

PETROLEUM DEVELOPMENT CORP Weld County CO

Well Name: **Anderson 34J-323**

Surface Location: Anderson 34M-HZ Pad Sec.34-T7N-R66W

North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4915.0

+N/-S

+E/-W

Northing

Easting

Latitude

Longitude

Slot

0.0

0.0

1439580.83

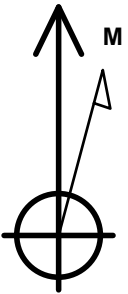
3204095.11

40.537730

-104.765690

Original Well Elev WELL @ 4930.0ft (Original Well Elev)

WELLBORE TARGET DETAILS				
Name	TVD	+N/-S	+E/-W	Shape
BHL 500'FSL, 1610'FWL	7255.0	-4481.1	-934.1	Point



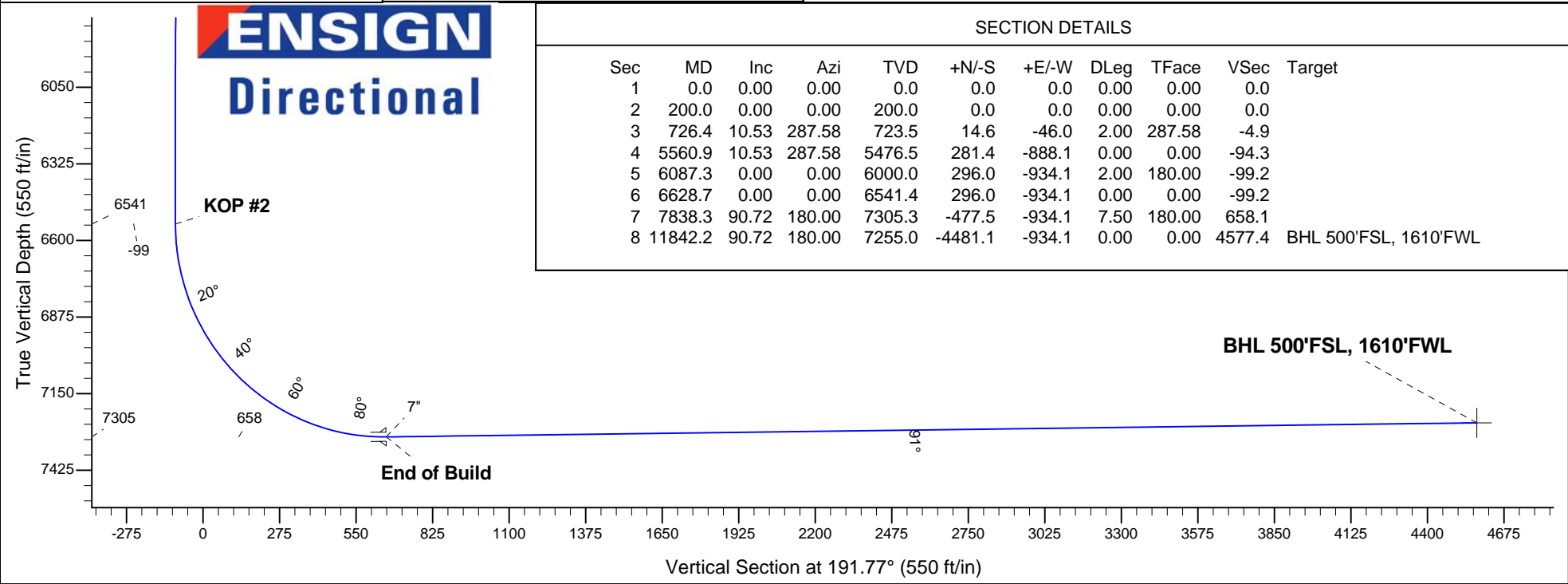
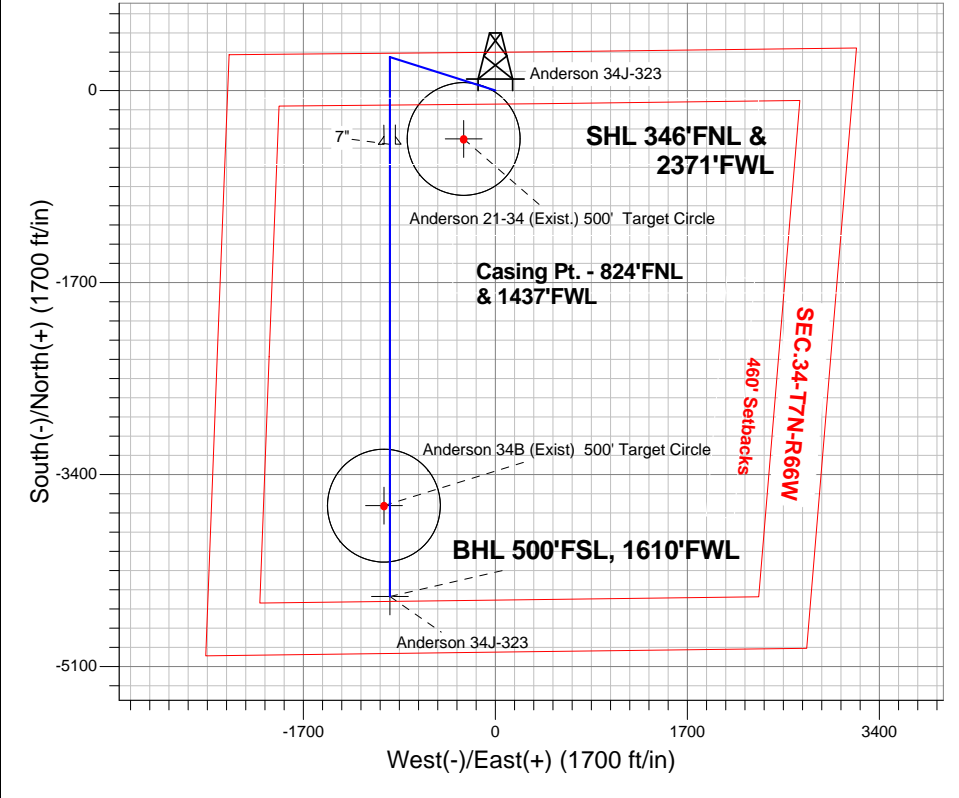
Azimuths to True North  
Magnetic North: 8.62°

Magnetic Field  
Strength: 53001.2snT  
Dip Angle: 67.10°  
Date: 5/13/2013  
Model: IGRF2010

Annotations

TVD	MD	Annotation
200.0	200.0	KOP #1
6541.4	6628.7	KOP #2
7305.3	7838.3	End of Build

Anderson 34M-HZ Pad Sec.34-T7N-R66W  
Anderson 34J-323  
Plan #1 (5-13-13)  
16:39, May 14 2013





## **Directional**

# **PETROLEUM DEVELOPMENT CORP Weld County CO**

**SEC.34-T7N-R66W**

**Anderson 34M-HZ Pad Sec.34-T7N-R66W**

**Anderson 34J-323**

**Wellbore #1**

**Plan: Plan #1 (5-13-13)**

## **Standard Planning Report**

**14 May, 2013**

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Anderson 34J-323
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Project:</b>	SEC.34-T7N-R66W	<b>MD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Site:</b>	Anderson 34M-HZ Pad Sec.34-T7N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	Anderson 34J-323	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (5-13-13)		

<b>Project</b>	SEC.34-T7N-R66W, Weld County, Colorado		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		Using Well Reference Point
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

Site	Anderson 34M-HZ Pad Sec.34-T7N-R66W				
Site Position:		Northing:	1,439,581.87 ft	Latitude:	40.537730
From:	Lat/Long	Easting:	3,204,217.40 ft	Longitude:	-104.765250
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.47 °

Well	Anderson 34J-323					
Well Position	+N/-S	0.0 ft	Northing:	1,439,580.83 ft	Latitude:	40.537730
	+E/-W	-122.3 ft	Easting:	3,204,095.11 ft	Longitude:	-104.765690
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,915.0 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	5/13/2013	8.62	67.10	53,001

<b>Design</b>	Plan #1 (5-13-13)			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	191.77

<b>Plan Sections</b>										
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	
726.4	10.53	287.58	723.5	14.6	-46.0	2.00	2.00	0.00	287.58	
5,560.9	10.53	287.58	5,476.5	281.4	-888.1	0.00	0.00	0.00	0.00	
6,087.3	0.00	0.00	6,000.0	296.0	-934.1	2.00	-2.00	0.00	180.00	
6,628.7	0.00	0.00	6,541.4	296.0	-934.1	0.00	0.00	0.00	0.00	
7,838.3	90.72	180.00	7,305.3	-477.5	-934.1	7.50	7.50	0.00	180.00	
11,842.2	90.72	180.00	7,255.0	-4,481.1	-934.1	0.00	0.00	0.00	0.00	BHL 500'FSL, 1610

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Anderson 34J-323
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Project:</b>	SEC.34-T7N-R66W	<b>MD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Site:</b>	Anderson 34M-HZ Pad Sec.34-T7N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	Anderson 34J-323	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (5-13-13)		

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
40.0	0.00	0.00	40.0	0.0	0.0	0.0	0.00	0.00	0.00
80.0	0.00	0.00	80.0	0.0	0.0	0.0	0.00	0.00	0.00
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	0.00
160.0	0.00	0.00	160.0	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
<b>KOP #1</b>									
240.0	0.80	287.58	240.0	0.1	-0.3	0.0	2.00	2.00	0.00
280.0	1.60	287.58	280.0	0.3	-1.1	-0.1	2.00	2.00	0.00
320.0	2.40	287.58	320.0	0.8	-2.4	-0.3	2.00	2.00	0.00
360.0	3.20	287.58	359.9	1.3	-4.3	-0.5	2.00	2.00	0.00
400.0	4.00	287.58	399.8	2.1	-6.7	-0.7	2.00	2.00	0.00
440.0	4.80	287.58	439.7	3.0	-9.6	-1.0	2.00	2.00	0.00
480.0	5.60	287.58	479.6	4.1	-13.0	-1.4	2.00	2.00	0.00
520.0	6.40	287.58	519.3	5.4	-17.0	-1.8	2.00	2.00	0.00
560.0	7.20	287.58	559.1	6.8	-21.5	-2.3	2.00	2.00	0.00
600.0	8.00	287.58	598.7	8.4	-26.6	-2.8	2.00	2.00	0.00
640.0	8.80	287.58	638.3	10.2	-32.1	-3.4	2.00	2.00	0.00
680.0	9.60	287.58	677.8	12.1	-38.2	-4.1	2.00	2.00	0.00
720.0	10.40	287.58	717.1	14.2	-44.9	-4.8	2.00	2.00	0.00
726.4	10.53	287.58	723.5	14.6	-46.0	-4.9	2.00	2.00	0.00
760.0	10.53	287.58	756.5	16.4	-51.8	-5.5	0.00	0.00	0.00
800.0	10.53	287.58	795.8	18.6	-58.8	-6.2	0.00	0.00	0.00
840.0	10.53	287.58	835.1	20.8	-65.8	-7.0	0.00	0.00	0.00
880.0	10.53	287.58	874.5	23.0	-72.7	-7.7	0.00	0.00	0.00
920.0	10.53	287.58	913.8	25.3	-79.7	-8.5	0.00	0.00	0.00
960.0	10.53	287.58	953.1	27.5	-86.7	-9.2	0.00	0.00	0.00
1,000.0	10.53	287.58	992.4	29.7	-93.6	-9.9	0.00	0.00	0.00
1,040.0	10.53	287.58	1,031.8	31.9	-100.6	-10.7	0.00	0.00	0.00
1,080.0	10.53	287.58	1,071.1	34.1	-107.6	-11.4	0.00	0.00	0.00
1,120.0	10.53	287.58	1,110.4	36.3	-114.5	-12.2	0.00	0.00	0.00
1,160.0	10.53	287.58	1,149.7	38.5	-121.5	-12.9	0.00	0.00	0.00
1,200.0	10.53	287.58	1,189.1	40.7	-128.5	-13.6	0.00	0.00	0.00
1,240.0	10.53	287.58	1,228.4	42.9	-135.4	-14.4	0.00	0.00	0.00
1,280.0	10.53	287.58	1,267.7	45.1	-142.4	-15.1	0.00	0.00	0.00
1,320.0	10.53	287.58	1,307.0	47.3	-149.4	-15.9	0.00	0.00	0.00
1,360.0	10.53	287.58	1,346.4	49.5	-156.3	-16.6	0.00	0.00	0.00
1,400.0	10.53	287.58	1,385.7	51.8	-163.3	-17.3	0.00	0.00	0.00
1,440.0	10.53	287.58	1,425.0	54.0	-170.3	-18.1	0.00	0.00	0.00
1,480.0	10.53	287.58	1,464.4	56.2	-177.2	-18.8	0.00	0.00	0.00
1,520.0	10.53	287.58	1,503.7	58.4	-184.2	-19.6	0.00	0.00	0.00
1,560.0	10.53	287.58	1,543.0	60.6	-191.2	-20.3	0.00	0.00	0.00
1,600.0	10.53	287.58	1,582.3	62.8	-198.2	-21.0	0.00	0.00	0.00
1,640.0	10.53	287.58	1,621.7	65.0	-205.1	-21.8	0.00	0.00	0.00
1,680.0	10.53	287.58	1,661.0	67.2	-212.1	-22.5	0.00	0.00	0.00
1,720.0	10.53	287.58	1,700.3	69.4	-219.1	-23.3	0.00	0.00	0.00
1,760.0	10.53	287.58	1,739.6	71.6	-226.0	-24.0	0.00	0.00	0.00
1,800.0	10.53	287.58	1,779.0	73.8	-233.0	-24.7	0.00	0.00	0.00
1,840.0	10.53	287.58	1,818.3	76.0	-240.0	-25.5	0.00	0.00	0.00
1,880.0	10.53	287.58	1,857.6	78.2	-246.9	-26.2	0.00	0.00	0.00
1,920.0	10.53	287.58	1,896.9	80.5	-253.9	-27.0	0.00	0.00	0.00
1,960.0	10.53	287.58	1,936.3	82.7	-260.9	-27.7	0.00	0.00	0.00
2,000.0	10.53	287.58	1,975.6	84.9	-267.8	-28.4	0.00	0.00	0.00

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<b>Project:</b>	SEC.34-T7N-R66W	<b>MD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Site:</b>	Anderson 34M-HZ Pad Sec.34-T7N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	Anderson 34J-323	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (5-13-13)		

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)
2,040.0	10.53	287.58	2,014.9	87.1	-274.8	-29.2	0.00	0.00	0.00
2,080.0	10.53	287.58	2,054.3	89.3	-281.8	-29.9	0.00	0.00	0.00
2,120.0	10.53	287.58	2,093.6	91.5	-288.7	-30.6	0.00	0.00	0.00
2,160.0	10.53	287.58	2,132.9	93.7	-295.7	-31.4	0.00	0.00	0.00
2,200.0	10.53	287.58	2,172.2	95.9	-302.7	-32.1	0.00	0.00	0.00
2,240.0	10.53	287.58	2,211.6	98.1	-309.6	-32.9	0.00	0.00	0.00
2,280.0	10.53	287.58	2,250.9	100.3	-316.6	-33.6	0.00	0.00	0.00
2,320.0	10.53	287.58	2,290.2	102.5	-323.6	-34.3	0.00	0.00	0.00
2,360.0	10.53	287.58	2,329.5	104.7	-330.5	-35.1	0.00	0.00	0.00
2,400.0	10.53	287.58	2,368.9	107.0	-337.5	-35.8	0.00	0.00	0.00
2,440.0	10.53	287.58	2,408.2	109.2	-344.5	-36.6	0.00	0.00	0.00
2,480.0	10.53	287.58	2,447.5	111.4	-351.4	-37.3	0.00	0.00	0.00
2,520.0	10.53	287.58	2,486.8	113.6	-358.4	-38.0	0.00	0.00	0.00
2,560.0	10.53	287.58	2,526.2	115.8	-365.4	-38.8	0.00	0.00	0.00
2,600.0	10.53	287.58	2,565.5	118.0	-372.3	-39.5	0.00	0.00	0.00
2,640.0	10.53	287.58	2,604.8	120.2	-379.3	-40.3	0.00	0.00	0.00
2,680.0	10.53	287.58	2,644.1	122.4	-386.3	-41.0	0.00	0.00	0.00
2,720.0	10.53	287.58	2,683.5	124.6	-393.3	-41.7	0.00	0.00	0.00
2,760.0	10.53	287.58	2,722.8	126.8	-400.2	-42.5	0.00	0.00	0.00
2,800.0	10.53	287.58	2,762.1	129.0	-407.2	-43.2	0.00	0.00	0.00
2,840.0	10.53	287.58	2,801.5	131.2	-414.2	-44.0	0.00	0.00	0.00
2,880.0	10.53	287.58	2,840.8	133.4	-421.1	-44.7	0.00	0.00	0.00
2,920.0	10.53	287.58	2,880.1	135.7	-428.1	-45.4	0.00	0.00	0.00
2,960.0	10.53	287.58	2,919.4	137.9	-435.1	-46.2	0.00	0.00	0.00
3,000.0	10.53	287.58	2,958.8	140.1	-442.0	-46.9	0.00	0.00	0.00
3,040.0	10.53	287.58	2,998.1	142.3	-449.0	-47.7	0.00	0.00	0.00
3,080.0	10.53	287.58	3,037.4	144.5	-456.0	-48.4	0.00	0.00	0.00
3,120.0	10.53	287.58	3,076.7	146.7	-462.9	-49.1	0.00	0.00	0.00
3,160.0	10.53	287.58	3,116.1	148.9	-469.9	-49.9	0.00	0.00	0.00
3,200.0	10.53	287.58	3,155.4	151.1	-476.9	-50.6	0.00	0.00	0.00
3,240.0	10.53	287.58	3,194.7	153.3	-483.8	-51.4	0.00	0.00	0.00
3,280.0	10.53	287.58	3,234.0	155.5	-490.8	-52.1	0.00	0.00	0.00
3,320.0	10.53	287.58	3,273.4	157.7	-497.8	-52.8	0.00	0.00	0.00
3,360.0	10.53	287.58	3,312.7	159.9	-504.7	-53.6	0.00	0.00	0.00
3,400.0	10.53	287.58	3,352.0	162.2	-511.7	-54.3	0.00	0.00	0.00
3,440.0	10.53	287.58	3,391.4	164.4	-518.7	-55.1	0.00	0.00	0.00
3,480.0	10.53	287.58	3,430.7	166.6	-525.6	-55.8	0.00	0.00	0.00
3,520.0	10.53	287.58	3,470.0	168.8	-532.6	-56.5	0.00	0.00	0.00
3,560.0	10.53	287.58	3,509.3	171.0	-539.6	-57.3	0.00	0.00	0.00
3,600.0	10.53	287.58	3,548.7	173.2	-546.5	-58.0	0.00	0.00	0.00
3,640.0	10.53	287.58	3,588.0	175.4	-553.5	-58.8	0.00	0.00	0.00
3,680.0	10.53	287.58	3,627.3	177.6	-560.5	-59.5	0.00	0.00	0.00
3,720.0	10.53	287.58	3,666.6	179.8	-567.4	-60.2	0.00	0.00	0.00
3,760.0	10.53	287.58	3,706.0	182.0	-574.4	-61.0	0.00	0.00	0.00
3,800.0	10.53	287.58	3,745.3	184.2	-581.4	-61.7	0.00	0.00	0.00
3,840.0	10.53	287.58	3,784.6	186.4	-588.4	-62.5	0.00	0.00	0.00
3,880.0	10.53	287.58	3,823.9	188.6	-595.3	-63.2	0.00	0.00	0.00
3,920.0	10.53	287.58	3,863.3	190.9	-602.3	-63.9	0.00	0.00	0.00
3,960.0	10.53	287.58	3,902.6	193.1	-609.3	-64.7	0.00	0.00	0.00
4,000.0	10.53	287.58	3,941.9	195.3	-616.2	-65.4	0.00	0.00	0.00
4,040.0	10.53	287.58	3,981.3	197.5	-623.2	-66.2	0.00	0.00	0.00
4,080.0	10.53	287.58	4,020.6	199.7	-630.2	-66.9	0.00	0.00	0.00
4,120.0	10.53	287.58	4,059.9	201.9	-637.1	-67.6	0.00	0.00	0.00

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<b>Project:</b>	SEC.34-T7N-R66W	<b>MD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Site:</b>	Anderson 34M-HZ Pad Sec.34-T7N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	Anderson 34J-323	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (5-13-13)		

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)
4,160.0	10.53	287.58	4,099.2	204.1	-644.1	-68.4	0.00	0.00	0.00
4,200.0	10.53	287.58	4,138.6	206.3	-651.1	-69.1	0.00	0.00	0.00
4,240.0	10.53	287.58	4,177.9	208.5	-658.0	-69.8	0.00	0.00	0.00
4,280.0	10.53	287.58	4,217.2	210.7	-665.0	-70.6	0.00	0.00	0.00
4,320.0	10.53	287.58	4,256.5	212.9	-672.0	-71.3	0.00	0.00	0.00
4,360.0	10.53	287.58	4,295.9	215.1	-678.9	-72.1	0.00	0.00	0.00
4,400.0	10.53	287.58	4,335.2	217.3	-685.9	-72.8	0.00	0.00	0.00
4,440.0	10.53	287.58	4,374.5	219.6	-692.9	-73.5	0.00	0.00	0.00
4,480.0	10.53	287.58	4,413.8	221.8	-699.8	-74.3	0.00	0.00	0.00
4,520.0	10.53	287.58	4,453.2	224.0	-706.8	-75.0	0.00	0.00	0.00
4,560.0	10.53	287.58	4,492.5	226.2	-713.8	-75.8	0.00	0.00	0.00
4,600.0	10.53	287.58	4,531.8	228.4	-720.7	-76.5	0.00	0.00	0.00
4,640.0	10.53	287.58	4,571.1	230.6	-727.7	-77.2	0.00	0.00	0.00
4,680.0	10.53	287.58	4,610.5	232.8	-734.7	-78.0	0.00	0.00	0.00
4,720.0	10.53	287.58	4,649.8	235.0	-741.6	-78.7	0.00	0.00	0.00
4,760.0	10.53	287.58	4,689.1	237.2	-748.6	-79.5	0.00	0.00	0.00
4,800.0	10.53	287.58	4,728.5	239.4	-755.6	-80.2	0.00	0.00	0.00
4,840.0	10.53	287.58	4,767.8	241.6	-762.5	-80.9	0.00	0.00	0.00
4,880.0	10.53	287.58	4,807.1	243.8	-769.5	-81.7	0.00	0.00	0.00
4,920.0	10.53	287.58	4,846.4	246.1	-776.5	-82.4	0.00	0.00	0.00
4,960.0	10.53	287.58	4,885.8	248.3	-783.4	-83.2	0.00	0.00	0.00
5,000.0	10.53	287.58	4,925.1	250.5	-790.4	-83.9	0.00	0.00	0.00
5,040.0	10.53	287.58	4,964.4	252.7	-797.4	-84.6	0.00	0.00	0.00
5,080.0	10.53	287.58	5,003.7	254.9	-804.4	-85.4	0.00	0.00	0.00
5,120.0	10.53	287.58	5,043.1	257.1	-811.3	-86.1	0.00	0.00	0.00
5,160.0	10.53	287.58	5,082.4	259.3	-818.3	-86.9	0.00	0.00	0.00
5,200.0	10.53	287.58	5,121.7	261.5	-825.3	-87.6	0.00	0.00	0.00
5,240.0	10.53	287.58	5,161.0	263.7	-832.2	-88.3	0.00	0.00	0.00
5,280.0	10.53	287.58	5,200.4	265.9	-839.2	-89.1	0.00	0.00	0.00
5,320.0	10.53	287.58	5,239.7	268.1	-846.2	-89.8	0.00	0.00	0.00
5,360.0	10.53	287.58	5,279.0	270.3	-853.1	-90.6	0.00	0.00	0.00
5,400.0	10.53	287.58	5,318.4	272.5	-860.1	-91.3	0.00	0.00	0.00
5,440.0	10.53	287.58	5,357.7	274.8	-867.1	-92.0	0.00	0.00	0.00
5,480.0	10.53	287.58	5,397.0	277.0	-874.0	-92.8	0.00	0.00	0.00
5,520.0	10.53	287.58	5,436.3	279.2	-881.0	-93.5	0.00	0.00	0.00
5,560.0	10.53	287.58	5,475.7	281.4	-888.0	-94.3	0.00	0.00	0.00
5,560.9	10.53	287.58	5,476.5	281.4	-888.1	-94.3	0.00	0.00	0.00
5,600.0	9.75	287.58	5,515.0	283.5	-894.7	-95.0	2.00	-2.00	0.00
5,640.0	8.95	287.58	5,554.5	285.5	-900.9	-95.6	2.00	-2.00	0.00
5,680.0	8.15	287.58	5,594.1	287.3	-906.5	-96.2	2.00	-2.00	0.00
5,720.0	7.35	287.58	5,633.7	288.9	-911.7	-96.8	2.00	-2.00	0.00
5,760.0	6.55	287.58	5,673.4	290.4	-916.3	-97.3	2.00	-2.00	0.00
5,800.0	5.75	287.58	5,713.2	291.7	-920.4	-97.7	2.00	-2.00	0.00
5,840.0	4.95	287.58	5,753.0	292.8	-923.9	-98.1	2.00	-2.00	0.00
5,880.0	4.15	287.58	5,792.9	293.7	-927.0	-98.4	2.00	-2.00	0.00
5,920.0	3.35	287.58	5,832.8	294.5	-929.4	-98.7	2.00	-2.00	0.00
5,960.0	2.55	287.58	5,872.7	295.1	-931.4	-98.9	2.00	-2.00	0.00
6,000.0	1.75	287.58	5,912.7	295.6	-932.8	-99.0	2.00	-2.00	0.00
6,040.0	0.95	287.58	5,952.7	295.9	-933.7	-99.1	2.00	-2.00	0.00
6,080.0	0.15	287.58	5,992.7	296.0	-934.1	-99.2	2.00	-2.00	0.00
6,087.3	0.00	0.00	6,000.0	296.0	-934.1	-99.2	2.00	-2.00	0.00
6,120.0	0.00	0.00	6,032.7	296.0	-934.1	-99.2	0.00	0.00	0.00
6,160.0	0.00	0.00	6,072.7	296.0	-934.1	-99.2	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Anderson 34J-323
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Project:</b>	SEC.34-T7N-R66W	<b>MD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Site:</b>	Anderson 34M-HZ Pad Sec.34-T7N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	Anderson 34J-323	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (5-13-13)		

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)
6,200.0	0.00	0.00	6,112.7	296.0	-934.1	-99.2	0.00	0.00	0.00
6,240.0	0.00	0.00	6,152.7	296.0	-934.1	-99.2	0.00	0.00	0.00
6,280.0	0.00	0.00	6,192.7	296.0	-934.1	-99.2	0.00	0.00	0.00
6,320.0	0.00	0.00	6,232.7	296.0	-934.1	-99.2	0.00	0.00	0.00
6,360.0	0.00	0.00	6,272.7	296.0	-934.1	-99.2	0.00	0.00	0.00
6,400.0	0.00	0.00	6,312.7	296.0	-934.1	-99.2	0.00	0.00	0.00
6,440.0	0.00	0.00	6,352.7	296.0	-934.1	-99.2	0.00	0.00	0.00
6,480.0	0.00	0.00	6,392.7	296.0	-934.1	-99.2	0.00	0.00	0.00
6,520.0	0.00	0.00	6,432.7	296.0	-934.1	-99.2	0.00	0.00	0.00
6,560.0	0.00	0.00	6,472.7	296.0	-934.1	-99.2	0.00	0.00	0.00
6,600.0	0.00	0.00	6,512.7	296.0	-934.1	-99.2	0.00	0.00	0.00
6,628.7	0.00	0.00	6,541.4	296.0	-934.1	-99.2	0.00	0.00	0.00
<b>KOP #2</b>									
6,640.0	0.84	180.00	6,552.7	295.9	-934.1	-99.1	7.47	7.47	0.00
6,680.0	3.84	180.00	6,592.6	294.3	-934.1	-97.5	7.50	7.50	0.00
6,720.0	6.84	180.00	6,632.5	290.6	-934.1	-93.8	7.50	7.50	0.00
6,760.0	9.84	180.00	6,672.0	284.8	-934.1	-88.1	7.50	7.50	0.00
6,800.0	12.84	180.00	6,711.3	276.9	-934.1	-80.4	7.50	7.50	0.00
6,840.0	15.84	180.00	6,750.0	267.0	-934.1	-70.7	7.50	7.50	0.00
6,880.0	18.84	180.00	6,788.2	255.1	-934.1	-59.1	7.50	7.50	0.00
6,920.0	21.84	180.00	6,825.7	241.1	-934.1	-45.5	7.50	7.50	0.00
6,960.0	24.84	180.00	6,862.4	225.3	-934.1	-29.9	7.50	7.50	0.00
7,000.0	27.84	180.00	6,898.2	207.6	-934.1	-12.6	7.50	7.50	0.00
7,040.0	30.84	180.00	6,933.1	188.0	-934.1	6.6	7.50	7.50	0.00
7,080.0	33.84	180.00	6,966.9	166.6	-934.1	27.6	7.50	7.50	0.00
7,120.0	36.84	180.00	6,999.5	143.4	-934.1	50.2	7.50	7.50	0.00
7,160.0	39.84	180.00	7,030.9	118.6	-934.1	74.5	7.50	7.50	0.00
7,200.0	42.84	180.00	7,060.9	92.2	-934.1	100.4	7.50	7.50	0.00
7,240.0	45.84	180.00	7,089.5	64.2	-934.1	127.7	7.50	7.50	0.00
7,280.0	48.84	180.00	7,116.6	34.8	-934.1	156.5	7.50	7.50	0.00
7,320.0	51.84	180.00	7,142.1	4.0	-934.1	186.7	7.50	7.50	0.00
7,360.0	54.84	180.00	7,166.0	-28.1	-934.1	218.1	7.50	7.50	0.00
7,400.0	57.84	180.00	7,188.2	-61.4	-934.1	250.7	7.50	7.50	0.00
7,440.0	60.84	180.00	7,208.6	-95.8	-934.1	284.4	7.50	7.50	0.00
7,480.0	63.84	180.00	7,227.1	-131.2	-934.1	319.0	7.50	7.50	0.00
7,520.0	66.84	180.00	7,243.8	-167.5	-934.1	354.6	7.50	7.50	0.00
7,560.0	69.84	180.00	7,258.6	-204.7	-934.1	391.0	7.50	7.50	0.00
7,600.0	72.84	180.00	7,271.4	-242.6	-934.1	428.1	7.50	7.50	0.00
7,640.0	75.84	180.00	7,282.2	-281.1	-934.1	465.8	7.50	7.50	0.00
7,680.0	78.84	180.00	7,290.9	-320.1	-934.1	504.0	7.50	7.50	0.00
7,720.0	81.84	180.00	7,297.6	-359.6	-934.1	542.6	7.50	7.50	0.00
7,760.0	84.84	180.00	7,302.3	-399.3	-934.1	581.5	7.50	7.50	0.00
7,800.0	87.84	180.00	7,304.8	-439.2	-934.1	620.6	7.50	7.50	0.00
7,838.3	90.72	180.00	7,305.3	-477.5	-934.1	658.1	7.50	7.50	0.00
<b>End of Build - 7"</b>									
7,840.0	90.72	180.00	7,305.3	-479.2	-934.1	659.7	0.20	0.20	0.00
7,880.0	90.72	180.00	7,304.8	-519.2	-934.1	698.9	0.00	0.00	0.00
7,920.0	90.72	180.00	7,304.3	-559.2	-934.1	738.0	0.00	0.00	0.00
7,960.0	90.72	180.00	7,303.8	-599.2	-934.1	777.2	0.00	0.00	0.00
8,000.0	90.72	180.00	7,303.3	-639.2	-934.1	816.4	0.00	0.00	0.00
8,040.0	90.72	180.00	7,302.8	-679.2	-934.1	855.5	0.00	0.00	0.00
8,080.0	90.72	180.00	7,302.3	-719.2	-934.1	894.7	0.00	0.00	0.00
8,120.0	90.72	180.00	7,301.8	-759.2	-934.1	933.8	0.00	0.00	0.00



<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Anderson 34J-323
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Project:</b>	SEC.34-T7N-R66W	<b>MD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Site:</b>	Anderson 34M-HZ Pad Sec.34-T7N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	Anderson 34J-323	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (5-13-13)		

## 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)
8,160.0	90.72	180.00	7,301.3	-799.2	-934.1	973.0	0.00	0.00	0.00
8,200.0	90.72	180.00	7,300.8	-839.2	-934.1	1,012.1	0.00	0.00	0.00
8,240.0	90.72	180.00	7,300.3	-879.2	-934.1	1,051.3	0.00	0.00	0.00
8,280.0	90.72	180.00	7,299.8	-919.2	-934.1	1,090.4	0.00	0.00	0.00
8,320.0	90.72	180.00	7,299.3	-959.2	-934.1	1,129.6	0.00	0.00	0.00
8,360.0	90.72	180.00	7,298.8	-999.2	-934.1	1,168.8	0.00	0.00	0.00
8,400.0	90.72	180.00	7,298.3	-1,039.2	-934.1	1,207.9	0.00	0.00	0.00
8,440.0	90.72	180.00	7,297.8	-1,079.2	-934.1	1,247.1	0.00	0.00	0.00
8,480.0	90.72	180.00	7,297.2	-1,119.1	-934.1	1,286.2	0.00	0.00	0.00
8,520.0	90.72	180.00	7,296.7	-1,159.1	-934.1	1,325.4	0.00	0.00	0.00
8,560.0	90.72	180.00	7,296.2	-1,199.1	-934.1	1,364.5	0.00	0.00	0.00
8,600.0	90.72	180.00	7,295.7	-1,239.1	-934.1	1,403.7	0.00	0.00	0.00
8,640.0	90.72	180.00	7,295.2	-1,279.1	-934.1	1,442.8	0.00	0.00	0.00
8,680.0	90.72	180.00	7,294.7	-1,319.1	-934.1	1,482.0	0.00	0.00	0.00
8,720.0	90.72	180.00	7,294.2	-1,359.1	-934.1	1,521.1	0.00	0.00	0.00
8,760.0	90.72	180.00	7,293.7	-1,399.1	-934.1	1,560.3	0.00	0.00	0.00
8,800.0	90.72	180.00	7,293.2	-1,439.1	-934.1	1,599.5	0.00	0.00	0.00
8,840.0	90.72	180.00	7,292.7	-1,479.1	-934.1	1,638.6	0.00	0.00	0.00
8,880.0	90.72	180.00	7,292.2	-1,519.1	-934.1	1,677.8	0.00	0.00	0.00
8,920.0	90.72	180.00	7,291.7	-1,559.1	-934.1	1,716.9	0.00	0.00	0.00
8,960.0	90.72	180.00	7,291.2	-1,599.1	-934.1	1,756.1	0.00	0.00	0.00
9,000.0	90.72	180.00	7,290.7	-1,639.1	-934.1	1,795.2	0.00	0.00	0.00
9,040.0	90.72	180.00	7,290.2	-1,679.1	-934.1	1,834.4	0.00	0.00	0.00
9,080.0	90.72	180.00	7,289.7	-1,719.1	-934.1	1,873.5	0.00	0.00	0.00
9,120.0	90.72	180.00	7,289.2	-1,759.1	-934.1	1,912.7	0.00	0.00	0.00
9,160.0	90.72	180.00	7,288.7	-1,799.1	-934.1	1,951.9	0.00	0.00	0.00
9,200.0	90.72	180.00	7,288.2	-1,839.1	-934.1	1,991.0	0.00	0.00	0.00
9,240.0	90.72	180.00	7,287.7	-1,879.1	-934.1	2,030.2	0.00	0.00	0.00
9,280.0	90.72	180.00	7,287.2	-1,919.1	-934.1	2,069.3	0.00	0.00	0.00
9,320.0	90.72	180.00	7,286.7	-1,959.1	-934.1	2,108.5	0.00	0.00	0.00
9,360.0	90.72	180.00	7,286.2	-1,999.1	-934.1	2,147.6	0.00	0.00	0.00
9,400.0	90.72	180.00	7,285.7	-2,039.1	-934.1	2,186.8	0.00	0.00	0.00
9,440.0	90.72	180.00	7,285.2	-2,079.1	-934.1	2,225.9	0.00	0.00	0.00
9,480.0	90.72	180.00	7,284.7	-2,119.1	-934.1	2,265.1	0.00	0.00	0.00
9,520.0	90.72	180.00	7,284.2	-2,159.1	-934.1	2,304.3	0.00	0.00	0.00
9,560.0	90.72	180.00	7,283.7	-2,199.1	-934.1	2,343.4	0.00	0.00	0.00
9,600.0	90.72	180.00	7,283.2	-2,239.1	-934.1	2,382.6	0.00	0.00	0.00
9,640.0	90.72	180.00	7,282.7	-2,279.1	-934.1	2,421.7	0.00	0.00	0.00
9,680.0	90.72	180.00	7,282.2	-2,319.1	-934.1	2,460.9	0.00	0.00	0.00
9,720.0	90.72	180.00	7,281.7	-2,359.1	-934.1	2,500.0	0.00	0.00	0.00
9,760.0	90.72	180.00	7,281.2	-2,399.0	-934.1	2,539.2	0.00	0.00	0.00
9,800.0	90.72	180.00	7,280.7	-2,439.0	-934.1	2,578.3	0.00	0.00	0.00
9,840.0	90.72	180.00	7,280.2	-2,479.0	-934.1	2,617.5	0.00	0.00	0.00
9,880.0	90.72	180.00	7,279.7	-2,519.0	-934.1	2,656.6	0.00	0.00	0.00
9,920.0	90.72	180.00	7,279.2	-2,559.0	-934.1	2,695.8	0.00	0.00	0.00
9,960.0	90.72	180.00	7,278.7	-2,599.0	-934.1	2,735.0	0.00	0.00	0.00
10,000.0	90.72	180.00	7,278.1	-2,639.0	-934.1	2,774.1	0.00	0.00	0.00
10,040.0	90.72	180.00	7,277.6	-2,679.0	-934.1	2,813.3	0.00	0.00	0.00
10,080.0	90.72	180.00	7,277.1	-2,719.0	-934.1	2,852.4	0.00	0.00	0.00
10,120.0	90.72	180.00	7,276.6	-2,759.0	-934.1	2,891.6	0.00	0.00	0.00
10,160.0	90.72	180.00	7,276.1	-2,799.0	-934.1	2,930.7	0.00	0.00	0.00
10,200.0	90.72	180.00	7,275.6	-2,839.0	-934.1	2,969.9	0.00	0.00	0.00
10,240.0	90.72	180.00	7,275.1	-2,879.0	-934.1	3,009.0	0.00	0.00	0.00



<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Anderson 34J-323
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Project:</b>	SEC.34-T7N-R66W	<b>MD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Site:</b>	Anderson 34M-HZ Pad Sec.34-T7N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	Anderson 34J-323	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (5-13-13)		

## 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)
10,280.0	90.72	180.00	7,274.6	-2,919.0	-934.1	3,048.2	0.00	0.00	0.00
10,320.0	90.72	180.00	7,274.1	-2,959.0	-934.1	3,087.4	0.00	0.00	0.00
10,360.0	90.72	180.00	7,273.6	-2,999.0	-934.1	3,126.5	0.00	0.00	0.00
10,400.0	90.72	180.00	7,273.1	-3,039.0	-934.1	3,165.7	0.00	0.00	0.00
10,440.0	90.72	180.00	7,272.6	-3,079.0	-934.1	3,204.8	0.00	0.00	0.00
10,480.0	90.72	180.00	7,272.1	-3,119.0	-934.1	3,244.0	0.00	0.00	0.00
10,520.0	90.72	180.00	7,271.6	-3,159.0	-934.1	3,283.1	0.00	0.00	0.00
10,560.0	90.72	180.00	7,271.1	-3,199.0	-934.1	3,322.3	0.00	0.00	0.00
10,600.0	90.72	180.00	7,270.6	-3,239.0	-934.1	3,361.4	0.00	0.00	0.00
10,640.0	90.72	180.00	7,270.1	-3,279.0	-934.1	3,400.6	0.00	0.00	0.00
10,680.0	90.72	180.00	7,269.6	-3,319.0	-934.1	3,439.8	0.00	0.00	0.00
10,720.0	90.72	180.00	7,269.1	-3,359.0	-934.1	3,478.9	0.00	0.00	0.00
10,760.0	90.72	180.00	7,268.6	-3,399.0	-934.1	3,518.1	0.00	0.00	0.00
10,800.0	90.72	180.00	7,268.1	-3,439.0	-934.1	3,557.2	0.00	0.00	0.00
10,840.0	90.72	180.00	7,267.6	-3,479.0	-934.1	3,596.4	0.00	0.00	0.00
10,880.0	90.72	180.00	7,267.1	-3,519.0	-934.1	3,635.5	0.00	0.00	0.00
10,920.0	90.72	180.00	7,266.6	-3,559.0	-934.1	3,674.7	0.00	0.00	0.00
10,960.0	90.72	180.00	7,266.1	-3,599.0	-934.1	3,713.8	0.00	0.00	0.00
11,000.0	90.72	180.00	7,265.6	-3,639.0	-934.1	3,753.0	0.00	0.00	0.00
11,040.0	90.72	180.00	7,265.1	-3,678.9	-934.1	3,792.1	0.00	0.00	0.00
11,080.0	90.72	180.00	7,264.6	-3,718.9	-934.1	3,831.3	0.00	0.00	0.00
11,120.0	90.72	180.00	7,264.1	-3,758.9	-934.1	3,870.5	0.00	0.00	0.00
11,160.0	90.72	180.00	7,263.6	-3,798.9	-934.1	3,909.6	0.00	0.00	0.00
11,200.0	90.72	180.00	7,263.1	-3,838.9	-934.1	3,948.8	0.00	0.00	0.00
11,240.0	90.72	180.00	7,262.6	-3,878.9	-934.1	3,987.9	0.00	0.00	0.00
11,280.0	90.72	180.00	7,262.1	-3,918.9	-934.1	4,027.1	0.00	0.00	0.00
11,320.0	90.72	180.00	7,261.6	-3,958.9	-934.1	4,066.2	0.00	0.00	0.00
11,360.0	90.72	180.00	7,261.1	-3,998.9	-934.1	4,105.4	0.00	0.00	0.00
11,400.0	90.72	180.00	7,260.6	-4,038.9	-934.1	4,144.5	0.00	0.00	0.00
11,440.0	90.72	180.00	7,260.1	-4,078.9	-934.1	4,183.7	0.00	0.00	0.00
11,480.0	90.72	180.00	7,259.6	-4,118.9	-934.1	4,222.9	0.00	0.00	0.00
11,520.0	90.72	180.00	7,259.0	-4,158.9	-934.1	4,262.0	0.00	0.00	0.00
11,560.0	90.72	180.00	7,258.5	-4,198.9	-934.1	4,301.2	0.00	0.00	0.00
11,600.0	90.72	180.00	7,258.0	-4,238.9	-934.1	4,340.3	0.00	0.00	0.00
11,640.0	90.72	180.00	7,257.5	-4,278.9	-934.1	4,379.5	0.00	0.00	0.00
11,680.0	90.72	180.00	7,257.0	-4,318.9	-934.1	4,418.6	0.00	0.00	0.00
11,720.0	90.72	180.00	7,256.5	-4,358.9	-934.1	4,457.8	0.00	0.00	0.00
11,760.0	90.72	180.00	7,256.0	-4,398.9	-934.1	4,496.9	0.00	0.00	0.00
11,800.0	90.72	180.00	7,255.5	-4,438.9	-934.1	4,536.1	0.00	0.00	0.00
11,840.0	90.72	180.00	7,255.0	-4,478.9	-934.1	4,575.3	0.00	0.00	0.00
11,842.2	90.72	180.00	7,255.0	-4,481.1	-934.1	4,577.4	0.00	0.00	0.00
BHL 500'FSL, 1610'FWL									

## 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									
BHL 500'FSL, 1610'F	0.00	0.00	7,255.0	-4,481.1	-934.1	1,435,092.30	3,203,198.18	40.525430	-104.769050
- plan hits target center									
- Point									

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Anderson 34J-323
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Project:</b>	SEC.34-T7N-R66W	<b>MD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Site:</b>	Anderson 34M-HZ Pad Sec.34-T7N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	Anderson 34J-323	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (5-13-13)		

#### Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,838.3	7,305.3	7"	7	7-1/2

#### 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
6,628.7	6,541.4	296.0	-934.1	KOP #2
7,838.3	7,305.3	-477.5	-934.1	End of Build



## **Directional**

# **PETROLEUM DEVELOPMENT CORP Weld County CO**

**SEC.34-T7N-R66W**

**Anderson 34M-HZ Pad Sec.34-T7N-R66W**

**Anderson 34J-323**

**Wellbore #1**

**Plan #1 (5-13-13)**

## **Anticollision Report**

**16 May, 2013**



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Anderson 34J-323
<b>Project:</b>	SEC.34-T7N-R66W	<b>TVD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Reference Site:</b>	Anderson 34M-HZ Pad Sec.34-T7N-R66W	<b>MD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Anderson 34J-323	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-13-13)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #1 (5-13-13)		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	Stations	<b>Error Model:</b>	ISCWSA
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum center-center distance of 10,000.0ft	<b>Error Surface:</b>	Elliptical Conic
<b>Warning Levels Evaluated at:</b>	2.00 Sigma		

<b>Survey Tool Program</b>	<b>Date</b> 5/14/2013			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	11,842.2	Plan #1 (5-13-13) (Wellbore #1)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Anderson (Existing Wells) Sec.34-T7N-R66W						
Anderson 21-34 (Exist) - Wellbore #1 - Wellbore #1	1,216.4	1,220.2	494.6	466.5	17.601	CC
Anderson 21-34 (Exist) - Wellbore #1 - Wellbore #1	1,600.0	1,597.3	499.5	462.3	13.430	ES
Anderson 21-34 (Exist) - Wellbore #1 - Wellbore #1	7,800.0	7,319.8	653.4	487.4	3.937	SF
Anderson 34B (Exist) - Wellbore #1 - Wellbore #1	11,037.0	7,280.1	52.8	-166.6	0.241	Level 1, CC, ES, SF
Anderson 34M-HZ Pad Sec.34-T7N-R66W						
Anderson 34J-423 - Wellbore #1 - Plan #1 (5-13-13)	200.0	200.0	30.6	29.9	45.343	CC, ES
Anderson 34J-423 - Wellbore #1 - Plan #1 (5-13-13)	11,842.2	11,861.1	347.6	176.8	2.034	SF
Anderson 34M-343 - Wellbore #1 - Plan #1 (5-13-13)	200.0	200.0	61.1	60.5	90.687	CC, ES
Anderson 34M-343 - Wellbore #1 - Plan #1 (5-13-13)	11,842.2	11,770.8	658.9	481.5	3.714	SF

<b>Offset Design</b> Anderson (Existing Wells) Sec.34-T7N-R66W - Anderson 21-34 (Exist) - Wellbore #1 - Wellbore #1											
<b>Survey Program:</b> 7800-UNKNOWN											
<b>Offset Site Error:</b> 0.0ft											
<b>Offset Well Error:</b> 0.0ft											
Reference	Offset	Semi Major Axis		Distance		Minimum		Separation		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Factor
0.0	0.0	15.0	15.0	0.0	0.3	-146.85	-429.9	-280.7	513.4	513.1	0.30 1,710.276
100.0	100.0	115.0	115.0	0.1	2.3	-146.85	-429.9	-280.7	513.4	511.0	2.41 212.811
200.0	200.0	215.0	215.0	0.3	4.3	-146.85	-429.9	-280.7	513.4	508.8	4.64 110.715
300.0	300.0	315.0	315.0	0.6	6.3	-74.63	-429.9	-280.7	513.0	506.1	6.85 74.832
400.0	399.8	414.8	414.8	0.8	8.3	-75.22	-429.9	-280.7	511.6	502.5	9.08 56.366
500.0	499.5	514.5	514.5	1.0	10.3	-76.21	-429.9	-280.7	509.4	498.1	11.32 45.017
600.0	598.7	613.7	613.7	1.3	12.3	-77.59	-429.9	-280.7	506.7	493.1	13.58 37.297
700.0	697.5	712.5	712.5	1.7	14.2	-79.37	-429.9	-280.7	503.5	487.6	15.89 31.689
726.4	723.5	738.5	738.5	1.8	14.8	-79.91	-429.9	-280.7	502.6	486.1	16.50 30.453
800.0	795.8	810.8	810.8	2.0	16.2	-81.40	-429.9	-280.7	500.4	482.2	18.23 27.448
900.0	894.1	909.1	909.1	2.4	18.2	-83.44	-429.9	-280.7	498.0	477.4	20.59 24.183
1,000.0	992.4	1,007.4	1,007.4	2.8	20.1	-85.51	-429.9	-280.7	496.2	473.2	22.96 21.610
1,100.0	1,090.8	1,105.8	1,105.8	3.2	22.1	-87.58	-429.9	-280.7	495.1	469.7	25.33 19.541
1,200.0	1,189.1	1,204.1	1,204.1	3.6	24.1	-89.66	-429.9	-280.7	494.6	466.9	27.71 17.849
1,216.4	1,205.2	1,220.2	1,220.2	3.7	24.4	-90.00	-429.9	-280.7	494.6	466.5	28.10 17.601 CC
1,300.0	1,287.4	1,302.4	1,302.4	4.0	26.0	-91.74	-429.9	-280.7	494.8	464.7	30.09 16.447
1,400.0	1,385.7	1,400.7	1,400.7	4.4	28.0	-93.82	-429.9	-280.7	495.7	463.3	32.46 15.272

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Anderson 34J-323
<b>Project:</b>	SEC.34-T7N-R66W	<b>TVD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Reference Site:</b>	Anderson 34M-HZ Pad Sec.34-T7N-R66W	<b>MD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Anderson 34J-323	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-13-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Anderson (Existing Wells) Sec.34-T7N-R66W - Anderson 21-34 (Exist) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 7800-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
1,500.0	1,484.0	1,499.0	1,499.0	4.9	30.0	-95.88		-429.9	-280.7	497.3	462.5	34.83	14.278	
1,600.0	1,582.3	1,597.3	1,597.3	5.3	31.9	-97.93		-429.9	-280.7	499.5	462.3	37.20	13.430	ES
1,700.0	1,680.6	1,695.6	1,695.6	5.7	33.9	-99.96		-429.9	-280.7	502.4	462.9	39.55	12.702	
1,800.0	1,779.0	1,794.0	1,794.0	6.1	35.9	-101.97		-429.9	-280.7	506.0	464.1	41.91	12.074	
1,900.0	1,877.3	1,892.3	1,892.3	6.5	37.8	-103.94		-429.9	-280.7	510.1	465.9	44.25	11.529	
2,000.0	1,975.6	1,990.6	1,990.6	6.9	39.8	-105.89		-429.9	-280.7	514.9	468.3	46.58	11.053	
2,100.0	2,073.9	2,088.9	2,088.9	7.3	41.8	-107.79		-429.9	-280.7	520.3	471.4	48.91	10.638	
2,200.0	2,172.2	2,187.2	2,187.2	7.8	43.7	-109.66		-429.9	-280.7	526.2	475.0	51.22	10.273	
2,300.0	2,270.5	2,285.5	2,285.5	8.2	45.7	-111.48		-429.9	-280.7	532.8	479.2	53.53	9.953	
2,400.0	2,368.9	2,383.9	2,383.9	8.6	47.7	-113.26		-429.9	-280.7	539.8	484.0	55.82	9.670	
2,500.0	2,467.2	2,482.2	2,482.2	9.0	49.6	-115.00		-429.9	-280.7	547.4	489.3	58.11	9.420	
2,600.0	2,565.5	2,580.5	2,580.5	9.4	51.6	-116.68		-429.9	-280.7	555.5	495.1	60.39	9.198	
2,700.0	2,663.8	2,678.8	2,678.8	9.8	53.6	-118.32		-429.9	-280.7	564.0	501.4	62.65	9.002	
2,800.0	2,762.1	2,777.1	2,777.1	10.3	55.5	-119.91		-429.9	-280.7	573.0	508.1	64.91	8.828	
2,900.0	2,860.4	2,875.4	2,875.4	10.7	57.5	-121.45		-429.9	-280.7	582.5	515.3	67.16	8.673	
3,000.0	2,958.8	2,973.8	2,973.8	11.1	59.5	-122.94		-429.9	-280.7	592.3	522.9	69.40	8.535	
3,100.0	3,057.1	3,072.1	3,072.1	11.5	61.4	-124.38		-429.9	-280.7	602.6	530.9	71.64	8.412	
3,200.0	3,155.4	3,170.4	3,170.4	11.9	63.4	-125.77		-429.9	-280.7	613.2	539.3	73.86	8.302	
3,300.0	3,253.7	3,268.7	3,268.7	12.3	65.4	-127.12		-429.9	-280.7	624.2	548.1	76.08	8.204	
3,400.0	3,352.0	3,367.0	3,367.0	12.7	67.3	-128.42		-429.9	-280.7	635.5	557.2	78.30	8.116	
3,500.0	3,450.3	3,465.3	3,465.3	13.2	69.3	-129.68		-429.9	-280.7	647.1	566.6	80.50	8.038	
3,600.0	3,548.7	3,563.7	3,563.7	13.6	71.3	-130.89		-429.9	-280.7	659.0	576.3	82.71	7.969	
3,700.0	3,647.0	3,662.0	3,662.0	14.0	73.2	-132.05		-429.9	-280.7	671.3	586.4	84.90	7.906	
3,800.0	3,745.3	3,760.3	3,760.3	14.4	75.2	-133.18		-429.9	-280.7	683.7	596.6	87.10	7.850	
3,900.0	3,843.6	3,858.6	3,858.6	14.8	77.2	-134.27		-429.9	-280.7	696.5	607.2	89.29	7.801	
4,000.0	3,941.9	3,956.9	3,956.9	15.2	79.1	-135.32		-429.9	-280.7	709.5	618.0	91.47	7.756	
4,100.0	4,040.2	4,055.2	4,055.2	15.7	81.1	-136.33		-429.9	-280.7	722.7	629.0	93.65	7.717	
4,200.0	4,138.6	4,153.6	4,153.6	16.1	83.1	-137.30		-429.9	-280.7	736.1	640.3	95.83	7.681	
4,300.0	4,236.9	4,251.9	4,251.9	16.5	85.0	-138.24		-429.9	-280.7	749.8	651.7	98.01	7.650	
4,400.0	4,335.2	4,350.2	4,350.2	16.9	87.0	-139.15		-429.9	-280.7	763.6	663.4	100.19	7.622	
4,500.0	4,433.5	4,448.5	4,448.5	17.3	89.0	-140.02		-429.9	-280.7	777.6	675.2	102.36	7.597	
4,600.0	4,531.8	4,546.8	4,546.8	17.7	90.9	-140.87		-429.9	-280.7	791.8	687.2	104.53	7.575	
4,700.0	4,630.1	4,645.1	4,645.1	18.2	92.9	-141.68		-429.9	-280.7	806.1	699.4	106.70	7.555	
4,800.0	4,728.5	4,743.5	4,743.5	18.6	94.9	-142.47		-429.9	-280.7	820.6	711.8	108.87	7.538	
4,900.0	4,826.8	4,841.8	4,841.8	19.0	96.8	-143.23		-429.9	-280.7	835.3	724.3	111.03	7.523	
5,000.0	4,925.1	4,940.1	4,940.1	19.4	98.8	-143.96		-429.9	-280.7	850.1	736.9	113.20	7.510	
5,100.0	5,023.4	5,038.4	5,038.4	19.8	100.8	-144.67		-429.9	-280.7	865.0	749.6	115.36	7.498	
5,200.0	5,121.7	5,136.7	5,136.7	20.2	102.7	-145.35		-429.9	-280.7	880.1	762.5	117.53	7.488	
5,300.0	5,220.0	5,235.0	5,235.0	20.7	104.7	-146.01		-429.9	-280.7	895.2	775.5	119.69	7.479	
5,400.0	5,318.4	5,333.4	5,333.4	21.1	106.7	-146.65		-429.9	-280.7	910.5	788.7	121.86	7.472	
5,500.0	5,416.7	5,431.7	5,431.7	21.5	108.6	-147.27		-429.9	-280.7	925.9	801.9	124.02	7.466	
5,560.9	5,476.5	5,491.5	5,491.5	21.8	109.8	-147.64		-429.9	-280.7	935.3	810.0	125.34	7.463	
5,600.0	5,515.0	5,530.0	5,530.0	21.9	110.6	-147.92		-429.9	-280.7	941.2	814.8	126.35	7.449	
5,700.0	5,613.9	5,628.9	5,628.9	22.2	112.6	-148.54		-429.9	-280.7	954.2	825.3	128.85	7.405	
5,800.0	5,713.2	5,728.2	5,728.2	22.4	114.6	-149.01		-429.9	-280.7	964.2	833.0	131.27	7.345	
5,900.0	5,812.8	5,827.8	5,827.8	22.6	116.6	-149.34		-429.9	-280.7	971.3	837.7	133.61	7.270	
6,000.0	5,912.7	5,927.7	5,927.7	22.8	118.6	-149.52		-429.9	-280.7	975.5	839.6	135.84	7.181	
6,087.3	6,000.0	6,015.0	6,015.0	22.9	120.3	-138.01		-429.9	-280.7	976.6	838.9	137.71	7.092	
6,100.0	6,012.7	6,027.7	6,027.7	22.9	120.6	-138.01		-429.9	-280.7	976.6	838.6	137.98	7.078	
6,200.0	6,112.7	6,127.7	6,127.7	23.0	122.6	-138.01		-429.9	-280.7	976.6	836.5	140.14	6.969	
6,300.0	6,212.7	6,227.7	6,227.7	23.1	124.6	-138.01		-429.9	-280.7	976.6	834.3	142.30	6.863	

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Anderson 34J-323
<b>Project:</b>	SEC.34-T7N-R66W	<b>TVD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Reference Site:</b>	Anderson 34M-HZ Pad Sec.34-T7N-R66W	<b>MD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Anderson 34J-323	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-13-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design		Anderson (Existing Wells) Sec.34-T7N-R66W - Anderson 21-34 (Exist) - Wellbore #1 - Wellbore #1											Offset Site Error:		0.0 ft
Survey Program: 7800-UNKNOWN													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	Offset		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)					
6,400.0	6,312.7	6,327.7	6,327.7	23.3	126.6	138.01	-429.9	-280.7	976.6	832.2	144.46	6.760			
6,500.0	6,412.7	6,427.7	6,427.7	23.4	128.6	138.01	-429.9	-280.7	976.6	830.0	146.62	6.661			
6,600.0	6,512.7	6,527.7	6,527.7	23.5	130.6	138.01	-429.9	-280.7	976.6	827.8	148.79	6.564			
6,628.7	6,541.4	6,556.4	6,556.4	23.5	131.1	138.01	-429.9	-280.7	976.6	827.2	149.41	6.536			
6,650.0	6,562.7	6,577.7	6,577.7	23.6	131.6	-42.01	-429.9	-280.7	976.4	826.6	149.80	6.518			
6,700.0	6,612.6	6,627.6	6,627.6	23.6	132.6	-42.25	-429.9	-280.7	974.1	823.7	150.44	6.476			
6,750.0	6,662.2	6,677.2	6,677.2	23.7	133.5	-42.73	-429.9	-280.7	969.5	818.8	150.69	6.434			
6,800.0	6,711.3	6,726.3	6,726.3	23.7	134.5	-43.48	-429.9	-280.7	962.5	811.9	150.61	6.391			
6,850.0	6,759.6	6,774.6	6,774.6	23.7	135.5	-44.49	-429.9	-280.7	953.2	803.0	150.23	6.345			
6,900.0	6,807.0	6,822.0	6,822.0	23.7	136.4	-45.78	-429.9	-280.7	941.7	792.1	149.64	6.293			
6,950.0	6,853.3	6,868.3	6,868.3	23.7	137.4	-47.35	-429.9	-280.7	928.2	779.3	148.94	6.232			
7,000.0	6,898.2	6,913.2	6,913.2	23.7	138.3	-49.22	-429.9	-280.7	912.8	764.5	148.27	6.156			
7,050.0	6,941.7	6,956.7	6,956.7	23.7	139.1	-51.39	-429.9	-280.7	895.7	747.9	147.76	6.062			
7,100.0	6,983.4	6,998.4	6,998.4	23.7	140.0	-53.85	-429.9	-280.7	877.0	729.5	147.56	5.944			
7,150.0	7,023.2	7,038.2	7,038.2	23.7	140.8	-56.61	-429.9	-280.7	857.2	709.4	147.81	5.799			
7,200.0	7,060.9	7,075.9	7,075.9	23.6	141.5	-59.64	-429.9	-280.7	836.3	687.7	148.57	5.629			
7,250.0	7,096.4	7,111.4	7,111.4	23.6	142.2	-62.88	-429.9	-280.7	814.8	664.9	149.88	5.436			
7,300.0	7,129.6	7,144.6	7,144.6	23.6	142.9	-66.30	-429.9	-280.7	793.0	641.4	151.66	5.229			
7,350.0	7,160.2	7,175.2	7,175.2	23.6	143.5	-69.80	-429.9	-280.7	771.3	617.6	153.77	5.016			
7,400.0	7,188.2	7,203.2	7,203.2	23.7	144.1	-73.29	-429.9	-280.7	750.1	594.1	156.01	4.808			
7,450.0	7,213.4	7,228.4	7,228.4	23.7	144.6	-76.67	-429.9	-280.7	729.9	571.7	158.19	4.614			
7,500.0	7,235.7	7,250.7	7,250.7	23.8	145.0	-79.84	-429.9	-280.7	711.1	550.9	160.14	4.440			
7,550.0	7,255.1	7,270.1	7,270.1	23.8	145.4	-82.70	-429.9	-280.7	694.2	532.4	161.77	4.291			
7,600.0	7,271.4	7,286.4	7,286.4	23.9	145.7	-85.17	-429.9	-280.7	679.7	516.6	163.06	4.168			
7,650.0	7,284.6	7,299.6	7,299.6	24.1	146.0	-87.18	-429.9	-280.7	668.0	503.9	164.05	4.072			
7,700.0	7,294.6	7,309.6	7,309.6	24.3	146.2	-88.68	-429.9	-280.7	659.5	494.7	164.82	4.002			
7,750.0	7,301.3	7,316.3	7,316.3	24.5	146.3	-89.63	-429.9	-280.7	654.6	489.2	165.44	3.957			
7,790.7	7,304.4	7,319.4	7,319.4	24.7	146.4	-90.00	-429.9	-280.7	653.4	487.5	165.89	3.938			
7,800.0	7,304.8	7,319.8	7,319.8	24.7	146.4	-90.03	-429.9	-280.7	653.4	487.4	165.99	3.937 SF			
7,838.3	7,305.3	7,320.3	7,320.3	24.9	146.4	-89.95	-429.9	-280.7	655.1	488.7	166.36	3.938			
7,900.0	7,304.5	7,319.5	7,319.5	25.4	146.4	-89.88	-429.9	-280.7	662.4	495.5	166.97	3.967			
8,000.0	7,303.3	7,318.3	7,318.3	26.1	146.4	-89.77	-429.9	-280.7	686.1	518.0	168.06	4.082			
8,100.0	7,302.0	7,317.0	7,317.0	27.1	146.3	-89.66	-429.9	-280.7	722.9	553.6	169.25	4.271			
8,200.0	7,300.8	7,315.8	7,315.8	28.1	146.3	-89.55	-429.9	-280.7	771.0	600.4	170.54	4.521			
8,300.0	7,299.5	7,314.5	7,314.5	29.3	146.3	-89.44	-429.9	-280.7	828.4	656.5	171.90	4.819			
8,400.0	7,298.3	7,313.3	7,313.3	30.6	146.3	-89.33	-429.9	-280.7	893.4	720.0	173.33	5.154			
8,500.0	7,297.0	7,312.0	7,312.0	31.9	146.2	-89.22	-429.9	-280.7	964.3	789.5	174.80	5.517			
8,600.0	7,295.7	7,310.7	7,310.7	33.3	146.2	-89.11	-429.9	-280.7	1,040.1	863.8	176.33	5.899			
8,700.0	7,294.5	7,309.5	7,309.5	34.7	146.2	-89.00	-429.9	-280.7	1,119.7	941.8	177.89	6.294			
8,800.0	7,293.2	7,308.2	7,308.2	36.2	146.2	-88.89	-429.9	-280.7	1,202.3	1,022.8	179.49	6.698			
8,900.0	7,292.0	7,307.0	7,307.0	37.8	146.1	-88.78	-429.9	-280.7	1,287.4	1,106.2	181.12	7.108			
9,000.0	7,290.7	7,305.7	7,305.7	39.3	146.1	-88.67	-429.9	-280.7	1,374.5	1,191.7	182.77	7.520			
9,100.0	7,289.5	7,304.5	7,304.5	40.9	146.1	-88.56	-429.9	-280.7	1,463.2	1,278.8	184.44	7.933			
9,200.0	7,288.2	7,303.2	7,303.2	42.6	146.1	-88.45	-429.9	-280.7	1,553.3	1,367.2	186.13	8.345			
9,300.0	7,286.9	7,301.9	7,301.9	44.2	146.0	-88.34	-429.9	-280.7	1,644.6	1,456.7	187.84	8.755			
9,400.0	7,285.7	7,300.7	7,300.7	45.9	146.0	-88.23	-429.9	-280.7	1,736.8	1,547.2	189.56	9.162			
9,500.0	7,284.4	7,299.4	7,299.4	47.6	146.0	-88.12	-429.9	-280.7	1,829.8	1,638.5	191.29	9.566			
9,600.0	7,283.2	7,298.2	7,298.2	49.3	146.0	-88.01	-429.9	-280.7	1,923.5	1,730.5	193.04	9.965			
9,700.0	7,281.9	7,296.9	7,296.9	51.1	145.9	-87.90	-429.9	-280.7	2,017.9	1,823.1	194.79	10.359			
9,800.0	7,280.7	7,295.7	7,295.7	52.8	145.9	-87.79	-429.9	-280.7	2,112.7	1,916.2	196.55	10.749			
9,900.0	7,279.4	7,294.4	7,294.4	54.6	145.9	-87.68	-429.9	-280.7	2,208.0	2,009.7	198.32	11.134			

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Anderson 34J-323
<b>Project:</b>	SEC.34-T7N-R66W	<b>TVD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Reference Site:</b>	Anderson 34M-HZ Pad Sec.34-T7N-R66W	<b>MD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Anderson 34J-323	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-13-13)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> Anderson (Existing Wells) Sec.34-T7N-R66W - Anderson 21-34 (Exist) - Wellbore #1 - Wellbore #1												<b>Offset Site Error:</b>	0.0 ft
<b>Survey Program:</b> 7800-UNKNOWN												<b>Offset Well Error:</b>	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	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
10,000.0	7,278.1	7,293.1	7,293.1	56.3	145.9	-87.57	-429.9	-280.7	2,303.7	2,103.7	200.09	11.513	
10,100.0	7,276.9	7,291.9	7,291.9	58.1	145.8	-87.46	-429.9	-280.7	2,399.8	2,197.9	201.88	11.888	
10,200.0	7,275.6	7,290.6	7,290.6	59.9	145.8	-87.35	-429.9	-280.7	2,496.2	2,292.5	203.66	12.256	
10,300.0	7,274.4	7,289.4	7,289.4	61.7	145.8	-87.24	-429.9	-280.7	2,592.8	2,387.3	205.45	12.620	
10,400.0	7,273.1	7,288.1	7,288.1	63.5	145.8	-87.13	-429.9	-280.7	2,689.7	2,482.4	207.25	12.978	
10,500.0	7,271.9	7,286.9	7,286.9	65.3	145.7	-87.02	-429.9	-280.7	2,786.8	2,577.7	209.05	13.331	
10,600.0	7,270.6	7,285.6	7,285.6	67.1	145.7	-86.91	-429.9	-280.7	2,884.1	2,673.2	210.85	13.679	
10,700.0	7,269.4	7,284.4	7,284.4	68.9	145.7	-86.80	-429.9	-280.7	2,981.6	2,768.9	212.65	14.021	
10,800.0	7,268.1	7,283.1	7,283.1	70.7	145.7	-86.69	-429.9	-280.7	3,079.2	2,864.7	214.46	14.358	
10,900.0	7,266.8	7,281.8	7,281.8	72.6	145.6	-86.58	-429.9	-280.7	3,177.0	2,960.7	216.27	14.690	
11,000.0	7,265.6	7,280.6	7,280.6	74.4	145.6	-86.47	-429.9	-280.7	3,274.9	3,056.8	218.08	15.017	
11,100.0	7,264.3	7,279.3	7,279.3	76.2	145.6	-86.36	-429.9	-280.7	3,373.0	3,153.1	219.89	15.339	
11,200.0	7,263.1	7,278.1	7,278.1	78.1	145.6	-86.25	-429.9	-280.7	3,471.1	3,249.4	221.71	15.656	
11,300.0	7,261.8	7,276.8	7,276.8	79.9	145.5	-86.14	-429.9	-280.7	3,569.4	3,345.8	223.52	15.969	
11,400.0	7,260.6	7,275.6	7,275.6	81.8	145.5	-86.03	-429.9	-280.7	3,667.7	3,442.4	225.34	16.276	
11,500.0	7,259.3	7,274.3	7,274.3	83.6	145.5	-85.92	-429.9	-280.7	3,766.1	3,539.0	227.16	16.580	
11,600.0	7,258.0	7,273.0	7,273.0	85.5	145.5	-85.81	-429.9	-280.7	3,864.7	3,635.7	228.97	16.878	
11,700.0	7,256.8	7,271.8	7,271.8	87.4	145.4	-85.70	-429.9	-280.7	3,963.2	3,732.5	230.79	17.172	
11,800.0	7,255.5	7,270.5	7,270.5	89.2	145.4	-85.59	-429.9	-280.7	4,061.9	3,829.3	232.61	17.462	
11,842.2	7,255.0	7,270.0	7,270.0	90.0	145.4	-85.54	-429.9	-280.7	4,103.6	3,870.2	233.38	17.583	



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Anderson 34J-323
<b>Project:</b>	SEC.34-T7N-R66W	<b>TVD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Reference Site:</b>	Anderson 34M-HZ Pad Sec.34-T7N-R66W	<b>MD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Anderson 34J-323	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-13-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design		Anderson (Existing Wells) Sec.34-T7N-R66W - Anderson 34B (Exist) - Wellbore #1 - Wellbore #1											Offset Site Error:		0.0 ft
Survey Program: 7800-UNKNOWN													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	Offset		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)					
0.0	0.0	15.0	15.0	0.0	0.3	-164.97	-3,675.9	-986.9	3,806.1	3,805.8	0.30	N/A			
100.0	100.0	115.0	115.0	0.1	2.3	-164.97	-3,675.9	-986.9	3,806.1	3,803.7	2.41	1,577.613			
200.0	200.0	215.0	215.0	0.3	4.3	-164.97	-3,675.9	-986.9	3,806.1	3,801.5	4.64	820.754			
300.0	300.0	315.0	315.0	0.6	6.3	-92.58	-3,675.9	-986.9	3,806.2	3,799.3	6.86	555.230			
400.0	399.8	414.8	414.8	0.8	8.3	-92.65	-3,675.9	-986.9	3,806.4	3,797.4	9.08	419.259			
500.0	499.5	514.5	514.5	1.0	10.3	-92.78	-3,675.9	-986.9	3,806.8	3,795.5	11.32	336.177			
600.0	598.7	613.7	613.7	1.3	12.3	-92.94	-3,675.9	-986.9	3,807.5	3,793.9	13.60	280.014			
700.0	697.5	712.5	712.5	1.7	14.2	-93.16	-3,675.9	-986.9	3,808.3	3,792.4	15.91	239.424			
726.4	723.5	738.5	738.5	1.8	14.8	-93.22	-3,675.9	-986.9	3,808.6	3,792.0	16.52	230.496			
800.0	795.8	810.8	810.8	2.0	16.2	-93.42	-3,675.9	-986.9	3,809.4	3,791.1	18.25	208.747			
900.0	894.1	909.1	909.1	2.4	18.2	-93.69	-3,675.9	-986.9	3,810.5	3,789.9	20.61	184.931			
1,000.0	992.4	1,007.4	1,007.4	2.8	20.1	-93.96	-3,675.9	-986.9	3,811.8	3,788.8	22.97	165.953			
1,100.0	1,090.8	1,105.8	1,105.8	3.2	22.1	-94.23	-3,675.9	-986.9	3,813.1	3,787.7	25.34	150.493			
1,200.0	1,189.1	1,204.1	1,204.1	3.6	24.1	-94.50	-3,675.9	-986.9	3,814.5	3,786.8	27.71	137.664			
1,300.0	1,287.4	1,302.4	1,302.4	4.0	26.0	-94.77	-3,675.9	-986.9	3,816.0	3,785.9	30.08	126.852			
1,400.0	1,385.7	1,400.7	1,400.7	4.4	28.0	-95.04	-3,675.9	-986.9	3,817.6	3,785.1	32.46	117.619			
1,500.0	1,484.0	1,499.0	1,499.0	4.9	30.0	-95.31	-3,675.9	-986.9	3,819.3	3,784.4	34.83	109.645			
1,600.0	1,582.3	1,597.3	1,597.3	5.3	31.9	-95.58	-3,675.9	-986.9	3,821.0	3,783.8	37.21	102.689			
1,700.0	1,680.6	1,695.6	1,695.6	5.7	33.9	-95.84	-3,675.9	-986.9	3,822.9	3,783.3	39.59	96.570			
1,800.0	1,779.0	1,794.0	1,794.0	6.1	35.9	-96.11	-3,675.9	-986.9	3,824.8	3,782.8	41.96	91.145			
1,900.0	1,877.3	1,892.3	1,892.3	6.5	37.8	-96.38	-3,675.9	-986.9	3,826.8	3,782.5	44.34	86.304			
2,000.0	1,975.6	1,990.6	1,990.6	6.9	39.8	-96.65	-3,675.9	-986.9	3,828.9	3,782.2	46.72	81.958			
2,100.0	2,073.9	2,088.9	2,088.9	7.3	41.8	-96.91	-3,675.9	-986.9	3,831.1	3,782.0	49.10	78.034			
2,200.0	2,172.2	2,187.2	2,187.2	7.8	43.7	-97.18	-3,675.9	-986.9	3,833.4	3,781.9	51.47	74.474			
2,300.0	2,270.5	2,285.5	2,285.5	8.2	45.7	-97.45	-3,675.9	-986.9	3,835.8	3,781.9	53.85	71.231			
2,400.0	2,368.9	2,383.9	2,383.9	8.6	47.7	-97.71	-3,675.9	-986.9	3,838.2	3,782.0	56.23	68.263			
2,500.0	2,467.2	2,482.2	2,482.2	9.0	49.6	-97.98	-3,675.9	-986.9	3,840.8	3,782.2	58.60	65.539			
2,600.0	2,565.5	2,580.5	2,580.5	9.4	51.6	-98.24	-3,675.9	-986.9	3,843.4	3,782.4	60.98	63.028			
2,700.0	2,663.8	2,678.8	2,678.8	9.8	53.6	-98.51	-3,675.9	-986.9	3,846.1	3,782.7	63.36	60.707			
2,800.0	2,762.1	2,777.1	2,777.1	10.3	55.5	-98.77	-3,675.9	-986.9	3,848.9	3,783.2	65.73	58.556			
2,900.0	2,860.4	2,875.4	2,875.4	10.7	57.5	-99.04	-3,675.9	-986.9	3,851.8	3,783.7	68.11	56.556			
3,000.0	2,958.8	2,973.8	2,973.8	11.1	59.5	-99.30	-3,675.9	-986.9	3,854.7	3,784.2	70.48	54.693			
3,100.0	3,057.1	3,072.1	3,072.1	11.5	61.4	-99.56	-3,675.9	-986.9	3,857.8	3,784.9	72.85	52.952			
3,200.0	3,155.4	3,170.4	3,170.4	11.9	63.4	-99.83	-3,675.9	-986.9	3,860.9	3,785.7	75.23	51.323			
3,300.0	3,253.7	3,268.7	3,268.7	12.3	65.4	-100.09	-3,675.9	-986.9	3,864.1	3,786.5	77.60	49.795			
3,400.0	3,352.0	3,367.0	3,367.0	12.7	67.3	-100.35	-3,675.9	-986.9	3,867.4	3,787.4	79.97	48.359			
3,500.0	3,450.3	3,465.3	3,465.3	13.2	69.3	-100.61	-3,675.9	-986.9	3,870.8	3,788.4	82.34	47.007			
3,600.0	3,548.7	3,563.7	3,563.7	13.6	71.3	-100.87	-3,675.9	-986.9	3,874.2	3,789.5	84.72	45.733			
3,700.0	3,647.0	3,662.0	3,662.0	14.0	73.2	-101.14	-3,675.9	-986.9	3,877.8	3,790.7	87.09	44.528			
3,800.0	3,745.3	3,760.3	3,760.3	14.4	75.2	-101.40	-3,675.9	-986.9	3,881.4	3,792.0	89.46	43.389			
3,900.0	3,843.6	3,858.6	3,858.6	14.8	77.2	-101.66	-3,675.9	-986.9	3,885.1	3,793.3	91.82	42.310			
4,000.0	3,941.9	3,956.9	3,956.9	15.2	79.1	-101.92	-3,675.9	-986.9	3,888.9	3,794.7	94.19	41.287			
4,100.0	4,040.2	4,055.2	4,055.2	15.7	81.1	-102.17	-3,675.9	-986.9	3,892.8	3,796.2	96.56	40.314			
4,200.0	4,138.6	4,153.6	4,153.6	16.1	83.1	-102.43	-3,675.9	-986.9	3,896.8	3,797.8	98.93	39.390			
4,300.0	4,236.9	4,251.9	4,251.9	16.5	85.0	-102.69	-3,675.9	-986.9	3,900.8	3,799.5	101.29	38.509			
4,400.0	4,335.2	4,350.2	4,350.2	16.9	87.0	-102.95	-3,675.9	-986.9	3,904.9	3,801.3	103.66	37.670			
4,500.0	4,433.5	4,448.5	4,448.5	17.3	89.0	-103.20	-3,675.9	-986.9	3,909.1	3,803.1	106.02	36.870			
4,600.0	4,531.8	4,546.8	4,546.8	17.7	90.9	-103.46	-3,675.9	-986.9	3,913.4	3,805.0	108.39	36.105			
4,700.0	4,630.1	4,645.1	4,645.1	18.2	92.9	-103.72	-3,675.9	-986.9	3,917.8	3,807.0	110.75	35.374			
4,800.0	4,728.5	4,743.5	4,743.5	18.6	94.9	-103.97	-3,675.9	-986.9	3,922.2	3,809.1	113.11	34.675			
4,900.0	4,826.8	4,841.8	4,841.8	19.0	96.8	-104.23	-3,675.9	-986.9	3,926.7	3,811.3	115.48	34.005			

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Anderson 34J-323
<b>Project:</b>	SEC.34-T7N-R66W	<b>TVD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Reference Site:</b>	Anderson 34M-HZ Pad Sec.34-T7N-R66W	<b>MD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Anderson 34J-323	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-13-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design		Anderson (Existing Wells) Sec.34-T7N-R66W - Anderson 34B (Exist) - Wellbore #1 - Wellbore #1											Offset Site Error:		0.0 ft
Survey Program: 7800-UNKNOWN													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	Offset		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)					
5,000.0	4,925.1	4,940.1	4,940.1	19.4	98.8	-104.48	-3,675.9	-986.9	3,931.3	3,813.5	117.84	33.362			
5,100.0	5,023.4	5,038.4	5,038.4	19.8	100.8	-104.73	-3,675.9	-986.9	3,936.0	3,815.8	120.20	32.746			
5,200.0	5,121.7	5,136.7	5,136.7	20.2	102.7	-104.99	-3,675.9	-986.9	3,940.8	3,818.2	122.56	32.155			
5,300.0	5,220.0	5,235.0	5,235.0	20.7	104.7	-105.24	-3,675.9	-986.9	3,945.6	3,820.7	124.91	31.587			
5,400.0	5,318.4	5,333.4	5,333.4	21.1	106.7	-105.49	-3,675.9	-986.9	3,950.5	3,823.3	127.27	31.040			
5,500.0	5,416.7	5,431.7	5,431.7	21.5	108.6	-105.74	-3,675.9	-986.9	3,955.5	3,825.9	129.63	30.515			
5,560.9	5,476.5	5,491.5	5,491.5	21.8	109.8	-105.89	-3,675.9	-986.9	3,958.6	3,827.5	131.06	30.204			
5,600.0	5,515.0	5,530.0	5,530.0	21.9	110.6	-106.03	-3,675.9	-986.9	3,960.5	3,828.6	131.98	30.009			
5,700.0	5,613.9	5,628.9	5,628.9	22.2	112.6	-106.32	-3,675.9	-986.9	3,964.8	3,830.6	134.24	29.534			
5,800.0	5,713.2	5,728.2	5,728.2	22.4	114.6	-106.54	-3,675.9	-986.9	3,968.2	3,831.7	136.48	29.075			
5,900.0	5,812.8	5,827.8	5,827.8	22.6	116.6	-106.70	-3,675.9	-986.9	3,970.5	3,831.9	138.68	28.632			
6,000.0	5,912.7	5,927.7	5,927.7	22.8	118.6	-106.80	-3,675.9	-986.9	3,971.9	3,831.1	140.83	28.203			
6,087.3	6,000.0	6,015.0	6,015.0	22.9	120.3	-179.24	-3,675.9	-986.9	3,972.3	3,829.6	142.68	27.840			
6,100.0	6,012.7	6,027.7	6,027.7	22.9	120.6	-179.24	-3,675.9	-986.9	3,972.3	3,829.3	142.95	27.788			
6,200.0	6,112.7	6,127.7	6,127.7	23.0	122.6	-179.24	-3,675.9	-986.9	3,972.3	3,827.2	145.08	27.380			
6,300.0	6,212.7	6,227.7	6,227.7	23.1	124.6	-179.24	-3,675.9	-986.9	3,972.3	3,825.1	147.21	26.984			
6,400.0	6,312.7	6,327.7	6,327.7	23.3	126.6	-179.24	-3,675.9	-986.9	3,972.3	3,823.0	149.34	26.599			
6,500.0	6,412.7	6,427.7	6,427.7	23.4	128.6	-179.24	-3,675.9	-986.9	3,972.3	3,820.8	151.47	26.225			
6,600.0	6,512.7	6,527.7	6,527.7	23.5	130.6	-179.24	-3,675.9	-986.9	3,972.3	3,818.7	153.61	25.860			
6,628.7	6,541.4	6,556.4	6,556.4	23.5	131.1	-179.24	-3,675.9	-986.9	3,972.3	3,818.1	154.22	25.758			
6,650.0	6,562.7	6,577.7	6,577.7	23.6	131.6	0.76	-3,675.9	-986.9	3,972.0	3,817.4	154.60	25.693			
6,700.0	6,612.6	6,627.6	6,627.6	23.6	132.6	0.77	-3,675.9	-986.9	3,969.0	3,814.0	155.01	25.605			
6,750.0	6,662.2	6,677.2	6,677.2	23.7	133.5	0.77	-3,675.9	-986.9	3,962.7	3,807.9	154.75	25.608			
6,800.0	6,711.3	6,726.3	6,726.3	23.7	134.5	0.78	-3,675.9	-986.9	3,953.2	3,799.4	153.80	25.703			
6,850.0	6,759.6	6,774.6	6,774.6	23.7	135.5	0.80	-3,675.9	-986.9	3,940.5	3,788.3	152.16	25.896			
6,900.0	6,807.0	6,822.0	6,822.0	23.7	136.4	0.82	-3,675.9	-986.9	3,924.6	3,774.8	149.83	26.194			
6,950.0	6,853.3	6,868.3	6,868.3	23.7	137.4	0.85	-3,675.9	-986.9	3,905.7	3,758.9	146.81	26.604			
7,000.0	6,898.2	6,913.2	6,913.2	23.7	138.3	0.88	-3,675.9	-986.9	3,883.9	3,740.8	143.10	27.141			
7,050.0	6,941.7	6,956.7	6,956.7	23.7	139.1	0.92	-3,675.9	-986.9	3,859.1	3,720.4	138.71	27.821			
7,100.0	6,983.4	6,998.4	6,998.4	23.7	140.0	0.97	-3,675.9	-986.9	3,831.5	3,697.8	133.66	28.665			
7,150.0	7,023.2	7,038.2	7,038.2	23.7	140.8	1.03	-3,675.9	-986.9	3,801.3	3,673.3	127.98	29.703			
7,200.0	7,060.9	7,075.9	7,075.9	23.6	141.5	1.09	-3,675.9	-986.9	3,768.5	3,646.8	121.68	30.971			
7,250.0	7,096.4	7,111.4	7,111.4	23.6	142.2	1.18	-3,675.9	-986.9	3,733.3	3,618.5	114.80	32.522			
7,300.0	7,129.6	7,144.6	7,144.6	23.6	142.9	1.28	-3,675.9	-986.9	3,695.9	3,588.5	107.37	34.422			
7,350.0	7,160.2	7,175.2	7,175.2	23.6	143.5	1.41	-3,675.9	-986.9	3,656.4	3,557.0	99.45	36.767			
7,400.0	7,188.2	7,203.2	7,203.2	23.7	144.1	1.57	-3,675.9	-986.9	3,615.0	3,523.9	91.08	39.689			
7,450.0	7,213.4	7,228.4	7,228.4	23.7	144.6	1.78	-3,675.9	-986.9	3,571.8	3,489.5	82.34	43.381			
7,500.0	7,235.7	7,250.7	7,250.7	23.8	145.0	2.05	-3,675.9	-986.9	3,527.1	3,453.8	73.29	48.125			
7,550.0	7,255.1	7,270.1	7,270.1	23.8	145.4	2.43	-3,675.9	-986.9	3,481.0	3,416.9	64.06	54.344			
7,600.0	7,271.4	7,286.4	7,286.4	23.9	145.7	2.98	-3,675.9	-986.9	3,433.8	3,378.9	54.80	62.655			
7,650.0	7,284.6	7,299.6	7,299.6	24.1	146.0	3.85	-3,675.9	-986.9	3,385.5	3,339.6	45.91	73.736			
7,700.0	7,294.6	7,309.6	7,309.6	24.3	146.2	5.39	-3,675.9	-986.9	3,336.6	3,298.0	38.57	86.508			
7,750.0	7,301.3	7,316.3	7,316.3	24.5	146.3	8.87	-3,675.9	-986.9	3,287.0	3,249.1	37.93	86.665			
7,800.0	7,304.8	7,319.8	7,319.8	24.7	146.4	23.44	-3,675.9	-986.9	3,237.2	3,165.1	72.05	44.927			
7,838.3	7,305.3	7,320.3	7,320.3	24.9	146.4	127.28	-3,675.9	-986.9	3,198.8	3,067.3	131.51	24.324			
7,900.0	7,304.5	7,319.5	7,319.5	25.4	146.4	126.75	-3,675.9	-986.9	3,137.2	3,004.3	132.92	23.603			
8,000.0	7,303.3	7,318.3	7,318.3	26.1	146.4	125.86	-3,675.9	-986.9	3,037.2	2,901.9	135.31	22.446			
8,100.0	7,302.0	7,317.0	7,317.0	27.1	146.3	124.96	-3,675.9	-986.9	2,937.2	2,799.4	137.84	21.310			
8,200.0	7,300.8	7,315.8	7,315.8	28.1	146.3	124.03	-3,675.9	-986.9	2,837.3	2,696.8	140.46	20.199			
8,300.0	7,299.5	7,314.5	7,314.5	29.3	146.3	123.08	-3,675.9	-986.9	2,737.3	2,594.1	143.18	19.118			
8,400.0	7,298.3	7,313.3	7,313.3	30.6	146.3	122.12	-3,675.9	-986.9	2,637.3	2,491.3	145.98	18.066			

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Anderson 34J-323
<b>Project:</b>	SEC.34-T7N-R66W	<b>TVD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Reference Site:</b>	Anderson 34M-HZ Pad Sec.34-T7N-R66W	<b>MD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Anderson 34J-323	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-13-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Anderson (Existing Wells) Sec.34-T7N-R66W - Anderson 34B (Exist) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 7800-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
8,500.0	7,297.0	7,312.0	7,312.0	31.9	146.2	121.13		-3,675.9	-986.9	2,537.3	2,388.5	148.85	17.047	
8,600.0	7,295.7	7,310.7	7,310.7	33.3	146.2	120.12		-3,675.9	-986.9	2,437.4	2,285.6	151.77	16.060	
8,700.0	7,294.5	7,309.5	7,309.5	34.7	146.2	119.09		-3,675.9	-986.9	2,337.4	2,182.7	154.74	15.106	
8,800.0	7,293.2	7,308.2	7,308.2	36.2	146.2	118.03		-3,675.9	-986.9	2,237.4	2,079.7	157.75	14.184	
8,900.0	7,292.0	7,307.0	7,307.0	37.8	146.1	116.96		-3,675.9	-986.9	2,137.5	1,976.7	160.78	13.294	
9,000.0	7,290.7	7,305.7	7,305.7	39.3	146.1	115.87		-3,675.9	-986.9	2,037.5	1,873.7	163.85	12.436	
9,100.0	7,289.5	7,304.5	7,304.5	40.9	146.1	114.75		-3,675.9	-986.9	1,937.6	1,770.6	166.92	11.608	
9,200.0	7,288.2	7,303.2	7,303.2	42.6	146.1	113.62		-3,675.9	-986.9	1,837.6	1,667.6	170.00	10.809	
9,300.0	7,286.9	7,301.9	7,301.9	44.2	146.0	112.46		-3,675.9	-986.9	1,737.7	1,564.6	173.09	10.039	
9,400.0	7,285.7	7,300.7	7,300.7	45.9	146.0	111.29		-3,675.9	-986.9	1,637.7	1,461.6	176.16	9.297	
9,500.0	7,284.4	7,299.4	7,299.4	47.6	146.0	110.10		-3,675.9	-986.9	1,537.8	1,358.6	179.23	8.580	
9,600.0	7,283.2	7,298.2	7,298.2	49.3	146.0	108.88		-3,675.9	-986.9	1,437.9	1,255.6	182.27	7.889	
9,700.0	7,281.9	7,296.9	7,296.9	51.1	145.9	107.65		-3,675.9	-986.9	1,337.9	1,152.7	185.28	7.221	
9,800.0	7,280.7	7,295.7	7,295.7	52.8	145.9	106.41		-3,675.9	-986.9	1,238.0	1,049.8	188.26	6.576	
9,900.0	7,279.4	7,294.4	7,294.4	54.6	145.9	105.14		-3,675.9	-986.9	1,138.1	946.9	191.19	5.953	
10,000.0	7,278.1	7,293.1	7,293.1	56.3	145.9	103.87		-3,675.9	-986.9	1,038.3	844.2	194.07	5.350	
10,100.0	7,276.9	7,291.9	7,291.9	58.1	145.8	102.57		-3,675.9	-986.9	938.4	741.5	196.89	4.766	
10,200.0	7,275.6	7,290.6	7,290.6	59.9	145.8	101.27		-3,675.9	-986.9	838.6	638.9	199.65	4.200	
10,300.0	7,274.4	7,289.4	7,289.4	61.7	145.8	99.95		-3,675.9	-986.9	738.8	536.5	202.34	3.651	
10,400.0	7,273.1	7,288.1	7,288.1	63.5	145.8	98.62		-3,675.9	-986.9	639.1	434.2	204.95	3.118	
10,500.0	7,271.9	7,286.9	7,286.9	65.3	145.7	97.28		-3,675.9	-986.9	539.5	332.1	207.47	2.601	
10,600.0	7,270.6	7,285.6	7,285.6	67.1	145.7	95.94		-3,675.9	-986.9	440.1	230.2	209.91	2.097	
10,700.0	7,269.4	7,284.4	7,284.4	68.9	145.7	94.59		-3,675.9	-986.9	341.1	128.8	212.25	1.607	
10,800.0	7,268.1	7,283.1	7,283.1	70.7	145.7	93.23		-3,675.9	-986.9	242.8	28.3	214.48	1.132 Level 2	
10,900.0	7,266.8	7,281.8	7,281.8	72.6	145.6	91.87		-3,675.9	-986.9	146.8	-69.8	216.61	0.678 Level 1	
11,000.0	7,265.6	7,280.6	7,280.6	74.4	145.6	90.50		-3,675.9	-986.9	64.5	-154.2	218.63	0.295 Level 1	
11,037.0	7,265.1	7,280.1	7,280.1	75.1	145.6	90.00		-3,675.9	-986.9	52.8	-166.6	219.35	0.241 Level 1, CC, ES, SF	
11,100.0	7,264.3	7,279.3	7,279.3	76.2	145.6	89.14		-3,675.9	-986.9	82.2	-138.3	220.53	0.373 Level 1	
11,200.0	7,263.1	7,278.1	7,278.1	78.1	145.6	87.78		-3,675.9	-986.9	171.3	-51.0	222.32	0.771 Level 1	
11,300.0	7,261.8	7,276.8	7,276.8	79.9	145.5	86.42		-3,675.9	-986.9	268.2	44.2	223.99	1.197 Level 2	
11,400.0	7,260.6	7,275.6	7,275.6	81.8	145.5	85.06		-3,675.9	-986.9	366.8	141.2	225.54	1.626	
11,500.0	7,259.3	7,274.3	7,274.3	83.6	145.5	83.71		-3,675.9	-986.9	466.0	239.0	226.97	2.053	
11,600.0	7,258.0	7,273.0	7,273.0	85.5	145.5	82.37		-3,675.9	-986.9	565.4	337.2	228.27	2.477	
11,700.0	7,256.8	7,271.8	7,271.8	87.4	145.4	81.03		-3,675.9	-986.9	665.0	435.6	229.46	2.898	
11,800.0	7,255.5	7,270.5	7,270.5	89.2	145.4	79.71		-3,675.9	-986.9	764.8	534.2	230.52	3.318	
11,842.2	7,255.0	7,270.0	7,270.0	90.0	145.4	79.15		-3,675.9	-986.9	806.9	575.9	230.93	3.494	

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Anderson 34J-323
<b>Project:</b>	SEC.34-T7N-R66W	<b>TVD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Reference Site:</b>	Anderson 34M-HZ Pad Sec.34-T7N-R66W	<b>MD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Anderson 34J-323	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-13-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design		Anderson 34M-HZ Pad Sec.34-T7N-R66W - Anderson 34J-423 - Wellbore #1 - Plan #1 (5-13-13)											Offset Site Error:		0.0 ft
Survey Program: 0-MWD													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)				
0.0	0.0	0.0	0.0	0.0	0.0	89.98	0.0	30.6	30.6						
100.0	100.0	100.0	100.0	0.1	0.1	89.98	0.0	30.6	30.6	30.4	0.22	136.030	CC, ES		
200.0	200.0	200.0	200.0	0.3	0.3	89.98	0.0	30.6	30.6	29.9	0.67	45.343			
300.0	300.0	300.0	300.0	0.6	0.6	163.33	0.0	30.6	32.2	31.1	1.12	28.715			
400.0	399.8	399.8	399.8	0.8	0.8	165.61	0.0	30.6	37.3	35.7	1.57	23.679			
500.0	499.5	500.9	500.9	1.0	1.0	167.58	0.8	29.0	44.1	42.1	2.02	21.848			
600.0	598.7	602.3	602.1	1.3	1.2	168.50	3.0	24.1	51.1	48.6	2.46	20.753			
700.0	697.5	703.9	703.3	1.7	1.5	168.75	6.8	16.0	58.1	55.2	2.92	19.930			
726.4	723.5	730.8	730.0	1.8	1.6	168.74	8.1	13.3	60.0	56.9	3.04	19.734			
800.0	795.8	805.7	804.4	2.0	1.8	168.39	12.1	4.6	64.3	60.9	3.39	18.975			
900.0	894.1	906.1	903.7	2.4	2.1	167.45	18.4	-8.9	68.2	64.4	3.88	17.594			
1,000.0	992.4	1,006.0	1,002.5	2.8	2.4	166.60	24.6	-22.4	72.2	67.8	4.38	16.461			
1,100.0	1,090.8	1,106.0	1,101.3	3.2	2.7	165.83	30.9	-35.8	76.1	71.2	4.90	15.535			
1,200.0	1,189.1	1,205.9	1,200.1	3.6	3.1	165.13	37.1	-49.3	80.0	74.6	5.42	14.766			
1,300.0	1,287.4	1,305.8	1,298.9	4.0	3.4	164.51	43.4	-62.7	84.0	78.0	5.95	14.118			
1,400.0	1,385.7	1,405.7	1,397.7	4.4	3.7	163.94	49.7	-76.2	88.0	81.5	6.48	13.570			
1,500.0	1,484.0	1,505.6	1,496.5	4.9	4.1	163.41	55.9	-89.7	91.9	84.9	7.02	13.095			
1,600.0	1,582.3	1,605.5	1,595.3	5.3	4.4	162.94	62.2	-103.1	95.9	88.3	7.56	12.682			
1,700.0	1,680.6	1,705.5	1,694.1	5.7	4.8	162.50	68.4	-116.6	99.9	91.8	8.11	12.321			
1,800.0	1,779.0	1,805.4	1,792.9	6.1	5.1	162.09	74.7	-130.1	103.9	95.2	8.66	12.001			
1,900.0	1,877.3	1,905.3	1,891.7	6.5	5.5	161.71	81.0	-143.5	107.9	98.7	9.21	11.716			
2,000.0	1,975.6	2,005.2	1,990.6	6.9	5.9	161.36	87.2	-157.0	111.9	102.1	9.76	11.462			
2,100.0	2,073.9	2,105.1	2,089.4	7.3	6.2	161.04	93.5	-170.5	115.9	105.6	10.32	11.233			
2,200.0	2,172.2	2,205.0	2,188.2	7.8	6.6	160.73	99.7	-183.9	119.9	109.0	10.87	11.025			
2,300.0	2,270.5	2,305.0	2,287.0	8.2	6.9	160.45	106.0	-197.4	123.9	112.5	11.43	10.837			
2,400.0	2,368.9	2,404.9	2,385.8	8.6	7.3	160.18	112.3	-210.8	127.9	115.9	11.99	10.664			
2,500.0	2,467.2	2,504.8	2,484.6	9.0	7.6	159.93	118.5	-224.3	131.9	119.4	12.56	10.507			
2,600.0	2,565.5	2,604.7	2,583.4	9.4	8.0	159.70	124.8	-237.8	135.9	122.8	13.12	10.362			
2,700.0	2,663.8	2,704.6	2,682.2	9.8	8.4	159.48	131.0	-251.2	140.0	126.3	13.68	10.228			
2,800.0	2,762.1	2,804.6	2,781.0	10.3	8.7	159.27	137.3	-264.7	144.0	129.7	14.25	10.104			
2,900.0	2,860.4	2,904.5	2,879.8	10.7	9.1	159.07	143.6	-278.2	148.0	133.2	14.82	9.989			
3,000.0	2,958.8	3,004.4	2,978.6	11.1	9.4	158.88	149.8	-291.6	152.0	136.6	15.38	9.882			
3,100.0	3,057.1	3,104.3	3,077.4	11.5	9.8	158.70	156.1	-305.1	156.0	140.1	15.95	9.783			
3,200.0	3,155.4	3,204.2	3,176.3	11.9	10.1	158.53	162.3	-318.6	160.1	143.6	16.52	9.689			
3,300.0	3,253.7	3,304.1	3,275.1	12.3	10.5	158.37	168.6	-332.0	164.1	147.0	17.09	9.602			
3,400.0	3,352.0	3,404.1	3,373.9	12.7	10.9	158.22	174.9	-345.5	168.1	150.5	17.66	9.520			
3,500.0	3,450.3	3,504.0	3,472.7	13.2	11.2	158.08	181.1	-358.9	172.2	153.9	18.23	9.443			
3,600.0	3,548.7	3,603.9	3,571.5	13.6	11.6	157.94	187.4	-372.4	176.2	157.4	18.80	9.370			
3,700.0	3,647.0	3,703.8	3,670.3	14.0	11.9	157.80	193.6	-385.9	180.2	160.9	19.38	9.302			
3,800.0	3,745.3	3,803.7	3,769.1	14.4	12.3	157.68	199.9	-399.3	184.3	164.3	19.95	9.237			
3,900.0	3,843.6	3,903.7	3,867.9	14.8	12.7	157.55	206.2	-412.8	188.3	167.8	20.52	9.176			
4,000.0	3,941.9	4,003.6	3,966.7	15.2	13.0	157.44	212.4	-426.3	192.3	171.2	21.09	9.118			
4,100.0	4,040.2	4,103.5	4,065.5	15.7	13.4	157.33	218.7	-439.7	196.4	174.7	21.67	9.062			
4,200.0	4,138.6	4,203.4	4,164.3	16.1	13.7	157.22	224.9	-453.2	200.4	178.2	22.24	9.010			
4,300.0	4,236.9	4,303.3	4,263.1	16.5	14.1	157.12	231.2	-466.7	204.4	181.6	22.82	8.960			
4,400.0	4,335.2	4,403.2	4,362.0	16.9	14.5	157.02	237.5	-480.1	208.5	185.1	23.39	8.912			
4,500.0	4,433.5	4,503.2	4,460.8	17.3	14.8	156.92	243.7	-493.6	212.5	188.6	23.97	8.867			
4,600.0	4,531.8	4,603.1	4,559.6	17.7	15.2	156.83	250.0	-507.0	216.6	192.0	24.54	8.823			
4,700.0	4,630.1	4,703.0	4,658.4	18.2	15.5	156.74	256.2	-520.5	220.6	195.5	25.12	8.782			
4,800.0	4,728.5	4,802.9	4,757.2	18.6	15.9	156.66	262.5	-534.0	224.6	199.0	25.70	8.742			
4,900.0	4,826.8	4,902.8	4,856.0	19.0	16.3	156.57	268.8	-547.4	228.7	202.4	26.27	8.704			

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

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Anderson 34J-323
<b>Project:</b>	SEC.34-T7N-R66W	<b>TVD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Reference Site:</b>	Anderson 34M-HZ Pad Sec.34-T7N-R66W	<b>MD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Anderson 34J-323	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-13-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Anderson 34M-HZ Pad Sec.34-T7N-R66W - Anderson 34J-423 - Wellbore #1 - Plan #1 (5-13-13)												Offset Site Error: 0.0 ft	
Survey Program: 0-MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	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
8,400.0	7,298.3	8,422.8	7,373.5	30.6	28.2	-102.92	-1,039.2	-606.0	336.6	282.5	54.06	6.227	
8,500.0	7,297.0	8,522.8	7,373.4	31.9	29.7	-103.11	-1,139.2	-606.0	336.8	279.8	57.02	5.907	
8,600.0	7,295.7	8,622.8	7,373.3	33.3	31.2	-103.30	-1,239.2	-606.0	337.1	277.0	60.07	5.612	
8,700.0	7,294.5	8,722.8	7,373.2	34.7	32.8	-103.49	-1,339.2	-606.0	337.4	274.2	63.19	5.339	
8,800.0	7,293.2	8,822.8	7,373.1	36.2	34.4	-103.68	-1,439.2	-606.0	337.6	271.3	66.37	5.087	
8,900.0	7,292.0	8,922.8	7,373.0	37.8	36.0	-103.87	-1,539.2	-606.0	337.9	268.3	69.60	4.855	
9,000.0	7,290.7	9,022.8	7,372.9	39.3	37.6	-104.06	-1,639.2	-606.0	338.2	265.3	72.87	4.641	
9,100.0	7,289.5	9,122.8	7,372.8	40.9	39.3	-104.25	-1,739.2	-606.0	338.5	262.3	76.18	4.443	
9,200.0	7,288.2	9,222.8	7,372.7	42.6	41.0	-104.44	-1,839.2	-606.0	338.8	259.3	79.52	4.260	
9,300.0	7,286.9	9,322.8	7,372.6	44.2	42.7	-104.63	-1,939.2	-606.0	339.1	256.2	82.88	4.091	
9,400.0	7,285.7	9,422.8	7,372.5	45.9	44.5	-104.82	-2,039.2	-606.0	339.3	253.1	86.27	3.934	
9,500.0	7,284.4	9,522.8	7,372.4	47.6	46.2	-105.01	-2,139.2	-606.0	339.6	250.0	89.67	3.788	
9,600.0	7,283.2	9,622.8	7,372.3	49.3	48.0	-105.20	-2,239.2	-606.0	339.9	246.9	93.09	3.652	
9,700.0	7,281.9	9,722.8	7,372.2	51.1	49.7	-105.38	-2,339.1	-606.0	340.2	243.7	96.53	3.525	
9,800.0	7,280.7	9,822.8	7,372.1	52.8	51.5	-105.57	-2,439.1	-606.0	340.6	240.6	99.98	3.406	
9,900.0	7,279.4	9,922.7	7,372.0	54.6	53.3	-105.76	-2,539.1	-606.0	340.9	237.4	103.43	3.296	
10,000.0	7,278.1	10,022.7	7,371.9	56.3	55.1	-105.94	-2,639.1	-606.0	341.2	234.3	106.90	3.192	
10,100.0	7,276.9	10,122.7	7,371.8	58.1	56.9	-106.13	-2,739.1	-606.0	341.5	231.1	110.37	3.094	
10,200.0	7,275.6	10,222.7	7,371.7	59.9	58.8	-106.32	-2,839.1	-606.0	341.8	228.0	113.84	3.003	
10,300.0	7,274.4	10,322.7	7,371.6	61.7	60.6	-106.50	-2,939.1	-606.0	342.1	224.8	117.32	2.916	
10,400.0	7,273.1	10,422.7	7,371.5	63.5	62.4	-106.69	-3,039.1	-606.0	342.5	221.7	120.81	2.835	
10,500.0	7,271.9	10,522.7	7,371.4	65.3	64.2	-106.87	-3,139.1	-606.0	342.8	218.5	124.29	2.758	
10,600.0	7,270.6	10,622.7	7,371.3	67.1	66.1	-107.06	-3,239.1	-606.0	343.1	215.4	127.78	2.686	
10,700.0	7,269.4	10,722.7	7,371.2	68.9	67.9	-107.24	-3,339.1	-606.0	343.5	212.2	131.26	2.617	
10,800.0	7,268.1	10,822.7	7,371.1	70.7	69.8	-107.42	-3,439.1	-606.0	343.8	209.1	134.75	2.552	
10,900.0	7,266.8	10,922.7	7,371.0	72.6	71.6	-107.61	-3,539.1	-606.0	344.2	205.9	138.23	2.490	
11,000.0	7,265.6	11,022.7	7,370.9	74.4	73.5	-107.79	-3,639.1	-606.0	344.5	202.8	141.72	2.431	
11,100.0	7,264.3	11,122.7	7,370.8	76.2	75.4	-107.97	-3,739.1	-606.0	344.9	199.7	145.20	2.375	
11,200.0	7,263.1	11,222.7	7,370.7	78.1	77.2	-108.16	-3,839.0	-606.0	345.2	196.6	148.68	2.322	
11,300.0	7,261.8	11,322.7	7,370.5	79.9	79.1	-108.34	-3,939.0	-606.1	345.6	193.4	152.15	2.271	
11,400.0	7,260.6	11,422.6	7,370.4	81.8	80.9	-108.52	-4,039.0	-606.1	346.0	190.3	155.63	2.223	
11,500.0	7,259.3	11,522.6	7,370.3	83.6	82.8	-108.70	-4,139.0	-606.1	346.3	187.2	159.10	2.177	
11,600.0	7,258.0	11,622.6	7,370.2	85.5	84.7	-108.88	-4,239.0	-606.1	346.7	184.1	162.56	2.133	
11,700.0	7,256.8	11,722.6	7,370.1	87.4	86.6	-109.06	-4,339.0	-606.1	347.1	181.0	166.02	2.090	
11,800.0	7,255.5	11,822.6	7,370.0	89.2	88.4	-109.24	-4,439.0	-606.1	347.5	178.0	169.48	2.050	
11,842.2	7,255.0	11,861.1	7,370.0	90.0	89.2	-109.31	-4,477.5	-606.1	347.6	176.8	170.88	2.034 SF	



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Anderson 34J-323
<b>Project:</b>	SEC.34-T7N-R66W	<b>TVD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Reference Site:</b>	Anderson 34M-HZ Pad Sec.34-T7N-R66W	<b>MD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Anderson 34J-323	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-13-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Anderson 34M-HZ Pad Sec.34-T7N-R66W - Anderson 34M-343 - Wellbore #1 - Plan #1 (5-13-13)													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 (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	89.99	0.0	61.1	61.1					
100.0	100.0	100.0	100.0	0.1	0.1	89.99	0.0	61.1	61.1	60.9	0.22	272.060		
200.0	200.0	200.0	200.0	0.3	0.3	89.99	0.0	61.1	61.1	60.5	0.67	90.687 CC, ES		
300.0	300.0	300.0	300.0	0.6	0.6	162.88	0.0	61.1	62.8	61.7	1.12	55.945		
400.0	399.8	399.8	399.8	0.8	0.8	164.15	0.0	61.1	67.8	66.3	1.57	43.084		
500.0	499.5	499.5	499.5	1.0	1.0	165.90	0.0	61.1	76.3	74.2	2.03	37.545		
600.0	598.7	598.7	598.7	1.3	1.2	167.78	0.0	61.1	88.1	85.6	2.49	35.383		
700.0	697.5	697.5	697.5	1.7	1.5	169.56	0.0	61.1	103.5	100.5	2.95	35.046		
726.4	723.5	723.5	723.5	1.8	1.5	169.99	0.0	61.1	108.1	105.0	3.07	35.161		
800.0	795.8	795.8	795.8	2.0	1.7	171.10	0.0	61.1	121.4	118.0	3.41	35.589		
900.0	894.1	894.1	894.1	2.4	1.9	172.26	0.0	61.1	139.5	135.6	3.87	36.028		
1,000.0	992.4	992.4	992.4	2.8	2.1	173.15	0.0	61.1	157.6	153.3	4.33	36.355		
1,100.0	1,090.8	1,095.8	1,095.8	3.2	2.3	173.63	1.1	59.9	174.4	169.6	4.80	36.318		
1,200.0	1,189.1	1,200.6	1,200.4	3.6	2.6	173.45	4.6	55.9	188.2	182.9	5.27	35.699		
1,300.0	1,287.4	1,306.1	1,305.5	4.0	2.8	172.73	10.8	48.9	198.8	193.0	5.75	34.558		
1,400.0	1,385.7	1,405.6	1,404.5	4.4	3.1	171.86	17.8	40.9	207.9	201.7	6.23	33.351		
1,500.0	1,484.0	1,505.2	1,503.5	4.9	3.3	171.06	24.8	33.0	217.1	210.3	6.73	32.278		
1,600.0	1,582.3	1,604.7	1,602.4	5.3	3.6	170.33	31.8	25.1	226.3	219.0	7.22	31.331		
1,700.0	1,680.6	1,704.2	1,701.4	5.7	3.8	169.66	38.7	17.1	235.5	227.8	7.72	30.489		
1,800.0	1,779.0	1,803.8	1,800.4	6.1	4.1	169.03	45.7	9.2	244.8	236.5	8.23	29.736		
1,900.0	1,877.3	1,903.3	1,899.3	6.5	4.4	168.46	52.7	1.3	254.0	245.3	8.74	29.060		
2,000.0	1,975.6	2,002.8	1,998.3	6.9	4.7	167.92	59.7	-6.7	263.4	254.1	9.26	28.449		
2,100.0	2,073.9	2,102.4	2,097.3	7.3	4.9	167.42	66.7	-14.6	272.7	262.9	9.78	27.895		
2,200.0	2,172.2	2,201.9	2,196.3	7.8	5.2	166.95	73.7	-22.5	282.0	271.7	10.30	27.391		
2,300.0	2,270.5	2,301.5	2,295.2	8.2	5.5	166.51	80.6	-30.5	291.4	280.6	10.82	26.930		
2,400.0	2,368.9	2,401.0	2,394.2	8.6	5.8	166.10	87.6	-38.4	300.8	289.4	11.35	26.507		
2,500.0	2,467.2	2,500.5	2,493.2	9.0	6.1	165.72	94.6	-46.4	310.2	298.3	11.88	26.118		
2,600.0	2,565.5	2,600.1	2,592.2	9.4	6.4	165.36	101.6	-54.3	319.6	307.2	12.41	25.758		
2,700.0	2,663.8	2,699.6	2,691.1	9.8	6.6	165.01	108.6	-62.2	329.0	316.1	12.94	25.425		
2,800.0	2,762.1	2,799.1	2,790.1	10.3	6.9	164.69	115.6	-70.2	338.4	325.0	13.48	25.117		
2,900.0	2,860.4	2,898.7	2,889.1	10.7	7.2	164.39	122.5	-78.1	347.9	333.9	14.01	24.829		
3,000.0	2,958.8	2,998.2	2,988.1	11.1	7.5	164.10	129.5	-86.0	357.3	342.8	14.55	24.561		
3,100.0	3,057.1	3,097.7	3,087.0	11.5	7.8	163.82	136.5	-94.0	366.8	351.7	15.09	24.311		
3,200.0	3,155.4	3,197.3	3,186.0	11.9	8.1	163.56	143.5	-101.9	376.3	360.6	15.63	24.076		
3,300.0	3,253.7	3,296.8	3,285.0	12.3	8.4	163.31	150.5	-109.8	385.8	369.6	16.17	23.856		
3,400.0	3,352.0	3,396.4	3,383.9	12.7	8.7	163.08	157.5	-117.8	395.2	378.5	16.71	23.648		
3,500.0	3,450.3	3,495.9	3,482.9	13.2	9.0	162.85	164.4	-125.7	404.7	387.5	17.26	23.453		
3,600.0	3,548.7	3,595.4	3,581.9	13.6	9.3	162.64	171.4	-133.7	414.2	396.4	17.80	23.269		
3,700.0	3,647.0	3,695.0	3,680.9	14.0	9.6	162.43	178.4	-141.6	423.7	405.4	18.35	23.095		
3,800.0	3,745.3	3,794.5	3,779.8	14.4	9.8	162.24	185.4	-149.5	433.2	414.3	18.89	22.930		
3,900.0	3,843.6	3,894.0	3,878.8	14.8	10.1	162.05	192.4	-157.5	442.7	423.3	19.44	22.774		
4,000.0	3,941.9	3,993.6	3,977.8	15.2	10.4	161.87	199.4	-165.4	452.3	432.3	19.99	22.626		
4,100.0	4,040.2	4,093.1	4,076.8	15.7	10.7	161.70	206.3	-173.3	461.8	441.2	20.54	22.485		
4,200.0	4,138.6	4,192.6	4,175.7	16.1	11.0	161.53	213.3	-181.3	471.3	450.2	21.09	22.351		
4,300.0	4,236.9	4,292.2	4,274.7	16.5	11.3	161.38	220.3	-189.2	480.8	459.2	21.64	22.224		
4,400.0	4,335.2	4,391.7	4,373.7	16.9	11.6	161.22	227.3	-197.2	490.4	468.2	22.19	22.102		
4,500.0	4,433.5	4,491.3	4,472.7	17.3	11.9	161.08	234.3	-205.1	499.9	477.2	22.74	21.986		
4,600.0	4,531.8	4,590.8	4,571.6	17.7	12.2	160.93	241.3	-213.0	509.4	486.1	23.29	21.875		
4,700.0	4,630.1	4,690.3	4,670.6	18.2	12.5	160.80	248.2	-221.0	519.0	495.1	23.84	21.769		
4,800.0	4,728.5	4,789.9	4,769.6	18.6	12.8	160.67	255.2	-228.9	528.5	504.1	24.39	21.667		
4,900.0	4,826.8	4,889.4	4,868.5	19.0	13.1	160.54	262.2	-236.8	538.1	513.1	24.95	21.570		

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



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Anderson 34J-323
<b>Project:</b>	SEC.34-T7N-R66W	<b>TVD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Reference Site:</b>	Anderson 34M-HZ Pad Sec.34-T7N-R66W	<b>MD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Anderson 34J-323	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-13-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Anderson 34M-HZ Pad Sec.34-T7N-R66W - Anderson 34M-343 - Wellbore #1 - Plan #1 (5-13-13)													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	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
5,000.0	4,925.1	4,988.9	4,967.5	19.4	13.4	160.42	269.2	-244.8	547.6	522.1	25.50	21.477		
5,100.0	5,023.4	5,088.5	5,066.5	19.8	13.7	160.30	276.2	-252.7	557.2	531.1	26.05	21.387		
5,200.0	5,121.7	5,188.0	5,165.5	20.2	14.0	160.19	283.2	-260.6	566.7	540.1	26.61	21.301		
5,300.0	5,220.0	5,278.7	5,255.7	20.7	14.2	160.13	289.1	-267.4	576.8	549.7	27.11	21.276		
5,400.0	5,318.4	5,365.2	5,342.0	21.1	14.4	160.25	293.1	-272.0	589.0	561.4	27.55	21.381		
5,500.0	5,416.7	5,451.1	5,427.8	21.5	14.5	160.53	295.4	-274.6	603.3	575.4	27.94	21.593		
5,560.9	5,476.5	5,503.0	5,479.7	21.8	14.6	160.78	296.0	-275.2	613.1	585.0	28.17	21.768		
5,600.0	5,515.0	5,538.3	5,515.0	21.9	14.7	161.01	296.0	-275.2	619.6	591.3	28.31	21.885		
5,700.0	5,613.9	5,637.2	5,613.9	22.2	14.9	161.55	296.0	-275.2	634.0	605.3	28.66	22.119		
5,800.0	5,713.2	5,736.5	5,713.2	22.4	15.0	161.95	296.0	-275.2	645.2	616.2	29.01	22.242		
5,900.0	5,812.8	5,836.1	5,812.8	22.6	15.2	162.22	296.0	-275.2	653.0	623.7	29.33	22.267		
6,000.0	5,912.7	5,936.0	5,912.7	22.8	15.4	162.37	296.0	-275.2	657.6	628.0	29.63	22.197		
6,087.3	6,000.0	6,023.3	6,000.0	22.9	15.6	90.00	296.0	-275.2	658.9	629.0	29.87	22.058		
6,100.0	6,012.7	6,036.0	6,012.7	22.9	15.6	90.00	296.0	-275.2	658.9	628.9	29.92	22.023		
6,200.0	6,112.7	6,136.0	6,112.7	23.0	15.8	90.00	296.0	-275.2	658.9	628.6	30.29	21.753		
6,300.0	6,212.7	6,236.0	6,212.7	23.1	16.0	90.00	296.0	-275.2	658.9	628.2	30.66	21.487		
6,400.0	6,312.7	6,336.0	6,312.7	23.3	16.1	90.00	296.0	-275.2	658.9	627.8	31.04	21.227		
6,500.0	6,412.7	6,436.0	6,412.7	23.4	16.3	90.00	296.0	-275.2	658.9	627.4	31.42	20.972		
6,600.0	6,512.7	6,536.0	6,512.7	23.5	16.5	90.00	296.0	-275.2	658.9	627.1	31.80	20.721		
6,628.7	6,541.4	6,564.7	6,541.4	23.5	16.6	90.00	296.0	-275.2	658.9	627.0	31.91	20.650		
6,650.0	6,562.7	6,586.0	6,562.7	23.6	16.6	-90.00	295.7	-275.2	658.9	626.9	31.98	20.604		
6,700.0	6,612.6	6,636.0	6,612.6	23.6	16.7	-90.00	292.7	-275.2	658.9	626.8	32.11	20.519		
6,750.0	6,662.2	6,686.0	6,662.2	23.7	16.7	-90.00	286.4	-275.2	658.9	626.7	32.20	20.459		
6,800.0	6,711.3	6,736.0	6,711.3	23.7	16.8	-90.00	276.9	-275.2	658.9	626.6	32.27	20.419		
6,850.0	6,759.6	6,786.0	6,759.6	23.7	16.8	-90.00	264.2	-275.2	658.9	626.6	32.30	20.396		
6,900.0	6,807.0	6,836.0	6,807.0	23.7	16.8	-90.00	248.3	-275.2	658.9	626.5	32.32	20.388		
6,950.0	6,853.3	6,886.0	6,853.3	23.7	16.8	-90.00	229.4	-275.2	658.9	626.6	32.31	20.390		
7,000.0	6,898.2	6,936.0	6,898.2	23.7	16.8	-90.00	207.5	-275.2	658.9	626.6	32.30	20.398		
7,050.0	6,941.7	6,986.0	6,941.6	23.7	16.8	-90.00	182.7	-275.2	658.9	626.6	32.29	20.404		
7,100.0	6,983.4	7,036.0	6,983.3	23.7	16.8	-90.00	155.2	-275.2	658.9	626.6	32.29	20.405		
7,150.0	7,023.2	7,086.0	7,023.1	23.7	16.7	-90.00	124.9	-275.2	658.9	626.6	32.31	20.392		
7,200.0	7,060.9	7,136.0	7,060.9	23.6	16.7	-90.00	92.1	-275.2	658.9	626.5	32.36	20.360		
7,250.0	7,096.4	7,185.9	7,096.4	23.6	16.7	-89.99	57.0	-275.2	658.9	626.4	32.45	20.303		
7,300.0	7,129.6	7,235.9	7,129.5	23.6	16.7	-89.99	19.5	-275.2	658.9	626.3	32.60	20.213		
7,350.0	7,160.2	7,285.9	7,160.2	23.6	16.7	-89.99	-20.0	-275.2	658.9	626.1	32.80	20.087		
7,400.0	7,188.2	7,335.9	7,188.1	23.7	16.7	-89.99	-61.4	-275.2	658.9	625.8	33.08	19.920		
7,450.0	7,213.4	7,385.9	7,213.3	23.7	16.8	-89.99	-104.6	-275.2	658.9	625.4	33.43	19.711		
7,500.0	7,235.7	7,435.9	7,235.7	23.8	16.9	-89.99	-149.3	-275.2	658.9	625.0	33.86	19.459		
7,550.0	7,255.1	7,485.9	7,255.0	23.8	17.1	-89.99	-195.4	-275.2	658.9	624.5	34.38	19.166		
7,600.0	7,271.4	7,535.9	7,271.3	23.9	17.4	-89.99	-242.6	-275.2	658.9	623.9	34.98	18.835		
7,650.0	7,284.6	7,585.9	7,284.5	24.1	17.7	-89.99	-290.8	-275.2	658.9	623.2	35.67	18.471		
7,700.0	7,294.6	7,635.9	7,294.5	24.3	18.1	-89.99	-339.8	-275.2	658.9	622.4	36.44	18.080		
7,750.0	7,301.3	7,685.9	7,301.2	24.5	18.6	-89.99	-389.3	-275.2	658.9	621.6	37.29	17.667		
7,800.0	7,304.8	7,735.9	7,304.7	24.7	19.0	-89.99	-439.2	-275.2	658.9	620.6	38.21	17.241		
7,838.3	7,305.3	7,774.2	7,305.2	24.9	19.4	-89.99	-477.5	-275.2	658.9	619.9	38.96	16.910		
7,900.0	7,304.5	7,835.9	7,304.4	25.4	20.1	-89.99	-539.2	-275.2	658.9	618.6	40.27	16.362		
8,000.0	7,303.3	7,935.9	7,303.2	26.1	21.3	-89.99	-639.2	-275.2	658.9	616.3	42.56	15.481		
8,100.0	7,302.0	8,035.9	7,301.9	27.1	22.5	-89.99	-739.2	-275.2	658.9	613.8	45.06	14.621		
8,200.0	7,300.8	8,135.9	7,300.7	28.1	23.9	-89.99	-839.2	-275.2	658.9	611.1	47.75	13.799		
8,300.0	7,299.5	8,235.9	7,299.4	29.3	25.3	-89.99	-939.2	-275.2	658.9	608.3	50.58	13.026		
8,400.0	7,298.3	8,335.9	7,298.2	30.6	26.8	-89.99	-1,039.2	-275.2	658.9	605.3	53.54	12.306		

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Anderson 34J-323
<b>Project:</b>	SEC.34-T7N-R66W	<b>TVD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Reference Site:</b>	Anderson 34M-HZ Pad Sec.34-T7N-R66W	<b>MD Reference:</b>	WELL @ 4930.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Anderson 34J-323	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-13-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Anderson 34M-HZ Pad Sec.34-T7N-R66W - Anderson 34M-343 - Wellbore #1 - Plan #1 (5-13-13)												Offset Site Error: 0.0 ft	
Survey Program: 0-MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (ft)	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset		Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)				Between Centres (ft)	Between Ellipses (ft)
8,500.0	7,297.0	8,435.9	7,296.9	31.9	28.3	-89.99	-1,139.1	-275.2	658.9	602.3	56.61	11.639	
8,600.0	7,295.7	8,535.9	7,295.7	33.3	29.9	-89.99	-1,239.1	-275.2	658.9	599.1	59.76	11.024	
8,700.0	7,294.5	8,635.9	7,294.4	34.7	31.6	-89.99	-1,339.1	-275.2	658.9	595.9	63.00	10.459	
8,800.0	7,293.2	8,735.9	7,293.1	36.2	33.2	-89.99	-1,439.1	-275.2	658.9	592.6	66.30	9.938	
8,900.0	7,292.0	8,835.9	7,291.9	37.8	34.9	-89.99	-1,539.1	-275.2	658.9	589.2	69.65	9.459	
9,000.0	7,290.7	8,935.9	7,290.6	39.3	36.6	-89.99	-1,639.1	-275.2	658.9	585.8	73.06	9.018	
9,100.0	7,289.5	9,035.9	7,289.4	40.9	38.3	-89.99	-1,739.1	-275.2	658.9	582.4	76.50	8.612	
9,200.0	7,288.2	9,135.9	7,288.1	42.6	40.0	-89.99	-1,839.1	-275.2	658.9	578.9	79.99	8.237	
9,300.0	7,286.9	9,235.9	7,286.9	44.2	41.8	-89.99	-1,939.1	-275.2	658.9	575.4	83.50	7.890	
9,400.0	7,285.7	9,335.9	7,285.6	45.9	43.6	-89.99	-2,039.1	-275.2	658.9	571.8	87.04	7.569	
9,500.0	7,284.4	9,435.9	7,284.3	47.6	45.4	-89.99	-2,139.1	-275.2	658.9	568.2	90.61	7.271	
9,600.0	7,283.2	9,535.9	7,283.1	49.3	47.2	-89.99	-2,239.1	-275.2	658.9	564.7	94.20	6.994	
9,700.0	7,281.9	9,635.9	7,281.8	51.1	49.0	-89.99	-2,339.1	-275.2	658.9	561.0	97.81	6.736	
9,800.0	7,280.7	9,735.9	7,280.6	52.8	50.8	-89.99	-2,439.0	-275.2	658.9	557.4	101.44	6.495	
9,900.0	7,279.4	9,835.9	7,279.3	54.6	52.6	-89.99	-2,539.0	-275.2	658.9	553.8	105.08	6.270	
10,000.0	7,278.1	9,935.9	7,278.1	56.3	54.4	-89.99	-2,639.0	-275.2	658.9	550.1	108.74	6.059	
10,100.0	7,276.9	10,035.9	7,276.8	58.1	56.2	-89.99	-2,739.0	-275.2	658.9	546.5	112.41	5.861	
10,200.0	7,275.6	10,135.9	7,275.5	59.9	58.1	-89.99	-2,839.0	-275.2	658.9	542.8	116.09	5.675	
10,300.0	7,274.4	10,235.9	7,274.3	61.7	59.9	-89.99	-2,939.0	-275.2	658.9	539.1	119.78	5.501	
10,400.0	7,273.1	10,335.9	7,273.0	63.5	61.8	-89.99	-3,039.0	-275.2	658.9	535.4	123.48	5.336	
10,500.0	7,271.9	10,435.9	7,271.8	65.3	63.6	-89.99	-3,139.0	-275.2	658.9	531.7	127.19	5.180	
10,600.0	7,270.6	10,535.9	7,270.5	67.1	65.5	-89.99	-3,239.0	-275.2	658.9	528.0	130.91	5.033	
10,700.0	7,269.4	10,635.9	7,269.3	68.9	67.4	-89.99	-3,339.0	-275.2	658.9	524.2	134.63	4.894	
10,800.0	7,268.1	10,735.9	7,268.0	70.7	69.2	-89.99	-3,439.0	-275.2	658.9	520.5	138.37	4.762	
10,900.0	7,266.8	10,835.9	7,266.7	72.6	71.1	-89.99	-3,539.0	-275.2	658.9	516.8	142.10	4.636	
11,000.0	7,265.6	10,935.9	7,265.5	74.4	73.0	-89.99	-3,638.9	-275.2	658.9	513.0	145.85	4.517	
11,100.0	7,264.3	11,035.9	7,264.2	76.2	74.8	-89.99	-3,738.9	-275.2	658.9	509.3	149.60	4.404	
11,200.0	7,263.1	11,135.9	7,263.0	78.1	76.7	-89.99	-3,838.9	-275.2	658.9	505.5	153.35	4.296	
11,300.0	7,261.8	11,235.9	7,261.7	79.9	78.6	-89.99	-3,938.9	-275.2	658.9	501.8	157.11	4.194	
11,400.0	7,260.6	11,335.9	7,260.5	81.8	80.5	-89.99	-4,038.9	-275.2	658.9	498.0	160.87	4.096	
11,500.0	7,259.3	11,435.9	7,259.2	83.6	82.4	-89.99	-4,138.9	-275.2	658.9	494.2	164.64	4.002	
11,600.0	7,258.0	11,535.9	7,258.0	85.5	84.2	-89.99	-4,238.9	-275.2	658.9	490.5	168.41	3.912	
11,700.0	7,256.8	11,635.9	7,256.7	87.4	86.1	-89.99	-4,338.9	-275.2	658.9	486.7	172.18	3.827	
11,800.0	7,255.5	11,735.9	7,255.4	89.2	88.0	-89.99	-4,438.9	-275.2	658.9	482.9	175.96	3.744	
11,830.2	7,255.2	11,766.1	7,255.1	89.8	88.6	-89.99	-4,469.1	-275.2	658.9	481.8	177.10	3.720	
11,842.2	7,255.0	11,770.8	7,255.0	90.0	88.7	-89.99	-4,473.8	-275.2	658.9	481.5	177.41	3.714 SF	

Reference Depths are relative to WELL @ 4930.0ft (Original Well Elev)Coordinates are relative to: Anderson 34J-323  
Offset Depths are relative to Offset DatumCoordinate System is US State Plane 1983, Colorado Northern Zone  
Central Meridian is -105.500000 °Grid Convergence at Surface is: 0.47°



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