53	106.45	796.5	-16.3	55.1	-7.6	0.00	0.00	0.00
900.0	8.53	106.45	895.4	-20.5	69.3	-9.6	0.00	0.00	0.00
1,000.0	8.53	106.45	994.3	-24.7	83.5	-11.5	0.00	0.00	0.00
1,100.0	8.53	106.45	1,093.2	-28.9	97.8	-13.5	0.00	0.00	0.00
1,200.0	8.53	106.45	1,192.1	-33.1	112.0	-15.4	0.00	0.00	0.00
1,300.0	8.53	106.45	1,291.0	-37.3	126.2	-17.4	0.00	0.00	0.00
1,400.0	8.53	106.45	1,389.9	-41.5	140.4	-19.4	0.00	0.00	0.00
1,500.0	8.53	106.45	1,488.8	-45.7	154.7	-21.3	0.00	0.00	0.00
1,600.0	8.53	106.45	1,587.7	-49.9	168.9	-23.3	0.00	0.00	0.00
1,700.0	8.53	106.45	1,686.5	-54.1	183.1	-25.3	0.00	0.00	0.00
1,800.0	8.53	106.45	1,785.4	-58.3	197.3	-27.2	0.00	0.00	0.00
1,900.0	8.53	106.45	1,884.3	-62.5	211.6	-29.2	0.00	0.00	0.00
2,000.0	8.53	106.45	1,983.2	-66.7	225.8	-31.1	0.00	0.00	0.00
2,100.0	8.53	106.45	2,082.1	-70.9	240.0	-33.1	0.00	0.00	0.00
2,200.0	8.53	106.45	2,181.0	-75.1	254.3	-35.1	0.00	0.00	0.00
2,300.0	8.53	106.45	2,279.9	-79.3	268.5	-37.0	0.00	0.00	0.00
2,400.0	8.53	106.45	2,378.8	-83.5	282.7	-39.0	0.00	0.00	0.00
2,500.0	8.53	106.45	2,477.7	-87.7	296.9	-41.0	0.00	0.00	0.00
2,600.0	8.53	106.45	2,576.6	-91.9	311.2	-42.9	0.00	0.00	0.00
2,700.0	8.53	106.45	2,675.5	-96.1	325.4	-44.9	0.00	0.00	0.00
2,800.0	8.53	106.45	2,774.4	-100.3	339.6	-46.8	0.00	0.00	0.00
2,900.0	8.53	106.45	2,873.3	-104.5	353.8	-48.8	0.00	0.00	0.00
3,000.0	8.53	106.45	2,972.2	-108.7	368.1	-50.8	0.00	0.00	0.00
3,100.0	8.53	106.45	3,071.1	-112.9	382.3	-52.7	0.00	0.00	0.00
3,200.0	8.53	106.45	3,170.0	-117.1	396.5	-54.7	0.00	0.00	0.00
3,300.0	8.53	106.45	3,268.8	-121.3	410.8	-56.7	0.00	0.00	0.00
3,400.0	8.53	106.45	3,367.7	-125.5	425.0	-58.6	0.00	0.00	0.00
3,500.0	8.53	106.45	3,466.6	-129.7	439.2	-60.6	0.00	0.00	0.00
3,600.0	8.53	106.45	3,565.5	-133.9	453.4	-62.5	0.00	0.00	0.00
3,700.0	8.53	106.45	3,664.4	-138.1	467.7	-64.5	0.00	0.00	0.00
3,800.0	8.53	106.45	3,763.3	-142.3	481.9	-66.5	0.00	0.00	0.00
3,900.0	8.53	106.45	3,862.2	-146.5	496.1	-68.4	0.00	0.00	0.00
4,000.0	8.53	106.45	3,961.1	-150.7	510.3	-70.4	0.00	0.00	0.00
4,100.0	8.53	106.45	4,060.0	-154.9	524.6	-72.4	0.00	0.00	0.00
4,200.0	8.53	106.45	4,158.9	-159.1	538.8	-74.3	0.00	0.00	0.00
4,300.0	8.53	106.45	4,257.8	-163.3	553.0	-76.3	0.00	0.00	0.00
4,400.0	8.53	106.45	4,356.7	-167.5	567.3	-78.2	0.00	0.00	0.00
4,500.0	8.53	106.45	4,455.6	-171.7	581.5	-80.2	0.00	0.00	0.00
4,600.0	8.53	106.45	4,554.5	-175.9	595.7	-82.2	0.00	0.00	0.00
4,700.0	8.53	106.45	4,653.4	-180.1	609.9	-84.1	0.00	0.00	0.00
4,800.0	8.53	106.45	4,752.2	-184.3	624.2	-86.1	0.00	0.00	0.00
4,900.0	8.53	106.45	4,851.1	-188.5	638.4	-88.1	0.00	0.00	0.00
5,000.0	8.53	106.45	4,950.0	-192.7	652.6	-90.0	0.00	0.00	0.00

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Site:	Diana 6T-HZ Pad Sec.6-T6N-R65W	North Reference:	True
Well:	Diana 6T-321	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (7-25-13)		

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)
5,100.0	8.53	106.45	5,048.9	-196.9	666.8	-92.0	0.00	0.00	0.00
5,126.4	8.53	106.45	5,075.0	-198.0	670.6	-92.5	0.00	0.00	0.00
5,200.0	7.06	106.45	5,148.0	-200.9	680.2	-93.8	2.00	-2.00	0.00
5,300.0	5.06	106.45	5,247.4	-203.8	690.3	-95.2	2.00	-2.00	0.00
5,400.0	3.06	106.45	5,347.1	-205.8	697.1	-96.2	2.00	-2.00	0.00
5,500.0	1.06	106.45	5,447.1	-206.9	700.5	-96.6	2.00	-2.00	0.00
5,552.9	0.00	0.00	5,500.0	-207.0	701.0	-96.7	2.00	-2.00	0.00
5,600.0	0.00	0.00	5,547.1	-207.0	701.0	-96.7	0.00	0.00	0.00
5,700.0	0.00	0.00	5,647.1	-207.0	701.0	-96.7	0.00	0.00	0.00
5,800.0	0.00	0.00	5,747.1	-207.0	701.0	-96.7	0.00	0.00	0.00
5,900.0	0.00	0.00	5,847.1	-207.0	701.0	-96.7	0.00	0.00	0.00
6,000.0	0.00	0.00	5,947.1	-207.0	701.0	-96.7	0.00	0.00	0.00
6,100.0	0.00	0.00	6,047.1	-207.0	701.0	-96.7	0.00	0.00	0.00
6,200.0	0.00	0.00	6,147.1	-207.0	701.0	-96.7	0.00	0.00	0.00
6,300.0	0.00	0.00	6,247.1	-207.0	701.0	-96.7	0.00	0.00	0.00
6,379.3	0.00	0.00	6,326.4	-207.0	701.0	-96.7	0.00	0.00	0.00
KOP #2									
6,400.0	1.55	0.03	6,347.1	-206.7	701.0	-96.4	7.50	7.50	0.00
6,500.0	9.05	0.03	6,446.6	-197.5	701.0	-87.3	7.50	7.50	0.00
6,600.0	16.55	0.03	6,544.0	-175.3	701.0	-65.4	7.50	7.50	0.00
6,700.0	24.05	0.03	6,637.7	-140.7	701.0	-31.1	7.50	7.50	0.00
6,800.0	31.55	0.03	6,726.1	-94.1	701.1	14.9	7.50	7.50	0.00
6,900.0	39.05	0.03	6,807.7	-36.3	701.1	72.0	7.50	7.50	0.00
7,000.0	46.55	0.03	6,881.0	31.6	701.1	139.1	7.50	7.50	0.00
7,100.0	54.05	0.03	6,944.8	108.5	701.2	215.0	7.50	7.50	0.00
7,200.0	61.55	0.03	6,998.1	193.0	701.2	298.6	7.50	7.50	0.00
7,300.0	69.05	0.03	7,039.8	283.8	701.2	388.3	7.50	7.50	0.00
7,400.0	76.55	0.03	7,069.4	379.3	701.3	482.6	7.50	7.50	0.00
7,500.0	84.05	0.03	7,086.2	477.8	701.3	580.0	7.50	7.50	0.00
7,577.4	89.86	0.03	7,090.3	555.0	701.4	656.3	7.50	7.50	0.00
End of Build - 7"									
7,600.0	89.86	0.03	7,090.4	577.6	701.4	678.7	0.02	0.02	0.00
7,700.0	89.86	0.03	7,090.6	677.6	701.4	777.5	0.00	0.00	0.00
7,800.0	89.86	0.03	7,090.9	777.6	701.5	876.3	0.00	0.00	0.00
7,900.0	89.86	0.03	7,091.1	877.6	701.5	975.1	0.00	0.00	0.00
8,000.0	89.86	0.03	7,091.4	977.6	701.6	1,073.9	0.00	0.00	0.00
8,100.0	89.86	0.03	7,091.6	1,077.6	701.6	1,172.7	0.00	0.00	0.00
8,200.0	89.86	0.03	7,091.8	1,177.6	701.7	1,271.6	0.00	0.00	0.00
8,300.0	89.86	0.03	7,092.1	1,277.6	701.7	1,370.4	0.00	0.00	0.00
8,400.0	89.86	0.03	7,092.3	1,377.6	701.8	1,469.2	0.00	0.00	0.00
8,500.0	89.86	0.03	7,092.6	1,477.6	701.8	1,568.0	0.00	0.00	0.00
8,600.0	89.86	0.03	7,092.8	1,577.6	701.9	1,666.8	0.00	0.00	0.00
8,700.0	89.86	0.03	7,093.1	1,677.6	701.9	1,765.6	0.00	0.00	0.00
8,800.0	89.86	0.03	7,093.3	1,777.6	702.0	1,864.5	0.00	0.00	0.00
8,900.0	89.86	0.03	7,093.5	1,877.6	702.0	1,963.3	0.00	0.00	0.00
9,000.0	89.86	0.03	7,093.8	1,977.6	702.1	2,062.1	0.00	0.00	0.00
9,100.0	89.86	0.03	7,094.0	2,077.6	702.1	2,160.9	0.00	0.00	0.00
9,200.0	89.86	0.03	7,094.3	2,177.6	702.2	2,259.7	0.00	0.00	0.00
9,300.0	89.86	0.03	7,094.5	2,277.6	702.3	2,358.5	0.00	0.00	0.00
9,400.0	89.86	0.03	7,094.8	2,377.6	702.3	2,457.4	0.00	0.00	0.00
9,500.0	89.86	0.03	7,095.0	2,477.6	702.4	2,556.2	0.00	0.00	0.00
9,600.0	89.86	0.03	7,095.3	2,577.6	702.4	2,655.0	0.00	0.00	0.00
9,700.0	89.86	0.03	7,095.5	2,677.6	702.5	2,753.8	0.00	0.00	0.00

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Project:	SEC.6-T6N-R65W	MD Reference:	WELL @ 4810.0ft (RKB -15')
Site:	Diana 6T-HZ Pad Sec.6-T6N-R65W	North Reference:	True
Well:	Diana 6T-321	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (7-25-13)		

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)
9,800.0	89.86	0.03	7,095.7	2,777.6	702.5	2,852.6	0.00	0.00	0.00
9,900.0	89.86	0.03	7,096.0	2,877.6	702.6	2,951.4	0.00	0.00	0.00
10,000.0	89.86	0.03	7,096.2	2,977.6	702.6	3,050.3	0.00	0.00	0.00
10,100.0	89.86	0.03	7,096.5	3,077.6	702.7	3,149.1	0.00	0.00	0.00
10,200.0	89.86	0.03	7,096.7	3,177.6	702.7	3,247.9	0.00	0.00	0.00
10,300.0	89.86	0.03	7,097.0	3,277.6	702.8	3,346.7	0.00	0.00	0.00
10,400.0	89.86	0.03	7,097.2	3,377.6	702.8	3,445.5	0.00	0.00	0.00
10,500.0	89.86	0.03	7,097.5	3,477.6	702.9	3,544.4	0.00	0.00	0.00
10,600.0	89.86	0.03	7,097.7	3,577.6	702.9	3,643.2	0.00	0.00	0.00
10,700.0	89.86	0.03	7,097.9	3,677.6	703.0	3,742.0	0.00	0.00	0.00
10,800.0	89.86	0.03	7,098.2	3,777.6	703.0	3,840.8	0.00	0.00	0.00
10,900.0	89.86	0.03	7,098.4	3,877.6	703.1	3,939.6	0.00	0.00	0.00
11,000.0	89.86	0.03	7,098.7	3,977.6	703.1	4,038.4	0.00	0.00	0.00
11,100.0	89.86	0.03	7,098.9	4,077.6	703.2	4,137.3	0.00	0.00	0.00
11,200.0	89.86	0.03	7,099.2	4,177.6	703.2	4,236.1	0.00	0.00	0.00
11,300.0	89.86	0.03	7,099.4	4,277.6	703.3	4,334.9	0.00	0.00	0.00
11,400.0	89.86	0.03	7,099.7	4,377.6	703.3	4,433.7	0.00	0.00	0.00
11,500.0	89.86	0.03	7,099.9	4,477.6	703.4	4,532.5	0.00	0.00	0.00
11,540.0	89.86	0.03	7,100.0	4,517.6	703.4	4,572.0	0.00	0.00	0.00
BHL 500'FNL, 1096'FEL									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,577.4	7,090.3	7"	7	8-3/4

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP #1
6,379.3	6,326.4	-207.0	701.0	KOP #2
7,577.4	7,090.3	555.0	701.4	End of Build



PETROLEUM DEVELOPMENT CORP Weld County CO

SEC.6-T6N-R65W

Diana 6T-HZ Pad Sec.6-T6N-R65W

Diana 6T-321

Wellbore #1

Plan #2 (7-25-13)

Anticollision Report

25 July, 2013



Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Diana 6T-321
Project:	SEC.6-T6N-R65W	TVD Reference:	WELL @ 4810.0ft (RKB -15')
Reference Site:	Diana 6T-HZ Pad Sec.6-T6N-R65W	MD Reference:	WELL @ 4810.0ft (RKB -15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Diana 6T-321	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (7-25-13)	Offset TVD Reference:	Offset Datum

Offset Design Diana 6T-HZ Pad Sec.6-T6N-R65W - Anderson 1 (P & A) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 7300-UNKNOWN													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,900.0	4,851.1	4,839.1	4,839.1	16.8	96.8	-64.00		415.4	1,195.7	821.7	709.1	112.65	7.294	
5,000.0	4,950.0	4,938.0	4,938.0	17.2	98.8	-64.93		415.4	1,195.7	815.3	700.2	115.04	7.087	
5,100.0	5,048.9	5,036.9	5,036.9	17.5	100.7	-65.87		415.4	1,195.7	809.0	691.6	117.43	6.889	
5,200.0	5,148.0	5,136.0	5,136.0	17.8	102.7	-66.70		415.4	1,195.7	803.4	683.6	119.82	6.705	
5,300.0	5,247.4	5,235.4	5,235.4	18.1	104.7	-67.31		415.4	1,195.7	799.2	677.1	122.12	6.545	
5,400.0	5,347.1	5,335.1	5,335.1	18.2	106.7	-67.73		415.4	1,195.7	796.5	672.2	124.35	6.406	
5,500.0	5,447.1	5,435.1	5,435.1	18.4	108.7	-67.94		415.4	1,195.7	795.2	668.7	126.52	6.285	
5,575.8	5,522.8	5,510.8	5,510.8	18.5	110.2	-68.00		415.4	1,195.7	794.9	666.7	128.14	6.203	
5,600.0	5,547.1	5,535.1	5,535.1	18.5	110.7	38.48		415.4	1,195.7	795.0	666.3	128.66	6.179	
5,700.0	5,647.1	5,635.1	5,635.1	18.7	112.7	38.48		415.4	1,195.7	795.0	664.2	130.79	6.078	
5,800.0	5,747.1	5,735.1	5,735.1	18.8	114.7	38.48		415.4	1,195.7	795.0	662.1	132.93	5.981	
5,900.0	5,847.1	5,835.1	5,835.1	18.9	116.7	38.48		415.4	1,195.7	795.0	659.9	135.07	5.886	
6,000.0	5,947.1	5,935.1	5,935.1	19.1	118.7	38.48		415.4	1,195.7	795.0	657.8	137.21	5.794	
6,100.0	6,047.1	6,035.1	6,035.1	19.2	120.7	38.48		415.4	1,195.7	795.0	655.6	139.35	5.705	
6,200.0	6,147.1	6,135.1	6,135.1	19.3	122.7	38.48		415.4	1,195.7	795.0	653.5	141.49	5.619	
6,300.0	6,247.1	6,235.1	6,235.1	19.5	124.7	38.48		415.4	1,195.7	795.0	651.4	143.64	5.535	
6,400.0	6,347.1	6,335.1	6,335.1	19.6	126.7	38.47		415.4	1,195.7	794.8	649.0	145.75	5.453	
6,500.0	6,446.6	6,434.6	6,434.6	19.7	128.7	39.23		415.4	1,195.7	787.6	640.8	146.78	5.366	
6,600.0	6,544.0	6,532.0	6,532.0	19.8	130.6	41.11		415.4	1,195.7	770.5	624.1	146.31	5.266	
6,700.0	6,637.7	6,625.7	6,625.7	19.9	132.5	44.22		415.4	1,195.7	744.2	599.3	144.88	5.137	
6,800.0	6,726.1	6,714.1	6,714.1	19.9	134.3	48.70		415.4	1,195.7	710.0	566.6	143.45	4.950	
6,900.0	6,807.7	6,795.7	6,795.7	19.9	135.9	54.63		415.4	1,195.7	669.8	526.5	143.31	4.674	
7,000.0	6,881.0	6,869.0	6,869.0	20.0	137.4	61.89		415.4	1,195.7	626.0	480.6	145.43	4.304	
7,100.0	6,944.8	6,932.8	6,932.8	20.0	138.7	69.96		415.4	1,195.7	582.0	432.4	149.56	3.891	
7,200.0	6,998.1	6,986.1	6,986.1	20.2	139.7	77.89		415.4	1,195.7	542.1	388.1	154.06	3.519	
7,300.0	7,039.8	7,027.8	7,027.8	20.4	140.6	84.56		415.4	1,195.7	511.6	354.3	157.35	3.251	
7,400.0	7,069.4	7,057.4	7,057.4	20.8	141.1	89.02		415.4	1,195.7	495.7	336.5	159.22	3.113	
7,437.1	7,077.1	7,065.1	7,065.1	21.0	141.3	90.00		415.4	1,195.7	494.3	334.6	159.72	3.095 CC, ES, SF	
7,500.0	7,086.2	7,074.2	7,074.2	21.4	141.5	90.75		415.4	1,195.7	498.2	337.8	160.46	3.105	
7,600.0	7,090.4	7,078.4	7,078.4	22.3	141.6	90.05		415.4	1,195.7	520.2	358.6	161.65	3.218	
7,700.0	7,090.6	7,078.6	7,078.6	23.3	141.6	90.07		415.4	1,195.7	559.5	396.7	162.84	3.436	
7,800.0	7,090.9	7,078.9	7,078.9	24.4	141.6	90.10		415.4	1,195.7	612.7	448.6	164.14	3.733	
7,900.0	7,091.1	7,079.1	7,079.1	25.7	141.6	90.13		415.4	1,195.7	676.6	511.1	165.52	4.088	
8,000.0	7,091.4	7,079.4	7,079.4	27.1	141.6	90.16		415.4	1,195.7	748.5	581.5	166.97	4.483	
8,100.0	7,091.6	7,079.6	7,079.6	28.5	141.6	90.19		415.4	1,195.7	826.2	657.8	168.48	4.904	
8,200.0	7,091.8	7,079.8	7,079.8	30.0	141.6	90.22		415.4	1,195.7	908.3	738.3	170.04	5.342	
8,300.0	7,092.1	7,080.1	7,080.1	31.5	141.6	90.24		415.4	1,195.7	993.7	822.1	171.64	5.790	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Diana 6T-321
Project:	SEC.6-T6N-R65W	TVD Reference:	WELL @ 4810.0ft (RKB -15')
Reference Site:	Diana 6T-HZ Pad Sec.6-T6N-R65W	MD Reference:	WELL @ 4810.0ft (RKB -15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Diana 6T-321	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (7-25-13)	Offset TVD Reference:	Offset Datum

Offset Design Diana 6T-HZ Pad Sec.6-T6N-R65W - Diana 6T-401 - Wellbore #1 - Plan #1 (1-25-13)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-89.99	-89.99	0.0	-30.6	30.6				
100.0	100.0	100.0	100.0	0.1	0.1	-89.99	-89.99	0.0	-30.6	30.6	30.4	0.22	136.085	
200.0	200.0	200.0	200.0	0.3	0.3	-89.99	-89.99	0.0	-30.6	30.6	29.9	0.67	45.362 CC, ES	
300.0	300.0	300.0	300.0	0.5	0.6	164.42	164.42	0.0	-30.6	32.3	31.1	1.12	28.910	
400.0	399.8	399.8	399.8	0.8	0.8	166.56	166.56	0.0	-30.6	37.3	35.8	1.56	23.921	
500.0	499.5	499.5	499.5	1.0	1.0	169.06	169.06	0.0	-30.6	45.9	43.8	2.01	22.766	
600.0	598.7	598.7	598.7	1.3	1.2	171.31	171.31	0.0	-30.6	57.9	55.4	2.47	23.408	
700.0	697.6	697.6	697.6	1.6	1.5	173.06	173.06	0.0	-30.6	72.4	69.5	2.92	24.775	
800.0	796.5	796.5	796.5	2.0	1.7	174.24	174.24	0.0	-30.6	87.2	83.8	3.38	25.812	
900.0	895.4	895.4	895.4	2.3	1.9	175.07	175.07	0.0	-30.6	102.0	98.1	3.84	26.586	
1,000.0	994.3	994.3	994.3	2.7	2.1	175.70	175.70	0.0	-30.6	116.8	112.5	4.29	27.184	
1,100.0	1,093.2	1,097.5	1,097.5	3.0	2.3	176.02	176.02	-0.8	-29.1	130.0	125.3	4.74	27.419	
1,200.0	1,192.1	1,201.8	1,201.6	3.4	2.5	175.89	175.89	-3.3	-24.3	139.8	134.6	5.18	27.012	
1,300.0	1,291.0	1,306.6	1,306.0	3.7	2.8	175.38	175.38	-7.5	-16.0	146.1	140.5	5.62	25.974	
1,400.0	1,389.9	1,406.5	1,405.4	4.1	3.0	174.75	174.75	-12.4	-6.5	150.6	144.5	6.08	24.784	
1,500.0	1,488.8	1,506.4	1,504.7	4.5	3.2	174.16	174.16	-17.3	3.0	155.1	148.6	6.54	23.730	
1,600.0	1,587.7	1,606.3	1,604.0	4.8	3.5	173.60	173.60	-22.2	12.5	159.7	152.7	7.00	22.796	
1,700.0	1,686.5	1,706.2	1,703.3	5.2	3.7	173.07	173.07	-27.1	22.0	164.2	156.8	7.48	21.964	
1,800.0	1,785.4	1,806.1	1,802.6	5.5	4.0	172.57	172.57	-32.0	31.5	168.8	160.9	7.96	21.221	
1,900.0	1,884.3	1,905.9	1,901.9	5.9	4.3	172.10	172.10	-36.9	41.0	173.4	165.0	8.44	20.552	
2,000.0	1,983.2	2,005.8	2,001.2	6.3	4.6	171.65	171.65	-41.8	50.5	178.0	169.1	8.92	19.948	
2,100.0	2,082.1	2,105.7	2,100.5	6.6	4.8	171.22	171.22	-46.7	60.0	182.6	173.2	9.41	19.401	
2,200.0	2,181.0	2,205.6	2,199.8	7.0	5.1	170.81	170.81	-51.6	69.5	187.2	177.3	9.90	18.903	
2,300.0	2,279.9	2,305.5	2,299.2	7.4	5.4	170.43	170.43	-56.5	79.0	191.8	181.4	10.40	18.449	
2,400.0	2,378.8	2,405.4	2,398.5	7.7	5.7	170.06	170.06	-61.5	88.5	196.5	185.6	10.90	18.032	
2,500.0	2,477.7	2,505.3	2,497.8	8.1	6.0	169.71	169.71	-66.4	98.0	201.1	189.7	11.40	17.648	
2,600.0	2,576.6	2,605.1	2,597.1	8.4	6.3	169.37	169.37	-71.3	107.5	205.8	193.9	11.90	17.295	
2,700.0	2,675.5	2,705.0	2,696.4	8.8	6.6	169.05	169.05	-76.2	117.0	210.4	198.0	12.40	16.968	
2,800.0	2,774.4	2,804.9	2,795.7	9.2	6.8	168.75	168.75	-81.1	126.5	215.1	202.2	12.91	16.665	
2,900.0	2,873.3	2,904.8	2,895.0	9.5	7.1	168.45	168.45	-86.0	136.0	219.8	206.3	13.41	16.383	
3,000.0	2,972.2	3,004.7	2,994.3	9.9	7.4	168.17	168.17	-90.9	145.5	224.4	210.5	13.92	16.120	
3,100.0	3,071.1	3,104.6	3,093.6	10.3	7.7	167.90	167.90	-95.8	155.0	229.1	214.7	14.43	15.874	
3,200.0	3,170.0	3,204.4	3,193.0	10.6	8.0	167.64	167.64	-100.7	164.5	233.8	218.8	14.94	15.644	
3,300.0	3,268.8	3,304.3	3,292.3	11.0	8.3	167.39	167.39	-105.6	174.0	238.5	223.0	15.46	15.429	
3,400.0	3,367.7	3,404.2	3,391.6	11.3	8.6	167.15	167.15	-110.5	183.5	243.2	227.2	15.97	15.226	
3,500.0	3,466.6	3,504.1	3,490.9	11.7	8.9	166.92	166.92	-115.4	193.0	247.9	231.4	16.49	15.036	
3,600.0	3,565.5	3,604.0	3,590.2	12.1	9.2	166.70	166.70	-120.3	202.5	252.6	235.6	17.00	14.856	
3,700.0	3,664.4	3,703.9	3,689.5	12.4	9.5	166.49	166.49	-125.2	212.0	257.3	239.7	17.52	14.686	
3,800.0	3,763.3	3,803.8	3,788.8	12.8	9.8	166.28	166.28	-130.1	221.4	262.0	243.9	18.04	14.526	
3,900.0	3,862.2	3,903.6	3,888.1	13.2	10.1	166.08	166.08	-135.0	230.9	266.7	248.1	18.55	14.373	
4,000.0	3,961.1	4,003.5	3,987.4	13.5	10.4	165.89	165.89	-139.9	240.4	271.4	252.3	19.07	14.229	
4,100.0	4,060.0	4,103.4	4,086.8	13.9	10.7	165.71	165.71	-144.8	249.9	276.1	256.5	19.59	14.092	
4,200.0	4,158.9	4,203.3	4,186.1	14.2	11.0	165.53	165.53	-149.7	259.4	280.8	260.7	20.11	13.962	
4,300.0	4,257.8	4,303.2	4,285.4	14.6	11.3	165.35	165.35	-154.6	268.9	285.6	264.9	20.64	13.838	
4,400.0	4,356.7	4,403.1	4,384.7	15.0	11.6	165.19	165.19	-159.5	278.4	290.3	269.1	21.16	13.720	
4,500.0	4,455.6	4,502.9	4,484.0	15.3	11.9	165.02	165.02	-164.4	287.9	295.0	273.3	21.68	13.607	
4,600.0	4,554.5	4,602.8	4,583.3	15.7	12.2	164.87	164.87	-169.3	297.4	299.7	277.5	22.20	13.499	
4,700.0	4,653.4	4,702.7	4,682.6	16.1	12.5	164.72	164.72	-174.2	306.9	304.5	281.7	22.73	13.396	
4,800.0	4,752.2	4,802.6	4,781.9	16.4	12.8	164.57	164.57	-179.1	316.4	309.2	285.9	23.25	13.297	
4,900.0	4,851.1	4,902.5	4,881.2	16.8	13.1	164.43	164.43	-184.0	325.9	313.9	290.2	23.78	13.203	
5,000.0	4,950.0	5,002.4	4,980.6	17.2	13.4	164.29	164.29	-188.9	335.4	318.7	294.4	24.30	13.113	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Diana 6T-321
Project:	SEC.6-T6N-R65W	TVD Reference:	WELL @ 4810.0ft (RKB -15')
Reference Site:	Diana 6T-HZ Pad Sec.6-T6N-R65W	MD Reference:	WELL @ 4810.0ft (RKB -15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Diana 6T-321	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (7-25-13)	Offset TVD Reference:	Offset Datum

Offset Design Diana 6T-HZ Pad Sec.6-T6N-R65W - Diana 6T-401 - Wellbore #1 - Plan #1 (1-25-13)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	5,048.9	5,102.3	5,079.9	17.5	13.7	164.15		-193.8	344.9	323.4	298.6	24.83	13.026	
5,200.0	5,148.0	5,202.2	5,179.2	17.8	14.0	163.99		-198.7	354.4	327.2	301.9	25.34	12.912	
5,300.0	5,247.4	5,294.2	5,270.8	18.1	14.3	163.77		-202.8	362.3	328.9	303.1	25.75	12.770	
5,400.0	5,347.1	5,384.9	5,361.3	18.2	14.5	163.63		-205.5	367.4	330.0	303.9	26.08	12.650	
5,500.0	5,447.1	5,475.6	5,452.0	18.4	14.6	163.56		-206.8	370.1	330.5	304.2	26.36	12.537	
5,600.0	5,547.1	5,570.7	5,547.1	18.5	14.8	-90.00		-207.0	370.4	330.6	303.9	26.67	12.394	
5,700.0	5,647.1	5,670.7	5,647.1	18.7	14.9	-90.00		-207.0	370.4	330.6	303.6	27.03	12.233	
5,800.0	5,747.1	5,770.7	5,747.1	18.8	15.1	-90.00		-207.0	370.4	330.6	303.2	27.38	12.075	
5,900.0	5,847.1	5,870.7	5,847.1	18.9	15.3	-90.00		-207.0	370.4	330.6	302.9	27.73	11.920	
6,000.0	5,947.1	5,970.7	5,947.1	19.1	15.4	-90.00		-207.0	370.4	330.6	302.5	28.09	11.767	
6,100.0	6,047.1	6,070.7	6,047.1	19.2	15.6	-90.00		-207.0	370.4	330.6	302.1	28.45	11.618	
6,200.0	6,147.1	6,170.7	6,147.1	19.3	15.8	-90.00		-207.0	370.4	330.6	301.8	28.82	11.471	
6,300.0	6,247.1	6,270.7	6,247.1	19.5	15.9	-90.00		-207.0	370.4	330.6	301.4	29.18	11.327	
6,361.2	6,308.2	6,331.9	6,308.2	19.6	16.0	-90.12		-207.0	370.4	330.6	301.2	29.42	11.239	
6,400.0	6,347.1	6,370.7	6,347.1	19.6	16.1	-90.08		-207.0	370.4	330.6	301.0	29.55	11.186	
6,500.0	6,446.6	6,470.2	6,446.6	19.7	16.3	-91.66		-207.0	370.4	330.7	300.7	30.04	11.009	
6,600.0	6,544.0	6,571.3	6,547.4	19.8	16.4	-94.33		-200.3	370.4	331.6	301.0	30.57	10.848	
6,700.0	6,637.7	6,674.6	6,648.5	19.9	16.5	-96.94		-179.7	370.4	333.1	302.1	30.97	10.756	
6,800.0	6,726.1	6,780.1	6,748.0	19.9	16.6	-99.43		-144.9	370.4	335.2	304.0	31.24	10.731	
6,900.0	6,807.7	6,888.0	6,843.8	19.9	16.7	-101.75		-95.4	370.5	337.8	306.4	31.41	10.753	
7,000.0	6,881.0	6,998.1	6,933.4	20.0	16.7	-103.86		-31.5	370.5	340.6	309.1	31.58	10.787	
7,100.0	6,944.8	7,110.4	7,014.3	20.0	16.8	-105.70		46.1	370.5	343.5	311.7	31.86	10.783	
7,200.0	6,998.1	7,224.7	7,084.1	20.2	16.9	-107.25		136.5	370.6	346.3	313.9	32.41	10.684	
7,300.0	7,039.8	7,340.6	7,140.3	20.4	17.2	-108.47		237.8	370.6	348.6	315.2	33.36	10.450	
7,400.0	7,069.4	7,457.9	7,181.0	20.8	17.9	-109.33		347.7	370.7	350.4	315.5	34.82	10.061	
7,500.0	7,086.2	7,576.1	7,204.5	21.4	19.0	-109.82		463.3	370.8	351.4	314.6	36.83	9.542	
7,600.0	7,090.4	7,679.7	7,215.3	22.3	20.1	-110.71		566.4	370.8	353.6	314.6	38.99	9.067	
7,700.0	7,090.6	7,791.6	7,220.0	23.3	21.5	-111.38		678.1	370.9	355.0	313.7	41.31	8.593	
7,800.0	7,090.9	7,891.6	7,219.7	24.4	22.8	-111.30		778.1	370.9	354.8	311.0	43.79	8.103	
7,900.0	7,091.1	7,991.6	7,219.5	25.7	24.2	-111.22		878.1	371.0	354.6	308.2	46.42	7.640	
8,000.0	7,091.4	8,091.6	7,219.2	27.1	25.6	-111.14		978.1	371.0	354.4	305.3	49.18	7.208	
8,100.0	7,091.6	8,191.6	7,218.9	28.5	27.1	-111.06		1,078.1	371.0	354.3	302.2	52.05	6.807	
8,200.0	7,091.8	8,291.6	7,218.6	30.0	28.7	-110.98		1,178.1	371.1	354.1	299.1	55.01	6.437	
8,300.0	7,092.1	8,391.6	7,218.3	31.5	30.3	-110.90		1,278.1	371.1	353.9	295.8	58.05	6.096	
8,400.0	7,092.3	8,491.6	7,218.0	33.1	31.9	-110.82		1,378.1	371.2	353.7	292.5	61.17	5.783	
8,500.0	7,092.6	8,591.6	7,217.7	34.7	33.6	-110.73		1,478.1	371.2	353.5	289.2	64.34	5.495	
8,600.0	7,092.8	8,691.6	7,217.4	36.3	35.3	-110.65		1,578.1	371.3	353.3	285.8	67.56	5.230	
8,700.0	7,093.1	8,791.6	7,217.2	38.0	37.0	-110.57		1,678.1	371.3	353.2	282.3	70.83	4.986	
8,800.0	7,093.3	8,891.6	7,216.9	39.7	38.7	-110.49		1,778.1	371.3	353.0	278.9	74.14	4.761	
8,900.0	7,093.5	8,991.6	7,216.6	41.4	40.5	-110.41		1,878.1	371.4	352.8	275.3	77.48	4.553	
9,000.0	7,093.8	9,091.6	7,216.3	43.1	42.2	-110.33		1,978.1	371.4	352.6	271.8	80.86	4.361	
9,100.0	7,094.0	9,191.6	7,216.0	44.8	44.0	-110.25		2,078.1	371.5	352.5	268.2	84.26	4.183	
9,200.0	7,094.3	9,291.6	7,215.7	46.6	45.8	-110.17		2,178.1	371.5	352.3	264.6	87.68	4.018	
9,300.0	7,094.5	9,391.6	7,215.4	48.4	47.6	-110.09		2,278.1	371.6	352.1	261.0	91.13	3.864	
9,400.0	7,094.8	9,491.6	7,215.2	50.2	49.4	-110.00		2,378.1	371.6	351.9	257.3	94.60	3.720	
9,500.0	7,095.0	9,591.6	7,214.9	51.9	51.2	-109.92		2,478.1	371.6	351.8	253.7	98.09	3.586	
9,600.0	7,095.3	9,691.5	7,214.6	53.7	53.0	-109.84		2,578.1	371.7	351.6	250.0	101.59	3.461	
9,700.0	7,095.5	9,791.5	7,214.3	55.5	54.9	-109.76		2,678.1	371.7	351.4	246.3	105.11	3.343	
9,800.0	7,095.7	9,891.5	7,214.0	57.4	56.7	-109.68		2,778.1	371.8	351.2	242.6	108.65	3.233	
9,900.0	7,096.0	9,991.5	7,213.7	59.2	58.5	-109.59		2,878.1	371.8	351.1	238.9	112.19	3.129	
10,000.0	7,096.2	10,091.5	7,213.4	61.0	60.4	-109.51		2,978.1	371.9	350.9	235.1	115.75	3.031	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Diana 6T-321
Project:	SEC.6-T6N-R65W	TVD Reference:	WELL @ 4810.0ft (RKB -15')
Reference Site:	Diana 6T-HZ Pad Sec.6-T6N-R65W	MD Reference:	WELL @ 4810.0ft (RKB -15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Diana 6T-321	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (7-25-13)	Offset TVD Reference:	Offset Datum

Offset Design Diana 6T-HZ Pad Sec.6-T6N-R65W - Diana 6T-401 - Wellbore #1 - Plan #1 (1-25-13)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
10,100.0	7,096.5	10,191.5	7,213.2	62.8	62.2	-109.43	3,078.1	371.9	350.7	231.4	119.32	2.939	
10,200.0	7,096.7	10,291.5	7,212.9	64.7	64.1	-109.35	3,178.1	372.0	350.6	227.6	122.91	2.852	
10,300.0	7,097.0	10,391.5	7,212.6	66.5	65.9	-109.27	3,278.1	372.0	350.4	223.9	126.50	2.770	
10,400.0	7,097.2	10,491.5	7,212.3	68.4	67.8	-109.18	3,378.1	372.0	350.2	220.1	130.10	2.692	
10,500.0	7,097.5	10,591.5	7,212.0	70.2	69.7	-109.10	3,478.1	372.1	350.0	216.3	133.71	2.618	
10,600.0	7,097.7	10,691.5	7,211.7	72.1	71.5	-109.02	3,578.1	372.1	349.9	212.6	137.33	2.548	
10,700.0	7,097.9	10,791.5	7,211.4	73.9	73.4	-108.94	3,678.1	372.2	349.7	208.8	140.95	2.481	
10,800.0	7,098.2	10,891.5	7,211.1	75.8	75.3	-108.85	3,778.1	372.2	349.5	205.0	144.59	2.418	
10,900.0	7,098.4	10,991.5	7,210.9	77.7	77.2	-108.77	3,878.1	372.3	349.4	201.2	148.23	2.357	
11,000.0	7,098.7	11,091.5	7,210.6	79.5	79.0	-108.69	3,978.1	372.3	349.2	197.3	151.88	2.299	
11,100.0	7,098.9	11,191.5	7,210.3	81.4	80.9	-108.60	4,078.1	372.3	349.1	193.5	155.53	2.244	
11,200.0	7,099.2	11,291.5	7,210.0	83.3	82.8	-108.52	4,178.1	372.4	348.9	189.7	159.19	2.192	
11,300.0	7,099.4	11,391.5	7,209.7	85.1	84.7	-108.44	4,278.1	372.4	348.7	185.9	162.86	2.141	
11,400.0	7,099.7	11,491.5	7,209.4	87.0	86.6	-108.36	4,378.1	372.5	348.6	182.0	166.53	2.093	
11,500.0	7,099.9	11,591.5	7,209.1	88.9	88.5	-108.27	4,478.1	372.5	348.4	178.2	170.21	2.047	
11,540.0	7,100.0	11,631.5	7,209.0	89.5	89.1	-108.24	4,518.0	372.5	348.4	176.9	171.43	2.032 SF	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Diana 6T-321
Project:	SEC.6-T6N-R65W	TVD Reference:	WELL @ 4810.0ft (RKB -15')
Reference Site:	Diana 6T-HZ Pad Sec.6-T6N-R65W	MD Reference:	WELL @ 4810.0ft (RKB -15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Diana 6T-321	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (7-25-13)	Offset TVD Reference:	Offset Datum

Offset Design Diana 6T-HZ Pad Sec.6-T6N-R65W - Harsh 1 (Exist.) - Wellbore #1 - Wellbore #1												Offset Site Error: 0.0 ft	
Survey Program: 7300-UNKNOWN												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
9,200.0	7,094.3	7,107.3	7,107.3	46.6	142.1	89.73	3,016.6	1,142.7	947.6	759.8	187.74	5.047	2.167 CC, ES, SF
9,300.0	7,094.5	7,107.5	7,107.5	48.4	142.2	89.76	3,016.6	1,142.7	860.3	670.7	189.55	4.539	
9,400.0	7,094.8	7,107.8	7,107.8	50.2	142.2	89.80	3,016.6	1,142.7	776.0	584.7	191.36	4.055	
9,500.0	7,095.0	7,108.0	7,108.0	51.9	142.2	89.83	3,016.6	1,142.7	696.0	502.8	193.18	3.603	
9,600.0	7,095.3	7,108.3	7,108.3	53.7	142.2	89.86	3,016.6	1,142.7	621.7	426.7	195.01	3.188	
9,700.0	7,095.5	7,108.5	7,108.5	55.5	142.2	89.89	3,016.6	1,142.7	555.6	358.8	196.85	2.823	
9,800.0	7,095.7	7,108.7	7,108.7	57.4	142.2	89.92	3,016.6	1,142.7	500.9	302.2	198.69	2.521	
9,900.0	7,096.0	7,109.0	7,109.0	59.2	142.2	89.96	3,016.6	1,142.7	461.6	261.0	200.54	2.302	
10,000.0	7,096.2	7,109.2	7,109.2	61.0	142.2	89.99	3,016.6	1,142.7	441.8	239.4	202.40	2.183	
10,039.2	7,096.3	7,109.3	7,109.3	61.7	142.2	90.00	3,016.6	1,142.7	440.1	237.0	203.12		
10,100.0	7,096.5	7,109.5	7,109.5	62.8	142.2	90.02	3,016.6	1,142.7	444.3	240.0	204.25	2.175	
10,200.0	7,096.7	7,109.7	7,109.7	64.7	142.2	90.05	3,016.6	1,142.7	468.5	262.4	206.12	2.273	
10,300.0	7,097.0	7,110.0	7,110.0	66.5	142.2	90.08	3,016.6	1,142.7	511.6	303.6	207.98	2.460	
10,400.0	7,097.2	7,110.2	7,110.2	68.4	142.2	90.11	3,016.6	1,142.7	569.1	359.2	209.85	2.712	
10,500.0	7,097.5	7,110.5	7,110.5	70.2	142.2	90.15	3,016.6	1,142.7	637.2	425.5	211.72	3.010	
10,600.0	7,097.7	7,110.7	7,110.7	72.1	142.2	90.18	3,016.6	1,142.7	712.9	499.3	213.60	3.337	
10,700.0	7,097.9	7,110.9	7,110.9	73.9	142.2	90.21	3,016.6	1,142.7	793.9	578.5	215.47	3.685	
10,800.0	7,098.2	7,111.2	7,111.2	75.8	142.2	90.24	3,016.6	1,142.7	878.9	661.6	217.35	4.044	
10,900.0	7,098.4	7,111.4	7,111.4	77.7	142.2	90.27	3,016.6	1,142.7	966.8	747.5	219.23	4.410	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Diana 6T-321
Project:	SEC.6-T6N-R65W	TVD Reference:	WELL @ 4810.0ft (RKB -15')
Reference Site:	Diana 6T-HZ Pad Sec.6-T6N-R65W	MD Reference:	WELL @ 4810.0ft (RKB -15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Diana 6T-321	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (7-25-13)	Offset TVD Reference:	Offset Datum

Offset Design Diana 6T-HZ Pad Sec.6-T6N-R65W - Harsh 41-6 (Exist.) - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 ft
Survey Program: 7300-UNKNOWN												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	Offset Wellbore Centre +E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
10,400.0	7,097.2	7,124.2	7,124.2	68.4	142.5	89.69	4,273.5	1,109.3	983.8	773.6	210.14	4.681	
10,500.0	7,097.5	7,124.5	7,124.5	70.2	142.5	89.73	4,273.5	1,109.3	893.6	681.6	212.02	4.215	
10,600.0	7,097.7	7,124.7	7,124.7	72.1	142.5	89.76	4,273.5	1,109.3	805.8	592.0	213.89	3.768	
10,700.0	7,097.9	7,124.9	7,124.9	73.9	142.5	89.79	4,273.5	1,109.3	721.2	505.5	215.77	3.343	
10,800.0	7,098.2	7,125.2	7,125.2	75.8	142.5	89.83	4,273.5	1,109.3	641.1	423.4	217.65	2.945	
10,900.0	7,098.4	7,125.4	7,125.4	77.7	142.5	89.86	4,273.5	1,109.3	567.2	347.7	219.53	2.584	
11,000.0	7,098.7	7,125.7	7,125.7	79.5	142.5	89.90	4,273.5	1,109.3	502.5	281.1	221.42	2.270	
11,100.0	7,098.9	7,125.9	7,125.9	81.4	142.5	89.93	4,273.5	1,109.3	450.9	227.6	223.30	2.019	
11,200.0	7,099.2	7,126.2	7,126.2	83.3	142.5	89.97	4,273.5	1,109.3	417.2	192.1	225.19	1.853	
11,296.1	7,099.4	7,126.4	7,126.4	85.1	142.5	90.00	4,273.5	1,109.3	406.0	179.0	227.01	1.789 CC	
11,300.0	7,099.4	7,126.4	7,126.4	85.1	142.5	90.00	4,273.5	1,109.3	406.1	179.0	227.08	1.788 ES, SF	
11,400.0	7,099.7	7,126.7	7,126.7	87.0	142.5	90.04	4,273.5	1,109.3	419.1	190.1	228.97	1.830	
11,500.0	7,099.9	7,126.9	7,126.9	88.9	142.5	90.07	4,273.5	1,109.3	454.4	223.5	230.87	1.968	
11,540.0	7,100.0	7,127.0	7,127.0	89.5	142.5	90.08	4,273.5	1,109.3	473.6	242.2	231.48	2.046	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Diana 6T-321
Project:	SEC.6-T6N-R65W	TVD Reference:	WELL @ 4810.0ft (RKB -15')
Reference Site:	Diana 6T-HZ Pad Sec.6-T6N-R65W	MD Reference:	WELL @ 4810.0ft (RKB -15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Diana 6T-321	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (7-25-13)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4810.0ft (RKB -15')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Diana 6T-321
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.51°



Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Diana 6T-321
Project:	SEC.6-T6N-R65W	TVD Reference:	WELL @ 4810.0ft (RKB -15')
Reference Site:	Diana 6T-HZ Pad Sec.6-T6N-R65W	MD Reference:	WELL @ 4810.0ft (RKB -15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Diana 6T-321	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (7-25-13)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4810.0ft (RKB -15')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Diana 6T-321
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.51°

