

# PETROLEUM DEVELOPMENT CORP Weld County CO

Well Name: **Anderson 34M-343**

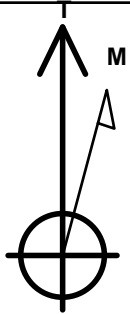
Surface Location: Anderson 34M-HZ Pad Sec.34-T7N-R66W  
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone  
Ground Elevation: 4915.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1439581.34	3204156.25	40.537730	-104.765470	

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

## WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
BHL 500'FSL, 2270'FWL	7255.0	-4473.8	-336.4	Point

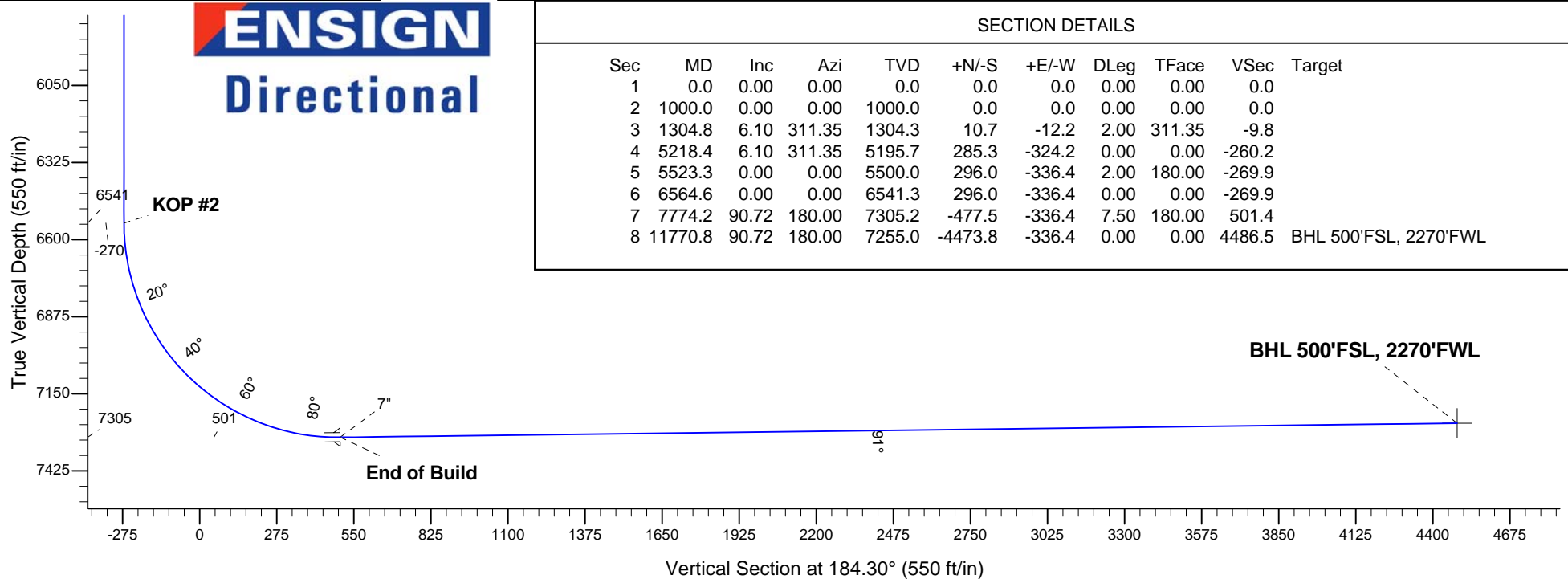
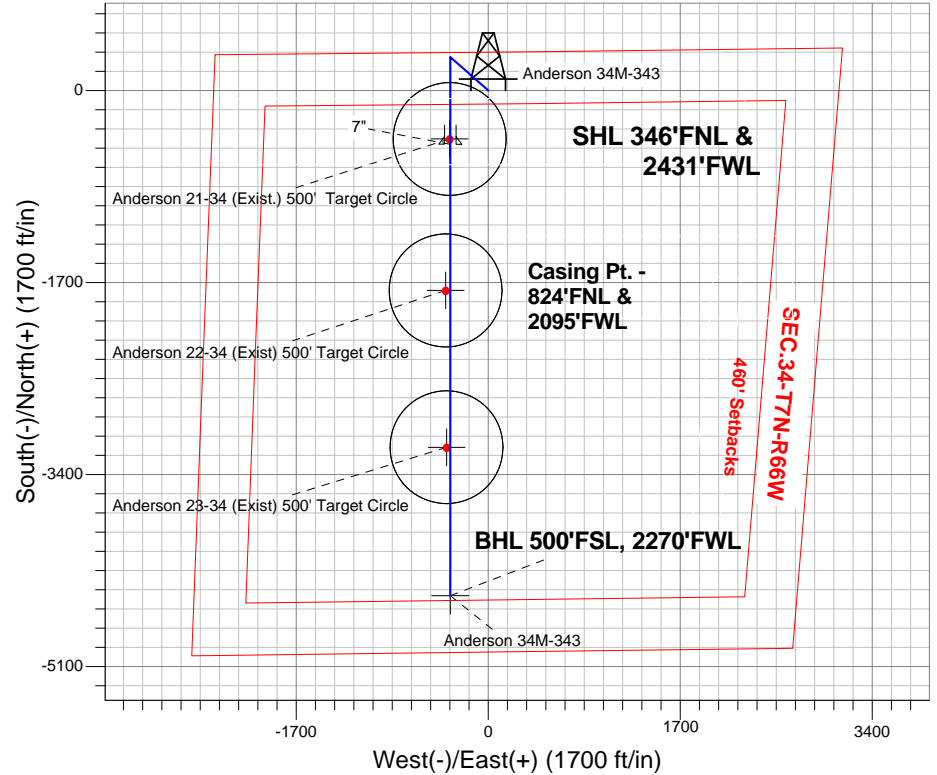


Azimuths to True North  
Magnetic North: 8.62°  
  
Magnetic Field  
Strength: 53001.2snT  
Dip Angle: 67.10°  
Date: 5/13/2013  
Model: IGRF2010

## ANNOTATIONS

TVD	MD	Annotation
1000.0	1000.0	KOP #1
6541.3	6564.6	KOP #2
7305.2	7774.2	End of Build

Anderson 34M-HZ Pad Sec.34-T7N-R66W  
Anderson 34M-343  
Plan #1 (5-13-13)  
16:27, May 14 2013





## **Directional**

# **PETROLEUM DEVELOPMENT CORP Weld County CO**

**SEC.34-T7N-R66W**

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

**Anderson 34M-343**

**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 34M-343
<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 34M-343	<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 34M-343					
Well Position	+N/-S	0.0 ft	Northing:	1,439,581.34 ft	Latitude:	40.537730
	+E/-W	-61.1 ft	Easting:	3,204,156.25 ft	Longitude:	-104.765470
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	184.30

<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	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,304.8	6.10	311.35	1,304.3	10.7	-12.2	2.00	2.00	0.00	311.35	
5,218.4	6.10	311.35	5,195.7	285.3	-324.2	0.00	0.00	0.00	0.00	
5,523.3	0.00	0.00	5,500.0	296.0	-336.4	2.00	-2.00	0.00	180.00	
6,564.6	0.00	0.00	6,541.3	296.0	-336.4	0.00	0.00	0.00	0.00	
7,774.2	90.72	180.00	7,305.2	-477.5	-336.4	7.50	7.50	0.00	180.00	
11,770.8	90.72	180.00	7,255.0	-4,473.8	-336.4	0.00	0.00	0.00	0.00	BHL 500'FSL, 2270

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Anderson 34M-343
<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 34M-343	<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
240.0	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	0.00
280.0	0.00	0.00	280.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
360.0	0.00	0.00	360.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
440.0	0.00	0.00	440.0	0.0	0.0	0.0	0.00	0.00	0.00
480.0	0.00	0.00	480.0	0.0	0.0	0.0	0.00	0.00	0.00
520.0	0.00	0.00	520.0	0.0	0.0	0.0	0.00	0.00	0.00
560.0	0.00	0.00	560.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
640.0	0.00	0.00	640.0	0.0	0.0	0.0	0.00	0.00	0.00
680.0	0.00	0.00	680.0	0.0	0.0	0.0	0.00	0.00	0.00
720.0	0.00	0.00	720.0	0.0	0.0	0.0	0.00	0.00	0.00
760.0	0.00	0.00	760.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
840.0	0.00	0.00	840.0	0.0	0.0	0.0	0.00	0.00	0.00
880.0	0.00	0.00	880.0	0.0	0.0	0.0	0.00	0.00	0.00
920.0	0.00	0.00	920.0	0.0	0.0	0.0	0.00	0.00	0.00
960.0	0.00	0.00	960.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>KOP #1</b>									
1,040.0	0.80	311.35	1,040.0	0.2	-0.2	-0.2	2.00	2.00	0.00
1,080.0	1.60	311.35	1,080.0	0.7	-0.8	-0.7	2.00	2.00	0.00
1,120.0	2.40	311.35	1,120.0	1.7	-1.9	-1.5	2.00	2.00	0.00
1,160.0	3.20	311.35	1,159.9	3.0	-3.4	-2.7	2.00	2.00	0.00
1,200.0	4.00	311.35	1,199.8	4.6	-5.2	-4.2	2.00	2.00	0.00
1,240.0	4.80	311.35	1,239.7	6.6	-7.5	-6.1	2.00	2.00	0.00
1,280.0	5.60	311.35	1,279.6	9.0	-10.3	-8.2	2.00	2.00	0.00
1,304.8	6.10	311.35	1,304.3	10.7	-12.2	-9.8	2.00	2.00	0.00
1,320.0	6.10	311.35	1,319.3	11.8	-13.4	-10.7	0.00	0.00	0.00
1,360.0	6.10	311.35	1,359.1	14.6	-16.6	-13.3	0.00	0.00	0.00
1,400.0	6.10	311.35	1,398.9	17.4	-19.8	-15.9	0.00	0.00	0.00
1,440.0	6.10	311.35	1,438.7	20.2	-22.9	-18.4	0.00	0.00	0.00
1,480.0	6.10	311.35	1,478.4	23.0	-26.1	-21.0	0.00	0.00	0.00
1,520.0	6.10	311.35	1,518.2	25.8	-29.3	-23.5	0.00	0.00	0.00
1,560.0	6.10	311.35	1,558.0	28.6	-32.5	-26.1	0.00	0.00	0.00
1,600.0	6.10	311.35	1,597.8	31.4	-35.7	-28.6	0.00	0.00	0.00
1,640.0	6.10	311.35	1,637.5	34.2	-38.9	-31.2	0.00	0.00	0.00
1,680.0	6.10	311.35	1,677.3	37.0	-42.1	-33.8	0.00	0.00	0.00
1,720.0	6.10	311.35	1,717.1	39.8	-45.3	-36.3	0.00	0.00	0.00
1,760.0	6.10	311.35	1,756.9	42.6	-48.5	-38.9	0.00	0.00	0.00
1,800.0	6.10	311.35	1,796.6	45.4	-51.6	-41.4	0.00	0.00	0.00
1,840.0	6.10	311.35	1,836.4	48.3	-54.8	-44.0	0.00	0.00	0.00
1,880.0	6.10	311.35	1,876.2	51.1	-58.0	-46.6	0.00	0.00	0.00
1,920.0	6.10	311.35	1,915.9	53.9	-61.2	-49.1	0.00	0.00	0.00
1,960.0	6.10	311.35	1,955.7	56.7	-64.4	-51.7	0.00	0.00	0.00
2,000.0	6.10	311.35	1,995.5	59.5	-67.6	-54.2	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Anderson 34M-343
<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 34M-343	<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	6.10	311.35	2,035.3	62.3	-70.8	-56.8	0.00	0.00	0.00
2,080.0	6.10	311.35	2,075.0	65.1	-74.0	-59.4	0.00	0.00	0.00
2,120.0	6.10	311.35	2,114.8	67.9	-77.2	-61.9	0.00	0.00	0.00
2,160.0	6.10	311.35	2,154.6	70.7	-80.4	-64.5	0.00	0.00	0.00
2,200.0	6.10	311.35	2,194.4	73.5	-83.5	-67.0	0.00	0.00	0.00
2,240.0	6.10	311.35	2,234.1	76.3	-86.7	-69.6	0.00	0.00	0.00
2,280.0	6.10	311.35	2,273.9	79.1	-89.9	-72.2	0.00	0.00	0.00
2,320.0	6.10	311.35	2,313.7	81.9	-93.1	-74.7	0.00	0.00	0.00
2,360.0	6.10	311.35	2,353.5	84.7	-96.3	-77.3	0.00	0.00	0.00
2,400.0	6.10	311.35	2,393.2	87.5	-99.5	-79.8	0.00	0.00	0.00
2,440.0	6.10	311.35	2,433.0	90.4	-102.7	-82.4	0.00	0.00	0.00
2,480.0	6.10	311.35	2,472.8	93.2	-105.9	-85.0	0.00	0.00	0.00
2,520.0	6.10	311.35	2,512.6	96.0	-109.1	-87.5	0.00	0.00	0.00
2,560.0	6.10	311.35	2,552.3	98.8	-112.2	-90.1	0.00	0.00	0.00
2,600.0	6.10	311.35	2,592.1	101.6	-115.4	-92.6	0.00	0.00	0.00
2,640.0	6.10	311.35	2,631.9	104.4	-118.6	-95.2	0.00	0.00	0.00
2,680.0	6.10	311.35	2,671.6	107.2	-121.8	-97.8	0.00	0.00	0.00
2,720.0	6.10	311.35	2,711.4	110.0	-125.0	-100.3	0.00	0.00	0.00
2,760.0	6.10	311.35	2,751.2	112.8	-128.2	-102.9	0.00	0.00	0.00
2,800.0	6.10	311.35	2,791.0	115.6	-131.4	-105.4	0.00	0.00	0.00
2,840.0	6.10	311.35	2,830.7	118.4	-134.6	-108.0	0.00	0.00	0.00
2,880.0	6.10	311.35	2,870.5	121.2	-137.8	-110.6	0.00	0.00	0.00
2,920.0	6.10	311.35	2,910.3	124.0	-141.0	-113.1	0.00	0.00	0.00
2,960.0	6.10	311.35	2,950.1	126.8	-144.1	-115.7	0.00	0.00	0.00
3,000.0	6.10	311.35	2,989.8	129.6	-147.3	-118.2	0.00	0.00	0.00
3,040.0	6.10	311.35	3,029.6	132.4	-150.5	-120.8	0.00	0.00	0.00
3,080.0	6.10	311.35	3,069.4	135.3	-153.7	-123.3	0.00	0.00	0.00
3,120.0	6.10	311.35	3,109.2	138.1	-156.9	-125.9	0.00	0.00	0.00
3,160.0	6.10	311.35	3,148.9	140.9	-160.1	-128.5	0.00	0.00	0.00
3,200.0	6.10	311.35	3,188.7	143.7	-163.3	-131.0	0.00	0.00	0.00
3,240.0	6.10	311.35	3,228.5	146.5	-166.5	-133.6	0.00	0.00	0.00
3,280.0	6.10	311.35	3,268.3	149.3	-169.7	-136.1	0.00	0.00	0.00
3,320.0	6.10	311.35	3,308.0	152.1	-172.8	-138.7	0.00	0.00	0.00
3,360.0	6.10	311.35	3,347.8	154.9	-176.0	-141.3	0.00	0.00	0.00
3,400.0	6.10	311.35	3,387.6	157.7	-179.2	-143.8	0.00	0.00	0.00
3,440.0	6.10	311.35	3,427.3	160.5	-182.4	-146.4	0.00	0.00	0.00
3,480.0	6.10	311.35	3,467.1	163.3	-185.6	-148.9	0.00	0.00	0.00
3,520.0	6.10	311.35	3,506.9	166.1	-188.8	-151.5	0.00	0.00	0.00
3,560.0	6.10	311.35	3,546.7	168.9	-192.0	-154.1	0.00	0.00	0.00
3,600.0	6.10	311.35	3,586.4	171.7	-195.2	-156.6	0.00	0.00	0.00
3,640.0	6.10	311.35	3,626.2	174.5	-198.4	-159.2	0.00	0.00	0.00
3,680.0	6.10	311.35	3,666.0	177.4	-201.6	-161.7	0.00	0.00	0.00
3,720.0	6.10	311.35	3,705.8	180.2	-204.7	-164.3	0.00	0.00	0.00
3,760.0	6.10	311.35	3,745.5	183.0	-207.9	-166.9	0.00	0.00	0.00
3,800.0	6.10	311.35	3,785.3	185.8	-211.1	-169.4	0.00	0.00	0.00
3,840.0	6.10	311.35	3,825.1	188.6	-214.3	-172.0	0.00	0.00	0.00
3,880.0	6.10	311.35	3,864.9	191.4	-217.5	-174.5	0.00	0.00	0.00
3,920.0	6.10	311.35	3,904.6	194.2	-220.7	-177.1	0.00	0.00	0.00
3,960.0	6.10	311.35	3,944.4	197.0	-223.9	-179.7	0.00	0.00	0.00
4,000.0	6.10	311.35	3,984.2	199.8	-227.1	-182.2	0.00	0.00	0.00
4,040.0	6.10	311.35	4,024.0	202.6	-230.3	-184.8	0.00	0.00	0.00
4,080.0	6.10	311.35	4,063.7	205.4	-233.4	-187.3	0.00	0.00	0.00
4,120.0	6.10	311.35	4,103.5	208.2	-236.6	-189.9	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Anderson 34M-343
<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 34M-343	<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	6.10	311.35	4,143.3	211.0	-239.8	-192.5	0.00	0.00	0.00
4,200.0	6.10	311.35	4,183.0	213.8	-243.0	-195.0	0.00	0.00	0.00
4,240.0	6.10	311.35	4,222.8	216.6	-246.2	-197.6	0.00	0.00	0.00
4,280.0	6.10	311.35	4,262.6	219.5	-249.4	-200.1	0.00	0.00	0.00
4,320.0	6.10	311.35	4,302.4	222.3	-252.6	-202.7	0.00	0.00	0.00
4,360.0	6.10	311.35	4,342.1	225.1	-255.8	-205.3	0.00	0.00	0.00
4,400.0	6.10	311.35	4,381.9	227.9	-259.0	-207.8	0.00	0.00	0.00
4,440.0	6.10	311.35	4,421.7	230.7	-262.2	-210.4	0.00	0.00	0.00
4,480.0	6.10	311.35	4,461.5	233.5	-265.3	-212.9	0.00	0.00	0.00
4,520.0	6.10	311.35	4,501.2	236.3	-268.5	-215.5	0.00	0.00	0.00
4,560.0	6.10	311.35	4,541.0	239.1	-271.7	-218.1	0.00	0.00	0.00
4,600.0	6.10	311.35	4,580.8	241.9	-274.9	-220.6	0.00	0.00	0.00
4,640.0	6.10	311.35	4,620.6	244.7	-278.1	-223.2	0.00	0.00	0.00
4,680.0	6.10	311.35	4,660.3	247.5	-281.3	-225.7	0.00	0.00	0.00
4,720.0	6.10	311.35	4,700.1	250.3	-284.5	-228.3	0.00	0.00	0.00
4,760.0	6.10	311.35	4,739.9	253.1	-287.7	-230.8	0.00	0.00	0.00
4,800.0	6.10	311.35	4,779.7	255.9	-290.9	-233.4	0.00	0.00	0.00
4,840.0	6.10	311.35	4,819.4	258.7	-294.0	-236.0	0.00	0.00	0.00
4,880.0	6.10	311.35	4,859.2	261.5	-297.2	-238.5	0.00	0.00	0.00
4,920.0	6.10	311.35	4,899.0	264.4	-300.4	-241.1	0.00	0.00	0.00
4,960.0	6.10	311.35	4,938.8	267.2	-303.6	-243.6	0.00	0.00	0.00
5,000.0	6.10	311.35	4,978.5	270.0	-306.8	-246.2	0.00	0.00	0.00
5,040.0	6.10	311.35	5,018.3	272.8	-310.0	-248.8	0.00	0.00	0.00
5,080.0	6.10	311.35	5,058.1	275.6	-313.2	-251.3	0.00	0.00	0.00
5,120.0	6.10	311.35	5,097.8	278.4	-316.4	-253.9	0.00	0.00	0.00
5,160.0	6.10	311.35	5,137.6	281.2	-319.6	-256.4	0.00	0.00	0.00
5,200.0	6.10	311.35	5,177.4	284.0	-322.7	-259.0	0.00	0.00	0.00
5,218.4	6.10	311.35	5,195.7	285.3	-324.2	-260.2	0.00	0.00	0.00
5,240.0	5.67	311.35	5,217.2	286.8	-325.9	-261.5	2.00	-2.00	0.00
5,280.0	4.87	311.35	5,257.0	289.2	-328.6	-263.7	2.00	-2.00	0.00
5,320.0	4.07	311.35	5,296.9	291.2	-331.0	-265.6	2.00	-2.00	0.00
5,360.0	3.27	311.35	5,336.8	292.9	-332.9	-267.1	2.00	-2.00	0.00
5,400.0	2.47	311.35	5,376.8	294.2	-334.4	-268.3	2.00	-2.00	0.00
5,440.0	1.67	311.35	5,416.7	295.2	-335.5	-269.2	2.00	-2.00	0.00
5,480.0	0.87	311.35	5,456.7	295.8	-336.1	-269.7	2.00	-2.00	0.00
5,520.0	0.07	311.35	5,496.7	296.0	-336.4	-269.9	2.00	-2.00	0.00
5,523.3	0.00	0.00	5,500.0	296.0	-336.4	-269.9	2.00	-2.00	0.00
5,560.0	0.00	0.00	5,536.7	296.0	-336.4	-269.9	0.00	0.00	0.00
5,600.0	0.00	0.00	5,576.7	296.0	-336.4	-269.9	0.00	0.00	0.00
5,640.0	0.00	0.00	5,616.7	296.0	-336.4	-269.9	0.00	0.00	0.00
5,680.0	0.00	0.00	5,656.7	296.0	-336.4	-269.9	0.00	0.00	0.00
5,720.0	0.00	0.00	5,696.7	296.0	-336.4	-269.9	0.00	0.00	0.00
5,760.0	0.00	0.00	5,736.7	296.0	-336.4	-269.9	0.00	0.00	0.00
5,800.0	0.00	0.00	5,776.7	296.0	-336.4	-269.9	0.00	0.00	0.00
5,840.0	0.00	0.00	5,816.7	296.0	-336.4	-269.9	0.00	0.00	0.00
5,880.0	0.00	0.00	5,856.7	296.0	-336.4	-269.9	0.00	0.00	0.00
5,920.0	0.00	0.00	5,896.7	296.0	-336.4	-269.9	0.00	0.00	0.00
5,960.0	0.00	0.00	5,936.7	296.0	-336.4	-269.9	0.00	0.00	0.00
6,000.0	0.00	0.00	5,976.7	296.0	-336.4	-269.9	0.00	0.00	0.00
6,040.0	0.00	0.00	6,016.7	296.0	-336.4	-269.9	0.00	0.00	0.00
6,080.0	0.00	0.00	6,056.7	296.0	-336.4	-269.9	0.00	0.00	0.00
6,120.0	0.00	0.00	6,096.7	296.0	-336.4	-269.9	0.00	0.00	0.00
6,160.0	0.00	0.00	6,136.7	296.0	-336.4	-269.9	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Anderson 34M-343
<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 34M-343	<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	6,176.7	296.0	-336.4	-269.9	0.00	0.00	0.00
6,240.0	0.00	0.00	6,216.7	296.0	-336.4	-269.9	0.00	0.00	0.00
6,280.0	0.00	0.00	6,256.7	296.0	-336.4	-269.9	0.00	0.00	0.00
6,320.0	0.00	0.00	6,296.7	296.0	-336.4	-269.9	0.00	0.00	0.00
6,360.0	0.00	0.00	6,336.7	296.0	-336.4	-269.9	0.00	0.00	0.00
6,400.0	0.00	0.00	6,376.7	296.0	-336.4	-269.9	0.00	0.00	0.00
6,440.0	0.00	0.00	6,416.7	296.0	-336.4	-269.9	0.00	0.00	0.00
6,480.0	0.00	0.00	6,456.7	296.0	-336.4	-269.9	0.00	0.00	0.00
6,520.0	0.00	0.00	6,496.7	296.0	-336.4	-269.9	0.00	0.00	0.00
6,560.0	0.00	0.00	6,536.7	296.0	-336.4	-269.9	0.00	0.00	0.00
6,564.6	0.00	0.00	6,541.3	296.0	-336.4	-269.9	0.00	0.00	0.00
<b>KOP #2</b>									
6,600.0	2.65	180.00	6,576.7	295.2	-336.4	-269.1	7.50	7.50	0.00
6,640.0	5.65	180.00	6,616.6	292.3	-336.4	-266.2	7.50	7.50	0.00
6,680.0	8.65	180.00	6,656.3	287.3	-336.4	-261.3	7.50	7.50	0.00
6,720.0	11.65	180.00	6,695.6	280.3	-336.4	-254.2	7.50	7.50	0.00
6,760.0	14.65	180.00	6,734.6	271.2	-336.4	-245.2	7.50	7.50	0.00
6,800.0	17.65	180.00	6,773.0	260.0	-336.4	-234.1	7.50	7.50	0.00
6,840.0	20.65	180.00	6,810.8	246.9	-336.4	-221.0	7.50	7.50	0.00
6,880.0	23.65	180.00	6,847.8	231.8	-336.4	-205.9	7.50	7.50	0.00
6,920.0	26.65	180.00	6,884.0	214.8	-336.4	-189.0	7.50	7.50	0.00
6,960.0	29.65	180.00	6,919.3	196.0	-336.4	-170.2	7.50	7.50	0.00
7,000.0	32.65	180.00	6,953.5	175.3	-336.4	-149.5	7.50	7.50	0.00
7,040.0	35.65	180.00	6,986.6	152.8	-336.4	-127.2	7.50	7.50	0.00
7,080.0	38.65	180.00	7,018.5	128.7	-336.4	-103.1	7.50	7.50	0.00
7,120.0	41.65	180.00	7,049.1	102.9	-336.4	-77.3	7.50	7.50	0.00
7,160.0	44.65	180.00	7,078.2	75.5	-336.4	-50.1	7.50	7.50	0.00
7,200.0	47.65	180.00	7,106.0	46.7	-336.4	-21.3	7.50	7.50	0.00
7,240.0	50.65	180.00	7,132.1	16.4	-336.4	8.9	7.50	7.50	0.00
7,280.0	53.65	180.00	7,156.7	-15.2	-336.4	40.4	7.50	7.50	0.00
7,320.0	56.65	180.00	7,179.5	-48.0	-336.4	73.1	7.50	7.50	0.00
7,360.0	59.65	180.00	7,200.6	-82.0	-336.4	107.0	7.50	7.50	0.00
7,400.0	62.65	180.00	7,219.9	-117.0	-336.4	141.9	7.50	7.50	0.00
7,440.0	65.65	180.00	7,237.3	-153.0	-336.4	177.8	7.50	7.50	0.00
7,480.0	68.65	180.00	7,252.9	-189.9	-336.4	214.5	7.50	7.50	0.00
7,520.0	71.65	180.00	7,266.4	-227.5	-336.4	252.1	7.50	7.50	0.00
7,560.0	74.65	180.00	7,278.0	-265.8	-336.4	290.2	7.50	7.50	0.00
7,600.0	77.65	180.00	7,287.6	-304.6	-336.4	329.0	7.50	7.50	0.00
7,640.0	80.65	180.00	7,295.1	-343.9	-336.4	368.1	7.50	7.50	0.00
7,680.0	83.65	180.00	7,300.6	-383.5	-336.4	407.6	7.50	7.50	0.00
7,720.0	86.65	180.00	7,304.0	-423.3	-336.4	447.4	7.50	7.50	0.00
7,760.0	89.65	180.00	7,305.3	-463.3	-336.4	487.2	7.50	7.50	0.00
7,774.2	90.72	180.00	7,305.2	-477.5	-336.4	501.4	7.50	7.50	0.00
<b>End of Build - 7"</b>									
7,800.0	90.72	180.00	7,304.9	-503.3	-336.4	527.1	0.01	0.01	0.00
7,840.0	90.72	180.00	7,304.4	-543.3	-336.4	567.0	0.00	0.00	0.00
7,880.0	90.72	180.00	7,303.9	-583.3	-336.4	606.9	0.00	0.00	0.00
7,920.0	90.72	180.00	7,303.4	-623.3	-336.4	646.8	0.00	0.00	0.00
7,960.0	90.72	180.00	7,302.9	-663.3	-336.4	686.7	0.00	0.00	0.00
8,000.0	90.72	180.00	7,302.4	-703.3	-336.4	726.5	0.00	0.00	0.00
8,040.0	90.72	180.00	7,301.9	-743.3	-336.4	766.4	0.00	0.00	0.00
8,080.0	90.72	180.00	7,301.4	-783.3	-336.4	806.3	0.00	0.00	0.00
8,120.0	90.72	180.00	7,300.9	-823.3	-336.4	846.2	0.00	0.00	0.00



<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Anderson 34M-343
<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 34M-343	<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	7,300.4	-863.3	-336.4	886.1	0.00	0.00	0.00
8,200.0	90.72	180.00	7,299.9	-903.3	-336.4	926.0	0.00	0.00	0.00
8,240.0	90.72	180.00	7,299.4	-943.3	-336.4	965.8	0.00	0.00	0.00
8,280.0	90.72	180.00	7,298.9	-983.3	-336.4	1,005.7	0.00	0.00	0.00
8,320.0	90.72	180.00	7,298.4	-1,023.3	-336.4	1,045.6	0.00	0.00	0.00
8,360.0	90.72	180.00	7,297.9	-1,063.3	-336.4	1,085.5	0.00	0.00	0.00
8,400.0	90.72	180.00	7,297.4	-1,103.3	-336.4	1,125.4	0.00	0.00	0.00
8,440.0	90.72	180.00	7,296.9	-1,143.3	-336.4	1,165.3	0.00	0.00	0.00
8,480.0	90.72	180.00	7,296.4	-1,183.3	-336.4	1,205.2	0.00	0.00	0.00
8,520.0	90.72	180.00	7,295.8	-1,223.3	-336.4	1,245.0	0.00	0.00	0.00
8,560.0	90.72	180.00	7,295.3	-1,263.3	-336.4	1,284.9	0.00	0.00	0.00
8,600.0	90.72	180.00	7,294.8	-1,303.3	-336.4	1,324.8	0.00	0.00	0.00
8,640.0	90.72	180.00	7,294.3	-1,343.3	-336.4	1,364.7	0.00	0.00	0.00
8,680.0	90.72	180.00	7,293.8	-1,383.2	-336.4	1,404.6	0.00	0.00	0.00
8,720.0	90.72	180.00	7,293.3	-1,423.2	-336.4	1,444.5	0.00	0.00	0.00
8,760.0	90.72	180.00	7,292.8	-1,463.2	-336.4	1,484.3	0.00	0.00	0.00
8,800.0	90.72	180.00	7,292.3	-1,503.2	-336.4	1,524.2	0.00	0.00	0.00
8,840.0	90.72	180.00	7,291.8	-1,543.2	-336.4	1,564.1	0.00	0.00	0.00
8,880.0	90.72	180.00	7,291.3	-1,583.2	-336.4	1,604.0	0.00	0.00	0.00
8,920.0	90.72	180.00	7,290.8	-1,623.2	-336.4	1,643.9	0.00	0.00	0.00
8,960.0	90.72	180.00	7,290.3	-1,663.2	-336.4	1,683.8	0.00	0.00	0.00
9,000.0	90.72	180.00	7,289.8	-1,703.2	-336.4	1,723.6	0.00	0.00	0.00
9,040.0	90.72	180.00	7,289.3	-1,743.2	-336.4	1,763.5	0.00	0.00	0.00
9,080.0	90.72	180.00	7,288.8	-1,783.2	-336.4	1,803.4	0.00	0.00	0.00
9,120.0	90.72	180.00	7,288.3	-1,823.2	-336.4	1,843.3	0.00	0.00	0.00
9,160.0	90.72	180.00	7,287.8	-1,863.2	-336.4	1,883.2	0.00	0.00	0.00
9,200.0	90.72	180.00	7,287.3	-1,903.2	-336.4	1,923.1	0.00	0.00	0.00
9,240.0	90.72	180.00	7,286.8	-1,943.2	-336.4	1,963.0	0.00	0.00	0.00
9,280.0	90.72	180.00	7,286.3	-1,983.2	-336.4	2,002.8	0.00	0.00	0.00
9,320.0	90.72	180.00	7,285.8	-2,023.2	-336.4	2,042.7	0.00	0.00	0.00
9,360.0	90.72	180.00	7,285.3	-2,063.2	-336.4	2,082.6	0.00	0.00	0.00
9,400.0	90.72	180.00	7,284.8	-2,103.2	-336.4	2,122.5	0.00	0.00	0.00
9,440.0	90.72	180.00	7,284.3	-2,143.2	-336.4	2,162.4	0.00	0.00	0.00
9,480.0	90.72	180.00	7,283.8	-2,183.2	-336.4	2,202.3	0.00	0.00	0.00
9,520.0	90.72	180.00	7,283.3	-2,223.2	-336.4	2,242.1	0.00	0.00	0.00
9,560.0	90.72	180.00	7,282.8	-2,263.2	-336.4	2,282.0	0.00	0.00	0.00
9,600.0	90.72	180.00	7,282.3	-2,303.2	-336.4	2,321.9	0.00	0.00	0.00
9,640.0	90.72	180.00	7,281.8	-2,343.2	-336.4	2,361.8	0.00	0.00	0.00
9,680.0	90.72	180.00	7,281.3	-2,383.2	-336.4	2,401.7	0.00	0.00	0.00
9,720.0	90.72	180.00	7,280.8	-2,423.2	-336.4	2,441.6	0.00	0.00	0.00
9,760.0	90.72	180.00	7,280.3	-2,463.2	-336.4	2,481.5	0.00	0.00	0.00
9,800.0	90.72	180.00	7,279.8	-2,503.2	-336.4	2,521.3	0.00	0.00	0.00
9,840.0	90.72	180.00	7,279.3	-2,543.2	-336.4	2,561.2	0.00	0.00	0.00
9,880.0	90.72	180.00	7,278.8	-2,583.2	-336.4	2,601.1	0.00	0.00	0.00
9,920.0	90.72	180.00	7,278.3	-2,623.2	-336.4	2,641.0	0.00	0.00	0.00
9,960.0	90.72	180.00	7,277.8	-2,663.1	-336.4	2,680.9	0.00	0.00	0.00
10,000.0	90.72	180.00	7,277.3	-2,703.1	-336.4	2,720.8	0.00	0.00	0.00
10,040.0	90.72	180.00	7,276.7	-2,743.1	-336.4	2,760.6	0.00	0.00	0.00
10,080.0	90.72	180.00	7,276.2	-2,783.1	-336.4	2,800.5	0.00	0.00	0.00
10,120.0	90.72	180.00	7,275.7	-2,823.1	-336.4	2,840.4	0.00	0.00	0.00
10,160.0	90.72	180.00	7,275.2	-2,863.1	-336.4	2,880.3	0.00	0.00	0.00
10,200.0	90.72	180.00	7,274.7	-2,903.1	-336.4	2,920.2	0.00	0.00	0.00
10,240.0	90.72	180.00	7,274.2	-2,943.1	-336.4	2,960.1	0.00	0.00	0.00



<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Anderson 34M-343
<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 34M-343	<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	7,273.7	-2,983.1	-336.4	2,999.9	0.00	0.00	0.00
10,320.0	90.72	180.00	7,273.2	-3,023.1	-336.4	3,039.8	0.00	0.00	0.00
10,360.0	90.72	180.00	7,272.7	-3,063.1	-336.4	3,079.7	0.00	0.00	0.00
10,400.0	90.72	180.00	7,272.2	-3,103.1	-336.4	3,119.6	0.00	0.00	0.00
10,440.0	90.72	180.00	7,271.7	-3,143.1	-336.4	3,159.5	0.00	0.00	0.00
10,480.0	90.72	180.00	7,271.2	-3,183.1	-336.4	3,199.4	0.00	0.00	0.00
10,520.0	90.72	180.00	7,270.7	-3,223.1	-336.4	3,239.3	0.00	0.00	0.00
10,560.0	90.72	180.00	7,270.2	-3,263.1	-336.4	3,279.1	0.00	0.00	0.00
10,600.0	90.72	180.00	7,269.7	-3,303.1	-336.4	3,319.0	0.00	0.00	0.00
10,640.0	90.72	180.00	7,269.2	-3,343.1	-336.4	3,358.9	0.00	0.00	0.00
10,680.0	90.72	180.00	7,268.7	-3,383.1	-336.4	3,398.8	0.00	0.00	0.00
10,720.0	90.72	180.00	7,268.2	-3,423.1	-336.4	3,438.7	0.00	0.00	0.00
10,760.0	90.72	180.00	7,267.7	-3,463.1	-336.4	3,478.6	0.00	0.00	0.00
10,800.0	90.72	180.00	7,267.2	-3,503.1	-336.4	3,518.4	0.00	0.00	0.00
10,840.0	90.72	180.00	7,266.7	-3,543.1	-336.4	3,558.3	0.00	0.00	0.00
10,880.0	90.72	180.00	7,266.2	-3,583.1	-336.4	3,598.2	0.00	0.00	0.00
10,920.0	90.72	180.00	7,265.7	-3,623.1	-336.4	3,638.1	0.00	0.00	0.00
10,960.0	90.72	180.00	7,265.2	-3,663.1	-336.4	3,678.0	0.00	0.00	0.00
11,000.0	90.72	180.00	7,264.7	-3,703.1	-336.4	3,717.9	0.00	0.00	0.00
11,040.0	90.72	180.00	7,264.2	-3,743.1	-336.4	3,757.7	0.00	0.00	0.00
11,080.0	90.72	180.00	7,263.7	-3,783.1	-336.4	3,797.6	0.00	0.00	0.00
11,120.0	90.72	180.00	7,263.2	-3,823.1	-336.4	3,837.5	0.00	0.00	0.00
11,160.0	90.72	180.00	7,262.7	-3,863.1	-336.4	3,877.4	0.00	0.00	0.00
11,200.0	90.72	180.00	7,262.2	-3,903.0	-336.4	3,917.3	0.00	0.00	0.00
11,240.0	90.72	180.00	7,261.7	-3,943.0	-336.4	3,957.2	0.00	0.00	0.00
11,280.0	90.72	180.00	7,261.2	-3,983.0	-336.4	3,997.1	0.00	0.00	0.00
11,320.0	90.72	180.00	7,260.7	-4,023.0	-336.4	4,036.9	0.00	0.00	0.00
11,360.0	90.72	180.00	7,260.2	-4,063.0	-336.4	4,076.8	0.00	0.00	0.00
11,400.0	90.72	180.00	7,259.7	-4,103.0	-336.4	4,116.7	0.00	0.00	0.00
11,440.0	90.72	180.00	7,259.2	-4,143.0	-336.4	4,156.6	0.00	0.00	0.00
11,480.0	90.72	180.00	7,258.7	-4,183.0	-336.4	4,196.5	0.00	0.00	0.00
11,520.0	90.72	180.00	7,258.2	-4,223.0	-336.4	4,236.4	0.00	0.00	0.00
11,560.0	90.72	180.00	7,257.6	-4,263.0	-336.4	4,276.2	0.00	0.00	0.00
11,600.0	90.72	180.00	7,257.1	-4,303.0	-336.4	4,316.1	0.00	0.00	0.00
11,640.0	90.72	180.00	7,256.6	-4,343.0	-336.4	4,356.0	0.00	0.00	0.00
11,680.0	90.72	180.00	7,256.1	-4,383.0	-336.4	4,395.9	0.00	0.00	0.00
11,720.0	90.72	180.00	7,255.6	-4,423.0	-336.4	4,435.8	0.00	0.00	0.00
11,760.0	90.72	180.00	7,255.1	-4,463.0	-336.4	4,475.7	0.00	0.00	0.00
11,770.8	90.72	180.00	7,255.0	-4,473.8	-336.4	4,486.5	0.00	0.00	0.00
BHL 500'FSL, 2270'FWL									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
7,774.2	7,305.2	7"	7	7-1/2	

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Anderson 34M-343
<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 34M-343	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (5-13-13)		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,000.0	1,000.0	0.0	0.0	KOP #1
6,564.6	6,541.3	296.0	-336.4	KOP #2
7,774.2	7,305.2	-477.5	-336.4	End of Build



## **Directional**

# **PETROLEUM DEVELOPMENT CORP Weld County CO**

**SEC.34-T7N-R66W**

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

**Anderson 34M-343**

**Wellbore #1**

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

## **Anticollision Report**

**14 May, 2013**



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Anderson 34M-343
<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 34M-343	<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	11,770.8	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	7,726.5	7,319.3	5.5	-159.4	0.033	Level 1, CC, ES, SF
Anderson 22-34 (Exist) - Wellbore #1 - Wellbore #1	9,067.4	7,304.0	41.7	-143.0	0.226	Level 1, CC, ES, SF
Anderson 23-34 (Exist) - Wellbore #1 - Wellbore #1	10,455.5	7,286.5	33.3	-176.2	0.159	Level 1, CC, ES, SF
Anderson 34M-HZ Pad Sec.34-T7N-R66W						
Anderson 34J-323 - Wellbore #1 - Plan #1 (5-13-13)	200.0	200.0	61.1	60.5	90.687	CC, ES
Anderson 34J-323 - Wellbore #1 - Plan #1 (5-13-13)	11,770.8	11,834.9	658.9	481.6	3.717	SF
Anderson 34J-423 - Wellbore #1 - Plan #1 (5-13-13)	400.0	400.0	30.6	29.0	19.433	CC, ES
Anderson 34J-423 - Wellbore #1 - Plan #1 (5-13-13)	11,770.8	11,857.5	350.2	182.4	2.086	SF
Anderson 34M-403 - Wellbore #1 - Plan #1 (5-13-13)	1,000.0	1,000.0	30.6	26.3	7.159	CC, ES
Anderson 34M-403 - Wellbore #1 - Plan #1 (5-13-13)	11,770.8	12,349.2	347.6	178.2	2.052	SF

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			Distance										
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)						
0.0	0.0	15.0	15.0	0.0	0.3	-141.50	-429.9	-341.9	549.3	549.0	0.30	1,829.644					
100.0	100.0	115.0	115.0	0.1	2.3	-141.50	-429.9	-341.9	549.3	546.8	2.41	227.664					
200.0	200.0	215.0	215.0	0.3	4.3	-141.50	-429.9	-341.9	549.3	544.6	4.64	118.442					
300.0	300.0	315.0	315.0	0.6	6.3	-141.50	-429.9	-341.9	549.3	542.4	6.86	80.042					
400.0	400.0	415.0	415.0	0.8	8.3	-141.50	-429.9	-341.9	549.3	540.2	9.09	60.445					
500.0	500.0	515.0	515.0	1.0	10.3	-141.50	-429.9	-341.9	549.3	537.9	11.31	48.557					
600.0	600.0	615.0	615.0	1.2	12.3	-141.50	-429.9	-341.9	549.3	535.7	13.54	40.576					
700.0	700.0	715.0	715.0	1.5	14.3	-141.50	-429.9	-341.9	549.3	533.5	15.76	34.849					
800.0	800.0	815.0	815.0	1.7	16.3	-141.50	-429.9	-341.9	549.3	531.3	17.99	30.538					
900.0	900.0	915.0	915.0	1.9	18.3	-141.50	-429.9	-341.9	549.3	529.0	20.21	27.177					
1,000.0	1,000.0	1,015.0	1,015.0	2.1	20.3	-141.50	-429.9	-341.9	549.3	526.8	22.44	24.482					
1,100.0	1,100.0	1,115.0	1,115.0	2.4	22.3	-93.03	-429.9	-341.9	549.3	524.7	24.66	22.281					
1,200.0	1,199.8	1,214.8	1,214.8	2.6	24.3	-93.57	-429.9	-341.9	549.6	522.8	26.87	20.454					
1,304.8	1,304.3	1,319.3	1,319.3	2.8	26.4	-94.51	-429.9	-341.9	550.3	521.1	29.20	18.844					
1,400.0	1,398.9	1,413.9	1,413.9	3.1	28.3	-95.55	-429.9	-341.9	551.2	519.9	31.33	17.595					
1,500.0	1,498.3	1,513.3	1,513.3	3.3	30.3	-96.64	-429.9	-341.9	552.3	518.8	33.57	16.454					

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 34M-343
<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 34M-343	<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
1,600.0	1,597.8	1,612.8	1,612.8	3.6	32.3	-97.73		-429.9	-341.9	553.7	517.8	35.81	15.459	
1,700.0	1,697.2	1,712.2	1,712.2	3.8	34.2	-98.81		-429.9	-341.9	555.2	517.1	38.07	14.585	
1,800.0	1,796.6	1,811.6	1,811.6	4.1	36.2	-99.88		-429.9	-341.9	556.9	516.6	40.32	13.811	
1,900.0	1,896.1	1,911.1	1,911.1	4.4	38.2	-100.95		-429.9	-341.9	558.9	516.3	42.58	13.124	
2,000.0	1,995.5	2,010.5	2,010.5	4.6	40.2	-102.01		-429.9	-341.9	561.0	516.1	44.85	12.509	
2,100.0	2,094.9	2,109.9	2,109.9	4.9	42.2	-103.06		-429.9	-341.9	563.3	516.2	47.11	11.957	
2,200.0	2,194.4	2,209.4	2,209.4	5.2	44.2	-104.10		-429.9	-341.9	565.8	516.4	49.37	11.460	
2,300.0	2,293.8	2,308.8	2,308.8	5.5	46.2	-105.13		-429.9	-341.9	568.5	516.9	51.64	11.009	
2,400.0	2,393.2	2,408.2	2,408.2	5.8	48.2	-106.16		-429.9	-341.9	571.4	517.5	53.91	10.600	
2,500.0	2,492.7	2,507.7	2,507.7	6.1	50.2	-107.17		-429.9	-341.9	574.5	518.3	56.17	10.227	
2,600.0	2,592.1	2,607.1	2,607.1	6.4	52.1	-108.17		-429.9	-341.9	577.7	519.3	58.44	9.886	
2,700.0	2,691.5	2,706.5	2,706.5	6.6	54.1	-109.16		-429.9	-341.9	581.1	520.4	60.70	9.573	
2,800.0	2,791.0	2,806.0	2,806.0	6.9	56.1	-110.14		-429.9	-341.9	584.7	521.7	62.96	9.286	
2,900.0	2,890.4	2,905.4	2,905.4	7.2	58.1	-111.11		-429.9	-341.9	588.5	523.2	65.23	9.022	
3,000.0	2,989.8	3,004.8	3,004.8	7.5	60.1	-112.06		-429.9	-341.9	592.4	524.9	67.49	8.778	
3,100.0	3,089.3	3,104.3	3,104.3	7.8	62.1	-113.00		-429.9	-341.9	596.5	526.7	69.75	8.552	
3,200.0	3,188.7	3,203.7	3,203.7	8.1	64.1	-113.93		-429.9	-341.9	600.7	528.7	72.01	8.342	
3,300.0	3,288.1	3,303.1	3,303.1	8.4	66.1	-114.84		-429.9	-341.9	605.1	530.9	74.27	8.148	
3,400.0	3,387.6	3,402.6	3,402.6	8.7	68.1	-115.74		-429.9	-341.9	609.7	533.2	76.52	7.967	
3,500.0	3,487.0	3,502.0	3,502.0	9.0	70.0	-116.63		-429.9	-341.9	614.4	535.6	78.78	7.799	
3,600.0	3,586.4	3,601.4	3,601.4	9.3	72.0	-117.51		-429.9	-341.9	619.3	538.2	81.03	7.642	
3,700.0	3,685.9	3,700.9	3,700.9	9.6	74.0	-118.37		-429.9	-341.9	624.3	541.0	83.29	7.495	
3,800.0	3,785.3	3,800.3	3,800.3	9.9	76.0	-119.22		-429.9	-341.9	629.4	543.9	85.54	7.358	
3,900.0	3,884.7	3,899.7	3,899.7	10.2	78.0	-120.05		-429.9	-341.9	634.7	546.9	87.79	7.230	
4,000.0	3,984.2	3,999.2	3,999.2	10.5	80.0	-120.87		-429.9	-341.9	640.1	550.0	90.03	7.109	
4,100.0	4,083.6	4,098.6	4,098.6	10.7	82.0	-121.67		-429.9	-341.9	645.6	553.3	92.28	6.996	
4,200.0	4,183.0	4,198.0	4,198.0	11.0	84.0	-122.47		-429.9	-341.9	651.3	556.7	94.53	6.890	
4,300.0	4,282.5	4,297.5	4,297.5	11.3	85.9	-123.24		-429.9	-341.9	657.1	560.3	96.77	6.790	
4,400.0	4,381.9	4,396.9	4,396.9	11.6	87.9	-124.01		-429.9	-341.9	663.0	563.9	99.01	6.696	
4,500.0	4,481.4	4,496.4	4,496.4	11.9	89.9	-124.76		-429.9	-341.9	669.0	567.7	101.25	6.607	
4,600.0	4,580.8	4,595.8	4,595.8	12.2	91.9	-125.50		-429.9	-341.9	675.1	571.6	103.49	6.523	
4,700.0	4,680.2	4,695.2	4,695.2	12.5	93.9	-126.22		-429.9	-341.9	681.4	575.6	105.73	6.444	
4,800.0	4,779.7	4,794.7	4,794.7	12.8	95.9	-126.93		-429.9	-341.9	687.7	579.7	107.97	6.370	
4,900.0	4,879.1	4,894.1	4,894.1	13.1	97.9	-127.63		-429.9	-341.9	694.2	584.0	110.20	6.299	
5,000.0	4,978.5	4,993.5	4,993.5	13.4	99.9	-128.32		-429.9	-341.9	700.7	588.3	112.44	6.232	
5,100.0	5,078.0	5,093.0	5,093.0	13.7	101.9	-128.99		-429.9	-341.9	707.4	592.7	114.67	6.169	
5,200.0	5,177.4	5,192.4	5,192.4	14.0	103.8	-129.65		-429.9	-341.9	714.1	597.2	116.90	6.109	
5,218.4	5,195.7	5,210.7	5,210.7	14.1	104.2	-129.77		-429.9	-341.9	715.4	598.1	117.31	6.098	
5,300.0	5,276.9	5,291.9	5,291.9	14.3	105.8	-130.30		-429.9	-341.9	720.2	601.0	119.21	6.042	
5,400.0	5,376.8	5,391.8	5,391.8	14.5	107.8	-130.73		-429.9	-341.9	724.2	602.7	121.46	5.962	
5,500.0	5,476.7	5,491.7	5,491.7	14.6	109.8	-130.90		-429.9	-341.9	725.8	602.2	123.65	5.870	
5,523.3	5,500.0	5,515.0	5,515.0	14.7	110.3	-179.57		-429.9	-341.9	725.9	601.7	124.15	5.847	
5,600.0	5,576.7	5,591.7	5,591.7	14.8	111.8	-179.57		-429.9	-341.9	725.9	600.1	125.82	5.769	
5,700.0	5,676.7	5,691.7	5,691.7	15.0	113.8	-179.57		-429.9	-341.9	725.9	597.9	128.01	5.671	
5,800.0	5,776.7	5,791.7	5,791.7	15.1	115.8	-179.57		-429.9	-341.9	725.9	595.7	130.21	5.575	
5,900.0	5,876.7	5,891.7	5,891.7	15.3	117.8	-179.57		-429.9	-341.9	725.9	593.5	132.40	5.483	
6,000.0	5,976.7	5,991.7	5,991.7	15.5	119.8	-179.57		-429.9	-341.9	725.9	591.3	134.60	5.393	
6,100.0	6,076.7	6,091.7	6,091.7	15.7	121.8	-179.57		-429.9	-341.9	725.9	589.1	136.79	5.306	
6,200.0	6,176.7	6,191.7	6,191.7	15.9	123.8	-179.57		-429.9	-341.9	725.9	586.9	138.99	5.223	
6,300.0	6,276.7	6,291.7	6,291.7	16.1	125.8	-179.57		-429.9	-341.9	725.9	584.7	141.19	5.141	
6,400.0	6,376.7	6,391.7	6,391.7	16.3	127.8	-179.57		-429.9	-341.9	725.9	582.5	143.39	5.062	

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 34M-343
<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 34M-343	<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
6,500.0	6,476.7	6,491.7	6,491.7	16.5	129.8	-179.57	-179.57	-429.9	-341.9	725.9	580.3	145.59	4.986	
6,564.6	6,541.3	6,556.3	6,556.3	16.6	131.1	-179.57	-179.57	-429.9	-341.9	725.9	578.9	147.01	4.938	
6,600.0	6,576.7	6,591.7	6,591.7	16.6	131.8	0.44	0.44	-429.9	-341.9	725.1	577.5	147.60	4.912	
6,650.0	6,626.5	6,641.5	6,641.5	16.7	132.8	0.44	0.44	-429.9	-341.9	721.1	573.3	147.88	4.876	
6,700.0	6,676.0	6,691.0	6,691.0	16.7	133.8	0.45	0.45	-429.9	-341.9	713.9	566.4	147.52	4.840	
6,750.0	6,724.9	6,739.9	6,739.9	16.8	134.8	0.46	0.46	-429.9	-341.9	703.5	557.0	146.50	4.802	
6,800.0	6,773.0	6,788.0	6,788.0	16.8	135.8	0.48	0.48	-429.9	-341.9	689.9	545.1	144.82	4.764	
6,850.0	6,820.1	6,835.1	6,835.1	16.8	136.7	0.50	0.50	-429.9	-341.9	673.2	530.7	142.48	4.725	
6,900.0	6,866.0	6,881.0	6,881.0	16.8	137.6	0.53	0.53	-429.9	-341.9	653.5	514.0	139.47	4.685	
6,950.0	6,910.6	6,925.6	6,925.6	16.8	138.5	0.57	0.57	-429.9	-341.9	630.7	494.9	135.81	4.644	
7,000.0	6,953.5	6,968.5	6,968.5	16.8	139.4	0.62	0.62	-429.9	-341.9	605.2	473.7	131.51	4.602	
7,050.0	6,994.7	7,009.7	7,009.7	16.8	140.2	0.68	0.68	-429.9	-341.9	576.8	450.3	126.57	4.557	
7,100.0	7,034.0	7,049.0	7,049.0	16.7	141.0	0.76	0.76	-429.9	-341.9	545.9	424.8	121.03	4.510	
7,150.0	7,071.1	7,086.1	7,086.1	16.7	141.7	0.85	0.85	-429.9	-341.9	512.4	397.5	114.91	4.459	
7,200.0	7,106.0	7,121.0	7,121.0	16.7	142.4	0.98	0.98	-429.9	-341.9	476.6	368.3	108.25	4.403	
7,250.0	7,138.4	7,153.4	7,153.4	16.7	143.1	1.15	1.15	-429.9	-341.9	438.5	337.5	101.07	4.339	
7,300.0	7,168.3	7,183.3	7,183.3	16.7	143.7	1.38	1.38	-429.9	-341.9	398.5	305.1	93.43	4.265	
7,350.0	7,195.5	7,210.5	7,210.5	16.8	144.2	1.71	1.71	-429.9	-341.9	356.5	271.2	85.39	4.176	
7,400.0	7,219.9	7,234.9	7,234.9	16.8	144.7	2.19	2.19	-429.9	-341.9	312.9	235.9	77.02	4.063	
7,450.0	7,241.4	7,256.4	7,256.4	17.0	145.1	2.94	2.94	-429.9	-341.9	267.8	199.3	68.48	3.911	
7,500.0	7,259.9	7,274.9	7,274.9	17.2	145.5	4.19	4.19	-429.9	-341.9	221.4	161.3	60.09	3.684	
7,550.0	7,275.3	7,290.3	7,290.3	17.5	145.8	6.52	6.52	-429.9	-341.9	173.8	120.8	53.00	3.280	
7,600.0	7,287.6	7,302.6	7,302.6	17.8	146.1	11.61	11.61	-429.9	-341.9	125.4	73.1	52.26	2.400	
7,650.0	7,296.7	7,311.7	7,311.7	18.2	146.2	25.81	25.81	-429.9	-341.9	76.3	-2.0	78.37	0.974 Level 1	
7,700.0	7,302.5	7,317.5	7,317.5	18.7	146.4	67.88	67.88	-429.9	-341.9	27.0	-126.2	153.27	0.176 Level 1	
7,726.5	7,304.3	7,319.3	7,319.3	19.0	146.4	89.98	89.98	-429.9	-341.9	5.5	-159.4	164.92	0.033 Level 1, CC, ES, SF	
7,750.0	7,305.1	7,320.1	7,320.1	19.2	146.4	94.66	94.66	-429.9	-341.9	24.1	-140.5	164.55	0.146 Level 1	
7,774.2	7,305.2	7,320.2	7,320.2	19.4	146.4	83.79	83.79	-429.9	-341.9	48.0	-116.6	164.59	0.292 Level 1	
7,800.0	7,304.9	7,319.9	7,319.9	19.7	146.4	80.48	80.48	-429.9	-341.9	73.6	-90.0	163.65	0.450 Level 1	
7,900.0	7,303.6	7,318.6	7,318.6	20.8	146.4	68.40	68.40	-429.9	-341.9	173.5	17.7	155.83	1.114 Level 2	
8,000.0	7,302.4	7,317.4	7,317.4	22.1	146.3	58.03	58.03	-429.9	-341.9	273.5	129.6	143.89	1.901	
8,100.0	7,301.1	7,316.1	7,316.1	23.4	146.3	49.55	49.55	-429.9	-341.9	373.5	242.6	130.89	2.853	
8,200.0	7,299.9	7,314.9	7,314.9	24.8	146.3	42.78	42.78	-429.9	-341.9	473.4	354.8	118.64	3.990	
8,300.0	7,298.6	7,313.6	7,313.6	26.3	146.3	37.38	37.38	-429.9	-341.9	573.4	465.5	107.89	5.315	
8,400.0	7,297.4	7,312.4	7,312.4	27.8	146.2	33.04	33.04	-429.9	-341.9	673.4	574.7	98.73	6.821	
8,500.0	7,296.1	7,311.1	7,311.1	29.4	146.2	29.53	29.53	-429.9	-341.9	773.4	682.4	91.04	8.495	
8,600.0	7,294.8	7,309.8	7,309.8	31.0	146.2	26.63	26.63	-429.9	-341.9	873.4	788.8	84.60	10.324	
8,700.0	7,293.6	7,308.6	7,308.6	32.6	146.2	24.23	24.23	-429.9	-341.9	973.4	894.2	79.20	12.290	
8,800.0	7,292.3	7,307.3	7,307.3	34.3	146.1	22.20	22.20	-429.9	-341.9	1,073.4	998.7	74.66	14.376	
8,900.0	7,291.1	7,306.1	7,306.1	36.0	146.1	20.47	20.47	-429.9	-341.9	1,173.4	1,102.5	70.83	16.565	
9,000.0	7,289.8	7,304.8	7,304.8	37.7	146.1	18.98	18.98	-429.9	-341.9	1,273.4	1,205.8	67.59	18.839	
9,100.0	7,288.6	7,303.6	7,303.6	39.4	146.1	17.69	17.69	-429.9	-341.9	1,373.3	1,308.5	64.83	21.183	
9,200.0	7,287.3	7,302.3	7,302.3	41.2	146.0	16.56	16.56	-429.9	-341.9	1,473.3	1,410.9	62.48	23.580	
9,300.0	7,286.0	7,301.0	7,301.0	42.9	146.0	15.56	15.56	-429.9	-341.9	1,573.3	1,512.9	60.47	26.017	
9,400.0	7,284.8	7,299.8	7,299.8	44.7	146.0	14.67	14.67	-429.9	-341.9	1,673.3	1,614.6	58.75	28.480	
9,500.0	7,283.5	7,298.5	7,298.5	46.5	146.0	13.87	13.87	-429.9	-341.9	1,773.3	1,716.0	57.29	30.956	
9,600.0	7,282.3	7,297.3	7,297.3	48.3	145.9	13.16	13.16	-429.9	-341.9	1,873.3	1,817.3	56.03	33.434	
9,700.0	7,281.0	7,296.0	7,296.0	50.1	145.9	12.51	12.51	-429.9	-341.9	1,973.3	1,918.3	54.96	35.906	
9,800.0	7,279.8	7,294.8	7,294.8	51.9	145.9	11.93	11.93	-429.9	-341.9	2,073.3	2,019.2	54.05	38.361	
9,900.0	7,278.5	7,293.5	7,293.5	53.8	145.9	11.39	11.39	-429.9	-341.9	2,173.3	2,120.0	53.28	40.792	
10,000.0	7,277.3	7,292.3	7,292.3	55.6	145.8	10.91	10.91	-429.9	-341.9	2,273.3	2,220.6	52.63	43.192	

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 34M-343
<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 34M-343	<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			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)				
10,100.0	7,276.0	7,291.0	7,291.0	57.4	145.8	10.46	-429.9	-341.9	2,373.3	2,321.2	52.09	45.557			
10,200.0	7,274.7	7,289.7	7,289.7	59.3	145.8	10.04	-429.9	-341.9	2,473.3	2,421.6	51.65	47.881			
10,300.0	7,273.5	7,288.5	7,288.5	61.1	145.8	9.66	-429.9	-341.9	2,573.2	2,521.9	51.30	50.160			
10,400.0	7,272.2	7,287.2	7,287.2	63.0	145.7	9.31	-429.9	-341.9	2,673.2	2,622.2	51.03	52.390			
10,500.0	7,271.0	7,286.0	7,286.0	64.8	145.7	8.98	-429.9	-341.9	2,773.2	2,722.4	50.82	54.571			
10,600.0	7,269.7	7,284.7	7,284.7	66.7	145.7	8.67	-429.9	-341.9	2,873.2	2,822.5	50.68	56.699			
10,700.0	7,268.5	7,283.5	7,283.5	68.6	145.7	8.38	-429.9	-341.9	2,973.2	2,922.6	50.59	58.773			
10,800.0	7,267.2	7,282.2	7,282.2	70.4	145.6	8.11	-429.9	-341.9	3,073.2	3,022.7	50.55	60.792			
10,900.0	7,265.9	7,280.9	7,280.9	72.3	145.6	7.86	-429.9	-341.9	3,173.2	3,122.6	50.56	62.755			
11,000.0	7,264.7	7,279.7	7,279.7	74.2	145.6	7.62	-429.9	-341.9	3,273.2	3,222.6	50.62	64.664			
11,100.0	7,263.4	7,278.4	7,278.4	76.0	145.6	7.40	-429.9	-341.9	3,373.2	3,322.5	50.71	66.517			
11,200.0	7,262.2	7,277.2	7,277.2	77.9	145.5	7.19	-429.9	-341.9	3,473.2	3,422.3	50.84	68.314			
11,300.0	7,260.9	7,275.9	7,275.9	79.8	145.5	6.99	-429.9	-341.9	3,573.2	3,522.2	51.00	70.058			
11,400.0	7,259.7	7,274.7	7,274.7	81.7	145.5	6.80	-429.9	-341.9	3,673.2	3,622.0	51.20	71.748			
11,500.0	7,258.4	7,273.4	7,273.4	83.6	145.5	6.62	-429.9	-341.9	3,773.1	3,721.7	51.42	73.385			
11,600.0	7,257.1	7,272.1	7,272.1	85.4	145.4	6.45	-429.9	-341.9	3,873.1	3,821.5	51.66	74.970			
11,700.0	7,255.9	7,270.9	7,270.9	87.3	145.4	6.29	-429.9	-341.9	3,973.1	3,921.2	51.93	76.505			
11,770.8	7,255.0	7,270.0	7,270.0	88.7	145.4	6.18	-429.9	-341.9	4,043.9	3,991.8	52.14	77.563			



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Anderson 34M-343
<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 34M-343	<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 22-34 (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
0.0	0.0	15.0	15.0	0.0	0.3	-167.95	-167.95	-1,770.6	-378.0	1,810.5	1,810.2	0.30	6,030.947	
100.0	100.0	115.0	115.0	0.1	2.3	-167.95	-167.95	-1,770.6	-378.0	1,810.5	1,808.1	2.41	750.436	
200.0	200.0	215.0	215.0	0.3	4.3	-167.95	-167.95	-1,770.6	-378.0	1,810.5	1,805.9	4.64	390.415	
300.0	300.0	315.0	315.0	0.6	6.3	-167.95	-167.95	-1,770.6	-378.0	1,810.5	1,803.6	6.86	263.839	
400.0	400.0	415.0	415.0	0.8	8.3	-167.95	-167.95	-1,770.6	-378.0	1,810.5	1,801.4	9.09	199.242	
500.0	500.0	515.0	515.0	1.0	10.3	-167.95	-167.95	-1,770.6	-378.0	1,810.5	1,799.2	11.31	160.055	
600.0	600.0	615.0	615.0	1.2	12.3	-167.95	-167.95	-1,770.6	-378.0	1,810.5	1,797.0	13.54	133.750	
700.0	700.0	715.0	715.0	1.5	14.3	-167.95	-167.95	-1,770.6	-378.0	1,810.5	1,794.7	15.76	114.870	
800.0	800.0	815.0	815.0	1.7	16.3	-167.95	-167.95	-1,770.6	-378.0	1,810.5	1,792.5	17.99	100.661	
900.0	900.0	915.0	915.0	1.9	18.3	-167.95	-167.95	-1,770.6	-378.0	1,810.5	1,790.3	20.21	89.581	
1,000.0	1,000.0	1,015.0	1,015.0	2.1	20.3	-167.95	-167.95	-1,770.6	-378.0	1,810.5	1,788.1	22.44	80.698	
1,100.0	1,100.0	1,115.0	1,115.0	2.4	22.3	-119.33	-119.33	-1,770.6	-378.0	1,811.3	1,786.7	24.65	73.475	
1,200.0	1,199.8	1,214.8	1,214.8	2.6	24.3	-119.43	-119.43	-1,770.6	-378.0	1,813.9	1,787.1	26.86	67.536	
1,304.8	1,304.3	1,319.3	1,319.3	2.8	26.4	-119.60	-119.60	-1,770.6	-378.0	1,818.5	1,789.3	29.16	62.352	
1,400.0	1,398.9	1,413.9	1,413.9	3.1	28.3	-119.87	-119.87	-1,770.6	-378.0	1,823.5	1,792.2	31.28	58.291	
1,500.0	1,498.3	1,513.3	1,513.3	3.3	30.3	-120.16	-120.16	-1,770.6	-378.0	1,828.8	1,795.3	33.52	54.566	
1,600.0	1,597.8	1,612.8	1,612.8	3.6	32.3	-120.45	-120.45	-1,770.6	-378.0	1,834.2	1,798.5	35.75	51.300	
1,700.0	1,697.2	1,712.2	1,712.2	3.8	34.2	-120.73	-120.73	-1,770.6	-378.0	1,839.7	1,801.7	38.00	48.415	
1,800.0	1,796.6	1,811.6	1,811.6	4.1	36.2	-121.01	-121.01	-1,770.6	-378.0	1,845.1	1,804.9	40.24	45.849	
1,900.0	1,896.1	1,911.1	1,911.1	4.4	38.2	-121.29	-121.29	-1,770.6	-378.0	1,850.6	1,808.1	42.49	43.552	
2,000.0	1,995.5	2,010.5	2,010.5	4.6	40.2	-121.57	-121.57	-1,770.6	-378.0	1,856.2	1,811.5	44.74	41.485	
2,100.0	2,094.9	2,109.9	2,109.9	4.9	42.2	-121.85	-121.85	-1,770.6	-378.0	1,861.8	1,814.8	47.00	39.616	
2,200.0	2,194.4	2,209.4	2,209.4	5.2	44.2	-122.13	-122.13	-1,770.6	-378.0	1,867.5	1,818.2	49.25	37.918	
2,300.0	2,293.8	2,308.8	2,308.8	5.5	46.2	-122.40	-122.40	-1,770.6	-378.0	1,873.2	1,821.6	51.51	36.368	
2,400.0	2,393.2	2,408.2	2,408.2	5.8	48.2	-122.67	-122.67	-1,770.6	-378.0	1,878.9	1,825.1	53.76	34.949	
2,500.0	2,492.7	2,507.7	2,507.7	6.1	50.2	-122.94	-122.94	-1,770.6	-378.0	1,884.7	1,828.6	56.02	33.644	
2,600.0	2,592.1	2,607.1	2,607.1	6.4	52.1	-123.21	-123.21	-1,770.6	-378.0	1,890.5	1,832.2	58.27	32.441	
2,700.0	2,691.5	2,706.5	2,706.5	6.6	54.1	-123.48	-123.48	-1,770.6	-378.0	1,896.3	1,835.8	60.53	31.328	
2,800.0	2,791.0	2,806.0	2,806.0	6.9	56.1	-123.75	-123.75	-1,770.6	-378.0	1,902.2	1,839.5	62.79	30.296	
2,900.0	2,890.4	2,905.4	2,905.4	7.2	58.1	-124.01	-124.01	-1,770.6	-378.0	1,908.2	1,843.1	65.05	29.336	
3,000.0	2,989.8	3,004.8	3,004.8	7.5	60.1	-124.27	-124.27	-1,770.6	-378.0	1,914.2	1,846.9	67.30	28.441	
3,100.0	3,089.3	3,104.3	3,104.3	7.8	62.1	-124.53	-124.53	-1,770.6	-378.0	1,920.2	1,850.6	69.56	27.605	
3,200.0	3,188.7	3,203.7	3,203.7	8.1	64.1	-124.79	-124.79	-1,770.6	-378.0	1,926.3	1,854.4	71.82	26.822	
3,300.0	3,288.1	3,303.1	3,303.1	8.4	66.1	-125.05	-125.05	-1,770.6	-378.0	1,932.4	1,858.3	74.07	26.087	
3,400.0	3,387.6	3,402.6	3,402.6	8.7	68.1	-125.31	-125.31	-1,770.6	-378.0	1,938.5	1,862.2	76.33	25.396	
3,500.0	3,487.0	3,502.0	3,502.0	9.0	70.0	-125.56	-125.56	-1,770.6	-378.0	1,944.7	1,866.1	78.59	24.745	
3,600.0	3,586.4	3,601.4	3,601.4	9.3	72.0	-125.81	-125.81	-1,770.6	-378.0	1,950.9	1,870.1	80.84	24.132	
3,700.0	3,685.9	3,700.9	3,700.9	9.6	74.0	-126.06	-126.06	-1,770.6	-378.0	1,957.2	1,874.1	83.10	23.552	
3,800.0	3,785.3	3,800.3	3,800.3	9.9	76.0	-126.31	-126.31	-1,770.6	-378.0	1,963.5	1,878.1	85.36	23.003	
3,900.0	3,884.7	3,899.7	3,899.7	10.2	78.0	-126.56	-126.56	-1,770.6	-378.0	1,969.8	1,882.2	87.61	22.483	
4,000.0	3,984.2	3,999.2	3,999.2	10.5	80.0	-126.81	-126.81	-1,770.6	-378.0	1,976.2	1,886.3	89.87	21.990	
4,100.0	4,083.6	4,098.6	4,098.6	10.7	82.0	-127.05	-127.05	-1,770.6	-378.0	1,982.6	1,890.4	92.12	21.521	
4,200.0	4,183.0	4,198.0	4,198.0	11.0	84.0	-127.30	-127.30	-1,770.6	-378.0	1,989.0	1,894.6	94.38	21.075	
4,300.0	4,282.5	4,297.5	4,297.5	11.3	85.9	-127.54	-127.54	-1,770.6	-378.0	1,995.5	1,898.9	96.63	20.650	
4,400.0	4,381.9	4,396.9	4,396.9	11.6	87.9	-127.78	-127.78	-1,770.6	-378.0	2,002.0	1,903.1	98.89	20.246	
4,500.0	4,481.4	4,496.4	4,496.4	11.9	89.9	-128.02	-128.02	-1,770.6	-378.0	2,008.5	1,907.4	101.14	19.859	
4,600.0	4,580.8	4,595.8	4,595.8	12.2	91.9	-128.25	-128.25	-1,770.6	-378.0	2,015.1	1,911.7	103.39	19.490	
4,700.0	4,680.2	4,695.2	4,695.2	12.5	93.9	-128.49	-128.49	-1,770.6	-378.0	2,021.7	1,916.1	105.64	19.137	
4,800.0	4,779.7	4,794.7	4,794.7	12.8	95.9	-128.72	-128.72	-1,770.6	-378.0	2,028.4	1,920.5	107.90	18.799	
4,900.0	4,879.1	4,894.1	4,894.1	13.1	97.9	-128.96	-128.96	-1,770.6	-378.0	2,035.1	1,924.9	110.15	18.476	
5,000.0	4,978.5	4,993.5	4,993.5	13.4	99.9	-129.19	-129.19	-1,770.6	-378.0	2,041.8	1,929.4	112.40	18.165	

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 34M-343
<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 34M-343	<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 22-34 (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
5,100.0	5,078.0	5,093.0	5,093.0	13.7	101.9	-129.42	-129.42	-1,770.6	-378.0	2,048.5	1,933.9	114.65	17.868	
5,200.0	5,177.4	5,192.4	5,192.4	14.0	103.8	-129.64	-129.64	-1,770.6	-378.0	2,055.3	1,938.4	116.90	17.582	
5,218.4	5,195.7	5,210.7	5,210.7	14.1	104.2	-129.69	-129.69	-1,770.6	-378.0	2,056.6	1,939.3	117.32	17.530	
5,300.0	5,276.9	5,291.9	5,291.9	14.3	105.8	-129.92	-129.92	-1,770.6	-378.0	2,061.4	1,942.2	119.23	17.289	
5,400.0	5,376.8	5,391.8	5,391.8	14.5	107.8	-130.11	-130.11	-1,770.6	-378.0	2,065.3	1,943.8	121.49	17.000	
5,500.0	5,476.7	5,491.7	5,491.7	14.6	109.8	-130.19	-130.19	-1,770.6	-378.0	2,066.9	1,943.3	123.68	16.712	
5,523.3	5,500.0	5,515.0	5,515.0	14.7	110.3	-178.85	-178.85	-1,770.6	-378.0	2,067.0	1,942.8	124.18	16.645	
5,600.0	5,576.7	5,591.7	5,591.7	14.8	111.8	-178.85	-178.85	-1,770.6	-378.0	2,067.0	1,941.2	125.84	16.425	
5,700.0	5,676.7	5,691.7	5,691.7	15.0	113.8	-178.85	-178.85	-1,770.6	-378.0	2,067.0	1,939.0	128.04	16.144	
5,800.0	5,776.7	5,791.7	5,791.7	15.1	115.8	-178.85	-178.85	-1,770.6	-378.0	2,067.0	1,936.8	130.23	15.872	
5,900.0	5,876.7	5,891.7	5,891.7	15.3	117.8	-178.85	-178.85	-1,770.6	-378.0	2,067.0	1,934.6	132.43	15.609	
6,000.0	5,976.7	5,991.7	5,991.7	15.5	119.8	-178.85	-178.85	-1,770.6	-378.0	2,067.0	1,932.4	134.62	15.354	
6,100.0	6,076.7	6,091.7	6,091.7	15.7	121.8	-178.85	-178.85	-1,770.6	-378.0	2,067.0	1,930.2	136.82	15.107	
6,200.0	6,176.7	6,191.7	6,191.7	15.9	123.8	-178.85	-178.85	-1,770.6	-378.0	2,067.0	1,928.0	139.02	14.869	
6,300.0	6,276.7	6,291.7	6,291.7	16.1	125.8	-178.85	-178.85	-1,770.6	-378.0	2,067.0	1,925.8	141.22	14.637	
6,400.0	6,376.7	6,391.7	6,391.7	16.3	127.8	-178.85	-178.85	-1,770.6	-378.0	2,067.0	1,923.6	143.41	14.413	
6,500.0	6,476.7	6,491.7	6,491.7	16.5	129.8	-178.85	-178.85	-1,770.6	-378.0	2,067.0	1,921.4	145.61	14.195	
6,564.6	6,541.3	6,556.3	6,556.3	16.6	131.1	-178.85	-178.85	-1,770.6	-378.0	2,067.0	1,920.0	147.04	14.058	
6,600.0	6,576.7	6,591.7	6,591.7	16.6	131.8	1.16	1.16	-1,770.6	-378.0	2,066.2	1,918.6	147.63	13.996	
6,650.0	6,626.5	6,641.5	6,641.5	16.7	132.8	1.16	1.16	-1,770.6	-378.0	2,062.2	1,914.3	147.91	13.943	
6,700.0	6,676.0	6,691.0	6,691.0	16.7	133.8	1.18	1.18	-1,770.6	-378.0	2,055.0	1,907.5	147.54	13.928	
6,750.0	6,724.9	6,739.9	6,739.9	16.8	134.8	1.20	1.20	-1,770.6	-378.0	2,044.6	1,898.1	146.53	13.954	
6,800.0	6,773.0	6,788.0	6,788.0	16.8	135.8	1.23	1.23	-1,770.6	-378.0	2,031.0	1,886.2	144.85	14.022	
6,850.0	6,820.1	6,835.1	6,835.1	16.8	136.7	1.27	1.27	-1,770.6	-378.0	2,014.3	1,871.8	142.51	14.135	
6,900.0	6,866.0	6,881.0	6,881.0	16.8	137.6	1.32	1.32	-1,770.6	-378.0	1,994.6	1,855.1	139.50	14.298	
6,950.0	6,910.6	6,925.6	6,925.6	16.8	138.5	1.38	1.38	-1,770.6	-378.0	1,971.9	1,836.0	135.84	14.516	
7,000.0	6,953.5	6,968.5	6,968.5	16.8	139.4	1.46	1.46	-1,770.6	-378.0	1,946.3	1,814.7	131.54	14.796	
7,050.0	6,994.7	7,009.7	7,009.7	16.8	140.2	1.55	1.55	-1,770.6	-378.0	1,918.0	1,791.3	126.61	15.148	
7,100.0	7,034.0	7,049.0	7,049.0	16.7	141.0	1.65	1.65	-1,770.6	-378.0	1,887.0	1,765.9	121.08	15.584	
7,150.0	7,071.1	7,086.1	7,086.1	16.7	141.7	1.79	1.79	-1,770.6	-378.0	1,853.5	1,738.6	114.97	16.122	
7,200.0	7,106.0	7,121.0	7,121.0	16.7	142.4	1.95	1.95	-1,770.6	-378.0	1,817.7	1,709.4	108.32	16.781	
7,250.0	7,138.4	7,153.4	7,153.4	16.7	143.1	2.15	2.15	-1,770.6	-378.0	1,779.7	1,678.5	101.16	17.592	
7,300.0	7,168.3	7,183.3	7,183.3	16.7	143.7	2.40	2.40	-1,770.6	-378.0	1,739.6	1,646.1	93.55	18.595	
7,350.0	7,195.5	7,210.5	7,210.5	16.8	144.2	2.72	2.72	-1,770.6	-378.0	1,697.7	1,612.2	85.55	19.844	
7,400.0	7,219.9	7,234.9	7,234.9	16.8	144.7	3.14	3.14	-1,770.6	-378.0	1,654.1	1,576.9	77.24	21.415	
7,450.0	7,241.4	7,256.4	7,256.4	17.0	145.1	3.70	3.70	-1,770.6	-378.0	1,609.0	1,540.2	68.74	23.407	
7,500.0	7,259.9	7,274.9	7,274.9	17.2	145.5	4.49	4.49	-1,770.6	-378.0	1,562.6	1,502.3	60.25	25.933	
7,550.0	7,275.3	7,290.3	7,290.3	17.5	145.8	5.67	5.67	-1,770.6	-378.0	1,515.0	1,462.8	52.24	29.002	
7,600.0	7,287.6	7,302.6	7,302.6	17.8	146.1	7.57	7.57	-1,770.6	-378.0	1,466.6	1,420.6	45.94	31.926	
7,650.0	7,296.7	7,311.7	7,311.7	18.2	146.2	11.13	11.13	-1,770.6	-378.0	1,417.4	1,372.2	45.23	31.338	
7,700.0	7,302.5	7,317.5	7,317.5	18.7	146.4	19.83	19.83	-1,770.6	-378.0	1,367.8	1,305.8	62.02	22.053	
7,750.0	7,305.1	7,320.1	7,320.1	19.2	146.4	58.81	58.81	-1,770.6	-378.0	1,317.9	1,175.4	142.51	9.248	
7,774.2	7,305.2	7,320.2	7,320.2	19.4	146.4	111.31	111.31	-1,770.6	-378.0	1,293.7	1,139.7	154.02	8.400	
7,800.0	7,304.9	7,319.9	7,319.9	19.7	146.4	110.92	110.92	-1,770.6	-378.0	1,267.9	1,113.3	154.66	8.198	
7,900.0	7,303.6	7,318.6	7,318.6	20.8	146.4	109.40	109.40	-1,770.6	-378.0	1,168.0	1,010.8	157.20	7.430	
8,000.0	7,302.4	7,317.4	7,317.4	22.1	146.3	107.85	107.85	-1,770.6	-378.0	1,068.1	908.3	159.79	6.684	
8,100.0	7,301.1	7,316.1	7,316.1	23.4	146.3	106.27	106.27	-1,770.6	-378.0	968.2	805.8	162.40	5.962	
8,200.0	7,299.9	7,314.9	7,314.9	24.8	146.3	104.66	104.66	-1,770.6	-378.0	868.3	703.3	165.00	5.262	
8,300.0	7,298.6	7,313.6	7,313.6	26.3	146.3	103.03	103.03	-1,770.6	-378.0	768.4	600.8	167.58	4.585	
8,400.0	7,297.4	7,312.4	7,312.4	27.8	146.2	101.38	101.38	-1,770.6	-378.0	668.6	498.5	170.11	3.930	
8,500.0	7,296.1	7,311.1	7,311.1	29.4	146.2	99.71	99.71	-1,770.6	-378.0	568.8	396.3	172.58	3.296	

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 34M-343
<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 34M-343	<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 22-34 (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
8,600.0	7,294.8	7,309.8	7,309.8	31.0	146.2	98.02	-1,770.6	-378.0	469.2	294.2	174.97	2.681		
8,700.0	7,293.6	7,308.6	7,308.6	32.6	146.2	96.32	-1,770.6	-378.0	369.7	192.4	177.26	2.086		
8,800.0	7,292.3	7,307.3	7,307.3	34.3	146.1	94.61	-1,770.6	-378.0	270.6	91.1	179.44	1.508		
8,900.0	7,291.1	7,306.1	7,306.1	36.0	146.1	92.89	-1,770.6	-378.0	172.5	-9.0	181.49	0.950 Level 1		
9,000.0	7,289.8	7,304.8	7,304.8	37.7	146.1	91.16	-1,770.6	-378.0	79.2	-104.2	183.42	0.432 Level 1		
9,067.4	7,289.0	7,304.0	7,304.0	38.9	146.1	90.00	-1,770.6	-378.0	41.7	-143.0	184.64	0.226 Level 1, CC, ES, SF		
9,100.0	7,288.6	7,303.6	7,303.6	39.4	146.1	89.44	-1,770.6	-378.0	52.9	-132.3	185.20	0.286 Level 1		
9,200.0	7,287.3	7,302.3	7,302.3	41.2	146.0	87.71	-1,770.6	-378.0	139.0	-47.8	186.84	0.744 Level 1		
9,300.0	7,286.0	7,301.0	7,301.0	42.9	146.0	85.99	-1,770.6	-378.0	236.3	48.0	188.33	1.255 Level 3		
9,400.0	7,284.8	7,299.8	7,299.8	44.7	146.0	84.27	-1,770.6	-378.0	335.2	145.6	189.65	1.767		
9,500.0	7,283.5	7,298.5	7,298.5	46.5	146.0	82.57	-1,770.6	-378.0	434.6	243.8	190.83	2.278		
9,600.0	7,282.3	7,297.3	7,297.3	48.3	145.9	80.87	-1,770.6	-378.0	534.2	342.4	191.84	2.785		
9,700.0	7,281.0	7,296.0	7,296.0	50.1	145.9	79.20	-1,770.6	-378.0	634.0	441.3	192.70	3.290		
9,800.0	7,279.8	7,294.8	7,294.8	51.9	145.9	77.54	-1,770.6	-378.0	733.8	540.4	193.40	3.794		
9,900.0	7,278.5	7,293.5	7,293.5	53.8	145.9	75.90	-1,770.6	-378.0	833.6	639.7	193.95	4.298		
10,000.0	7,277.3	7,292.3	7,292.3	55.6	145.8	74.29	-1,770.6	-378.0	933.5	739.1	194.36	4.803		
10,100.0	7,276.0	7,291.0	7,291.0	57.4	145.8	72.70	-1,770.6	-378.0	1,033.4	838.8	194.62	5.310		
10,200.0	7,274.7	7,289.7	7,289.7	59.3	145.8	71.14	-1,770.6	-378.0	1,133.3	938.6	194.75	5.819		
10,300.0	7,273.5	7,288.5	7,288.5	61.1	145.8	69.61	-1,770.6	-378.0	1,233.2	1,038.5	194.76	6.332		
10,400.0	7,272.2	7,287.2	7,287.2	63.0	145.7	68.10	-1,770.6	-378.0	1,333.2	1,138.5	194.65	6.849		
10,500.0	7,271.0	7,286.0	7,286.0	64.8	145.7	66.63	-1,770.6	-378.0	1,433.1	1,238.7	194.43	7.371		
10,600.0	7,269.7	7,284.7	7,284.7	66.7	145.7	65.19	-1,770.6	-378.0	1,533.1	1,339.0	194.10	7.898		
10,700.0	7,268.5	7,283.5	7,283.5	68.6	145.7	63.78	-1,770.6	-378.0	1,633.0	1,439.4	193.68	8.431		
10,800.0	7,267.2	7,282.2	7,282.2	70.4	145.6	62.41	-1,770.6	-378.0	1,733.0	1,539.8	193.18	8.971		
10,900.0	7,265.9	7,280.9	7,280.9	72.3	145.6	61.07	-1,770.6	-378.0	1,833.0	1,640.4	192.60	9.517		
11,000.0	7,264.7	7,279.7	7,279.7	74.2	145.6	59.76	-1,770.6	-378.0	1,932.9	1,741.0	191.95	10.070		
11,100.0	7,263.4	7,278.4	7,278.4	76.0	145.6	58.49	-1,770.6	-378.0	2,032.9	1,841.7	191.24	10.630		
11,200.0	7,262.2	7,277.2	7,277.2	77.9	145.5	57.25	-1,770.6	-378.0	2,132.9	1,942.4	190.48	11.197		
11,300.0	7,260.9	7,275.9	7,275.9	79.8	145.5	56.04	-1,770.6	-378.0	2,232.9	2,043.2	189.67	11.772		
11,400.0	7,259.7	7,274.7	7,274.7	81.7	145.5	54.87	-1,770.6	-378.0	2,332.8	2,144.0	188.82	12.355		
11,500.0	7,258.4	7,273.4	7,273.4	83.6	145.5	53.73	-1,770.6	-378.0	2,432.8	2,244.9	187.93	12.945		
11,600.0	7,257.1	7,272.1	7,272.1	85.4	145.4	52.62	-1,770.6	-378.0	2,532.8	2,345.8	187.02	13.543		
11,700.0	7,255.9	7,270.9	7,270.9	87.3	145.4	51.55	-1,770.6	-378.0	2,632.8	2,446.7	186.09	14.148		
11,770.8	7,255.0	7,270.0	7,270.0	88.7	145.4	50.81	-1,770.6	-378.0	2,703.6	2,518.2	185.42	14.581		

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Anderson 34M-343
<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 34M-343	<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 23-34 (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			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	15.0	15.0	0.0	0.3	-173.32	-3,158.6	-369.7	3,180.2	3,179.9	0.30	N/A			
100.0	100.0	115.0	115.0	0.1	2.3	-173.32	-3,158.6	-369.7	3,180.2	3,177.8	2.41	1,318.177			
200.0	200.0	215.0	215.0	0.3	4.3	-173.32	-3,158.6	-369.7	3,180.2	3,175.6	4.64	685.782			
300.0	300.0	315.0	315.0	0.6	6.3	-173.32	-3,158.6	-369.7	3,180.2	3,173.3	6.86	463.445			
400.0	400.0	415.0	415.0	0.8	8.3	-173.32	-3,158.6	-369.7	3,180.2	3,171.1	9.09	349.978			
500.0	500.0	515.0	515.0	1.0	10.3	-173.32	-3,158.6	-369.7	3,180.2	3,168.9	11.31	281.145			
600.0	600.0	615.0	615.0	1.2	12.3	-173.32	-3,158.6	-369.7	3,180.2	3,166.7	13.54	234.938			
700.0	700.0	715.0	715.0	1.5	14.3	-173.32	-3,158.6	-369.7	3,180.2	3,164.4	15.76	201.775			
800.0	800.0	815.0	815.0	1.7	16.3	-173.32	-3,158.6	-369.7	3,180.2	3,162.2	17.99	176.816			
900.0	900.0	915.0	915.0	1.9	18.3	-173.32	-3,158.6	-369.7	3,180.2	3,160.0	20.21	157.353			
1,000.0	1,000.0	1,015.0	1,015.0	2.1	20.3	-173.32	-3,158.6	-369.7	3,180.2	3,157.8	22.44	141.749			
1,100.0	1,100.0	1,115.0	1,115.0	2.4	22.3	-124.68	-3,158.6	-369.7	3,181.2	3,156.5	24.65	129.048			
1,200.0	1,199.8	1,214.8	1,214.8	2.6	24.3	-124.71	-3,158.6	-369.7	3,184.2	3,157.3	26.85	118.578			
1,304.8	1,304.3	1,319.3	1,319.3	2.8	26.4	-124.76	-3,158.6	-369.7	3,189.5	3,160.3	29.15	109.412			
1,400.0	1,398.9	1,413.9	1,413.9	3.1	28.3	-124.91	-3,158.6	-369.7	3,195.2	3,164.0	31.27	102.192			
1,500.0	1,498.3	1,513.3	1,513.3	3.3	30.3	-125.06	-3,158.6	-369.7	3,201.4	3,167.9	33.50	95.569			
1,600.0	1,597.8	1,612.8	1,612.8	3.6	32.3	-125.22	-3,158.6	-369.7	3,207.5	3,171.8	35.73	89.761			
1,700.0	1,697.2	1,712.2	1,712.2	3.8	34.2	-125.37	-3,158.6	-369.7	3,213.7	3,175.7	37.97	84.629			
1,800.0	1,796.6	1,811.6	1,811.6	4.1	36.2	-125.52	-3,158.6	-369.7	3,219.8	3,179.6	40.22	80.062			
1,900.0	1,896.1	1,911.1	1,911.1	4.4	38.2	-125.68	-3,158.6	-369.7	3,226.0	3,183.6	42.46	75.973			
2,000.0	1,995.5	2,010.5	2,010.5	4.6	40.2	-125.83	-3,158.6	-369.7	3,232.3	3,187.6	44.71	72.293			
2,100.0	2,094.9	2,109.9	2,109.9	4.9	42.2	-125.98	-3,158.6	-369.7	3,238.5	3,191.6	46.96	68.963			
2,200.0	2,194.4	2,209.4	2,209.4	5.2	44.2	-126.13	-3,158.6	-369.7	3,244.8	3,195.6	49.21	65.935			
2,300.0	2,293.8	2,308.8	2,308.8	5.5	46.2	-126.28	-3,158.6	-369.7	3,251.1	3,199.6	51.46	63.172			
2,400.0	2,393.2	2,408.2	2,408.2	5.8	48.2	-126.43	-3,158.6	-369.7	3,257.4	3,203.7	53.72	60.640			
2,500.0	2,492.7	2,507.7	2,507.7	6.1	50.2	-126.58	-3,158.6	-369.7	3,263.8	3,207.8	55.97	58.311			
2,600.0	2,592.1	2,607.1	2,607.1	6.4	52.1	-126.73	-3,158.6	-369.7	3,270.1	3,211.9	58.23	56.163			
2,700.0	2,691.5	2,706.5	2,706.5	6.6	54.1	-126.88	-3,158.6	-369.7	3,276.5	3,216.0	60.48	54.174			
2,800.0	2,791.0	2,806.0	2,806.0	6.9	56.1	-127.03	-3,158.6	-369.7	3,282.9	3,220.2	62.74	52.329			
2,900.0	2,890.4	2,905.4	2,905.4	7.2	58.1	-127.17	-3,158.6	-369.7	3,289.3	3,224.4	64.99	50.612			
3,000.0	2,989.8	3,004.8	3,004.8	7.5	60.1	-127.32	-3,158.6	-369.7	3,295.8	3,228.5	67.25	49.010			
3,100.0	3,089.3	3,104.3	3,104.3	7.8	62.1	-127.47	-3,158.6	-369.7	3,302.3	3,232.8	69.50	47.512			
3,200.0	3,188.7	3,203.7	3,203.7	8.1	64.1	-127.61	-3,158.6	-369.7	3,308.8	3,237.0	71.76	46.109			
3,300.0	3,288.1	3,303.1	3,303.1	8.4	66.1	-127.76	-3,158.6	-369.7	3,315.3	3,241.3	74.02	44.791			
3,400.0	3,387.6	3,402.6	3,402.6	8.7	68.1	-127.90	-3,158.6	-369.7	3,321.8	3,245.5	76.27	43.552			
3,500.0	3,487.0	3,502.0	3,502.0	9.0	70.0	-128.04	-3,158.6	-369.7	3,328.4	3,249.8	78.53	42.384			
3,600.0	3,586.4	3,601.4	3,601.4	9.3	72.0	-128.19	-3,158.6	-369.7	3,335.0	3,254.2	80.79	41.282			
3,700.0	3,685.9	3,700.9	3,700.9	9.6	74.0	-128.33	-3,158.6	-369.7	3,341.6	3,258.5	83.04	40.240			
3,800.0	3,785.3	3,800.3	3,800.3	9.9	76.0	-128.47	-3,158.6	-369.7	3,348.2	3,262.9	85.30	39.253			
3,900.0	3,884.7	3,899.7	3,899.7	10.2	78.0	-128.61	-3,158.6	-369.7	3,354.8	3,267.3	87.55	38.317			
4,000.0	3,984.2	3,999.2	3,999.2	10.5	80.0	-128.75	-3,158.6	-369.7	3,361.5	3,271.7	89.81	37.429			
4,100.0	4,083.6	4,098.6	4,098.6	10.7	82.0	-128.90	-3,158.6	-369.7	3,368.2	3,276.1	92.07	36.585			
4,200.0	4,183.0	4,198.0	4,198.0	11.0	84.0	-129.04	-3,158.6	-369.7	3,374.9	3,280.5	94.32	35.781			
4,300.0	4,282.5	4,297.5	4,297.5	11.3	85.9	-129.17	-3,158.6	-369.7	3,381.6	3,285.0	96.58	35.015			
4,400.0	4,381.9	4,396.9	4,396.9	11.6	87.9	-129.31	-3,158.6	-369.7	3,388.3	3,289.5	98.83	34.284			
4,500.0	4,481.4	4,496.4	4,496.4	11.9	89.9	-129.45	-3,158.6	-369.7	3,395.1	3,294.0	101.09	33.586			
4,600.0	4,580.8	4,595.8	4,595.8	12.2	91.9	-129.59	-3,158.6	-369.7	3,401.9	3,298.5	103.34	32.919			
4,700.0	4,680.2	4,695.2	4,695.2	12.5	93.9	-129.73	-3,158.6	-369.7	3,408.7	3,303.1	105.60	32.280			
4,800.0	4,779.7	4,794.7	4,794.7	12.8	95.9	-129.86	-3,158.6	-369.7	3,415.5	3,307.6	107.85	31.669			
4,900.0	4,879.1	4,894.1	4,894.1	13.1	97.9	-130.00	-3,158.6	-369.7	3,422.3	3,312.2	110.11	31.082			
5,000.0	4,978.5	4,993.5	4,993.5	13.4	99.9	-130.13	-3,158.6	-369.7	3,429.2	3,316.8	112.36	30.520			

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 34M-343
<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 34M-343	<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 23-34 (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
5,100.0	5,078.0	5,093.0	5,093.0	13.7	101.9	-130.27	-130.27	-3,158.6	-369.7	3,436.1	3,321.5	114.61	29.980	
5,200.0	5,177.4	5,192.4	5,192.4	14.0	103.8	-130.40	-130.40	-3,158.6	-369.7	3,443.0	3,326.1	116.87	29.461	
5,218.4	5,195.7	5,210.7	5,210.7	14.1	104.2	-130.43	-130.43	-3,158.6	-369.7	3,444.2	3,327.0	117.28	29.367	
5,300.0	5,276.9	5,291.9	5,291.9	14.3	105.8	-130.60	-130.60	-3,158.6	-369.7	3,449.1	3,329.9	119.20	28.935	
5,400.0	5,376.8	5,391.8	5,391.8	14.5	107.8	-130.73	-130.73	-3,158.6	-369.7	3,453.1	3,331.6	121.46	28.429	
5,500.0	5,476.7	5,491.7	5,491.7	14.6	109.8	-130.79	-130.79	-3,158.6	-369.7	3,454.7	3,331.1	123.66	27.938	
5,523.3	5,500.0	5,515.0	5,515.0	14.7	110.3	-179.45	-179.45	-3,158.6	-369.7	3,454.8	3,330.6	124.16	27.826	
5,600.0	5,576.7	5,591.7	5,591.7	14.8	111.8	-179.45	-179.45	-3,158.6	-369.7	3,454.8	3,329.0	125.82	27.458	
5,700.0	5,676.7	5,691.7	5,691.7	15.0	113.8	-179.45	-179.45	-3,158.6	-369.7	3,454.8	3,326.8	128.02	26.987	
5,800.0	5,776.7	5,791.7	5,791.7	15.1	115.8	-179.45	-179.45	-3,158.6	-369.7	3,454.8	3,324.6	130.21	26.532	
5,900.0	5,876.7	5,891.7	5,891.7	15.3	117.8	-179.45	-179.45	-3,158.6	-369.7	3,454.8	3,322.4	132.41	26.093	
6,000.0	5,976.7	5,991.7	5,991.7	15.5	119.8	-179.45	-179.45	-3,158.6	-369.7	3,454.8	3,320.2	134.60	25.667	
6,100.0	6,076.7	6,091.7	6,091.7	15.7	121.8	-179.45	-179.45	-3,158.6	-369.7	3,454.8	3,318.0	136.80	25.255	
6,200.0	6,176.7	6,191.7	6,191.7	15.9	123.8	-179.45	-179.45	-3,158.6	-369.7	3,454.8	3,315.8	139.00	24.855	
6,300.0	6,276.7	6,291.7	6,291.7	16.1	125.8	-179.45	-179.45	-3,158.6	-369.7	3,454.8	3,313.6	141.20	24.468	
6,400.0	6,376.7	6,391.7	6,391.7	16.3	127.8	-179.45	-179.45	-3,158.6	-369.7	3,454.8	3,311.4	143.39	24.093	
6,500.0	6,476.7	6,491.7	6,491.7	16.5	129.8	-179.45	-179.45	-3,158.6	-369.7	3,454.8	3,309.2	145.59	23.729	
6,564.6	6,541.3	6,556.3	6,556.3	16.6	131.1	-179.45	-179.45	-3,158.6	-369.7	3,454.8	3,307.8	147.02	23.500	
6,600.0	6,576.7	6,591.7	6,591.7	16.6	131.8	0.55	0.55	-3,158.6	-369.7	3,454.0	3,306.4	147.61	23.400	
6,650.0	6,626.5	6,641.5	6,641.5	16.7	132.8	0.56	0.56	-3,158.6	-369.7	3,450.0	3,302.2	147.89	23.329	
6,700.0	6,676.0	6,691.0	6,691.0	16.7	133.8	0.56	0.56	-3,158.6	-369.7	3,442.8	3,295.3	147.52	23.338	
6,750.0	6,724.9	6,739.9	6,739.9	16.8	134.8	0.57	0.57	-3,158.6	-369.7	3,432.4	3,285.9	146.50	23.429	
6,800.0	6,773.0	6,788.0	6,788.0	16.8	135.8	0.59	0.59	-3,158.6	-369.7	3,418.8	3,274.0	144.82	23.607	
6,850.0	6,820.1	6,835.1	6,835.1	16.8	136.7	0.60	0.60	-3,158.6	-369.7	3,402.1	3,259.6	142.48	23.878	
6,900.0	6,866.0	6,881.0	6,881.0	16.8	137.6	0.62	0.62	-3,158.6	-369.7	3,382.4	3,242.9	139.47	24.251	
6,950.0	6,910.6	6,925.6	6,925.6	16.8	138.5	0.65	0.65	-3,158.6	-369.7	3,359.6	3,223.8	135.81	24.737	
7,000.0	6,953.5	6,968.5	6,968.5	16.8	139.4	0.68	0.68	-3,158.6	-369.7	3,334.1	3,202.6	131.51	25.353	
7,050.0	6,994.7	7,009.7	7,009.7	16.8	140.2	0.72	0.72	-3,158.6	-369.7	3,305.7	3,179.2	126.57	26.117	
7,100.0	7,034.0	7,049.0	7,049.0	16.7	141.0	0.76	0.76	-3,158.6	-369.7	3,274.8	3,153.7	121.03	27.057	
7,150.0	7,071.1	7,086.1	7,086.1	16.7	141.7	0.82	0.82	-3,158.6	-369.7	3,241.3	3,126.4	114.91	28.207	
7,200.0	7,106.0	7,121.0	7,121.0	16.7	142.4	0.88	0.88	-3,158.6	-369.7	3,205.5	3,097.2	108.24	29.615	
7,250.0	7,138.4	7,153.4	7,153.4	16.7	143.1	0.97	0.97	-3,158.6	-369.7	3,167.5	3,066.4	101.06	31.344	
7,300.0	7,168.3	7,183.3	7,183.3	16.7	143.7	1.07	1.07	-3,158.6	-369.7	3,127.4	3,034.0	93.40	33.483	
7,350.0	7,195.5	7,210.5	7,210.5	16.8	144.2	1.20	1.20	-3,158.6	-369.7	3,085.4	3,000.1	85.33	36.160	
7,400.0	7,219.9	7,234.9	7,234.9	16.8	144.7	1.37	1.37	-3,158.6	-369.7	3,041.8	2,964.9	76.89	39.561	
7,450.0	7,241.4	7,256.4	7,256.4	17.0	145.1	1.59	1.59	-3,158.6	-369.7	2,996.7	2,928.5	68.16	43.968	
7,500.0	7,259.9	7,274.9	7,274.9	17.2	145.5	1.91	1.91	-3,158.6	-369.7	2,950.3	2,891.0	59.21	49.824	
7,550.0	7,275.3	7,290.3	7,290.3	17.5	145.8	2.37	2.37	-3,158.6	-369.7	2,902.7	2,852.5	50.20	57.828	
7,600.0	7,287.6	7,302.6	7,302.6	17.8	146.1	3.13	3.13	-3,158.6	-369.7	2,854.2	2,812.8	41.40	68.945	
7,650.0	7,296.7	7,311.7	7,311.7	18.2	146.2	4.55	4.55	-3,158.6	-369.7	2,805.1	2,771.2	33.91	82.725	
7,700.0	7,302.5	7,317.5	7,317.5	18.7	146.4	8.15	8.15	-3,158.6	-369.7	2,755.4	2,721.8	33.66	81.858	
7,750.0	7,305.1	7,320.1	7,320.1	19.2	146.4	32.77	32.77	-3,158.6	-369.7	2,705.5	2,612.8	92.73	29.177	
7,774.2	7,305.2	7,320.2	7,320.2	19.4	146.4	135.30	135.30	-3,158.6	-369.7	2,681.3	2,564.1	117.16	22.886	
7,800.0	7,304.9	7,319.9	7,319.9	19.7	146.4	135.02	135.02	-3,158.6	-369.7	2,655.5	2,537.6	117.90	22.524	
7,900.0	7,303.6	7,318.6	7,318.6	20.8	146.4	133.92	133.92	-3,158.6	-369.7	2,555.6	2,434.7	120.87	21.143	
8,000.0	7,302.4	7,317.4	7,317.4	22.1	146.3	132.78	132.78	-3,158.6	-369.7	2,455.6	2,331.6	124.00	19.802	
8,100.0	7,301.1	7,316.1	7,316.1	23.4	146.3	131.60	131.60	-3,158.6	-369.7	2,355.6	2,228.3	127.28	18.507	
8,200.0	7,299.9	7,314.9	7,314.9	24.8	146.3	130.37	130.37	-3,158.6	-369.7	2,255.6	2,124.9	130.69	17.259	
8,300.0	7,298.6	7,313.6	7,313.6	26.3	146.3	129.09	129.09	-3,158.6	-369.7	2,155.6	2,021.4	134.21	16.061	
8,400.0	7,297.4	7,312.4	7,312.4	27.8	146.2	127.76	127.76	-3,158.6	-369.7	2,055.6	1,917.8	137.85	14.912	
8,500.0	7,296.1	7,311.1	7,311.1	29.4	146.2	126.39	126.39	-3,158.6	-369.7	1,955.7	1,814.1	141.58	13.813	

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 34M-343
<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 34M-343	<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 23-34 (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			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)			
8,600.0	7,294.8	7,309.8	7,309.8	31.0	146.2	124.96	-3,158.6	-369.7	1,855.7	1,710.3	145.39	12.764		
8,700.0	7,293.6	7,308.6	7,308.6	32.6	146.2	123.49	-3,158.6	-369.7	1,755.7	1,606.4	149.27	11.762		
8,800.0	7,292.3	7,307.3	7,307.3	34.3	146.1	121.96	-3,158.6	-369.7	1,655.7	1,502.5	153.21	10.807		
8,900.0	7,291.1	7,306.1	7,306.1	36.0	146.1	120.38	-3,158.6	-369.7	1,555.8	1,398.6	157.19	9.898		
9,000.0	7,289.8	7,304.8	7,304.8	37.7	146.1	118.75	-3,158.6	-369.7	1,455.8	1,294.6	161.19	9.032		
9,100.0	7,288.6	7,303.6	7,303.6	39.4	146.1	117.06	-3,158.6	-369.7	1,355.8	1,190.6	165.20	8.207		
9,200.0	7,287.3	7,302.3	7,302.3	41.2	146.0	115.32	-3,158.6	-369.7	1,255.9	1,086.7	169.21	7.422		
9,300.0	7,286.0	7,301.0	7,301.0	42.9	146.0	113.53	-3,158.6	-369.7	1,155.9	982.7	173.18	6.675		
9,400.0	7,284.8	7,299.8	7,299.8	44.7	146.0	111.69	-3,158.6	-369.7	1,056.0	878.9	177.10	5.963		
9,500.0	7,283.5	7,298.5	7,298.5	46.5	146.0	109.80	-3,158.6	-369.7	956.0	775.1	180.95	5.283		
9,600.0	7,282.3	7,297.3	7,297.3	48.3	145.9	107.87	-3,158.6	-369.7	856.1	671.4	184.70	4.635		
9,700.0	7,281.0	7,296.0	7,296.0	50.1	145.9	105.89	-3,158.6	-369.7	756.2	567.9	188.33	4.015		
9,800.0	7,279.8	7,294.8	7,294.8	51.9	145.9	103.88	-3,158.6	-369.7	656.3	464.5	191.82	3.422		
9,900.0	7,278.5	7,293.5	7,293.5	53.8	145.9	101.82	-3,158.6	-369.7	556.5	361.4	195.14	2.852		
10,000.0	7,277.3	7,292.3	7,292.3	55.6	145.8	99.74	-3,158.6	-369.7	456.7	258.5	198.26	2.304		
10,100.0	7,276.0	7,291.0	7,291.0	57.4	145.8	97.63	-3,158.6	-369.7	357.1	155.9	201.18	1.775		
10,200.0	7,274.7	7,289.7	7,289.7	59.3	145.8	95.50	-3,158.6	-369.7	257.7	53.8	203.86	1.264 Level 3		
10,300.0	7,273.5	7,288.5	7,288.5	61.1	145.8	93.35	-3,158.6	-369.7	159.1	-47.2	206.29	0.771 Level 1		
10,400.0	7,272.2	7,287.2	7,287.2	63.0	145.7	91.20	-3,158.6	-369.7	64.8	-143.7	208.46	0.311 Level 1		
10,455.5	7,271.5	7,286.5	7,286.5	64.0	145.7	90.00	-3,158.6	-369.7	33.3	-176.2	209.54	0.159 Level 1, CC, ES, SF		
10,500.0	7,271.0	7,286.0	7,286.0	64.8	145.7	89.04	-3,158.6	-369.7	55.6	-154.8	210.35	0.264 Level 1		
10,600.0	7,269.7	7,284.7	7,284.7	66.7	145.7	86.88	-3,158.6	-369.7	148.3	-63.7	211.96	0.699 Level 1		
10,700.0	7,268.5	7,283.5	7,283.5	68.6	145.7	84.74	-3,158.6	-369.7	246.7	33.4	213.29	1.157 Level 2		
10,800.0	7,267.2	7,282.2	7,282.2	70.4	145.6	82.60	-3,158.6	-369.7	346.0	131.7	214.33	1.615		
10,900.0	7,265.9	7,280.9	7,280.9	72.3	145.6	80.49	-3,158.6	-369.7	445.7	230.6	215.09	2.072		
11,000.0	7,264.7	7,279.7	7,279.7	74.2	145.6	78.40	-3,158.6	-369.7	545.4	329.9	215.57	2.530		
11,100.0	7,263.4	7,278.4	7,278.4	76.0	145.6	76.35	-3,158.6	-369.7	645.3	429.5	215.79	2.990		
11,200.0	7,262.2	7,277.2	7,277.2	77.9	145.5	74.33	-3,158.6	-369.7	745.2	529.4	215.75	3.454		
11,300.0	7,260.9	7,275.9	7,275.9	79.8	145.5	72.35	-3,158.6	-369.7	845.1	629.6	215.48	3.922		
11,400.0	7,259.7	7,274.7	7,274.7	81.7	145.5	70.41	-3,158.6	-369.7	945.0	730.0	214.99	4.395		
11,500.0	7,258.4	7,273.4	7,273.4	83.6	145.5	68.51	-3,158.6	-369.7	1,044.9	830.6	214.30	4.876		
11,600.0	7,257.1	7,272.1	7,272.1	85.4	145.4	66.67	-3,158.6	-369.7	1,144.9	931.4	213.43	5.364		
11,700.0	7,255.9	7,270.9	7,270.9	87.3	145.4	64.87	-3,158.6	-369.7	1,244.8	1,032.4	212.39	5.861		
11,770.8	7,255.0	7,270.0	7,270.0	88.7	145.4	63.63	-3,158.6	-369.7	1,315.6	1,104.0	211.56	6.218		



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Anderson 34M-343
<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 34M-343	<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-323 - 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	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
0.0	0.0	0.0	0.0	0.0	0.0	-90.01	-90.01	0.0	-61.1	61.1				
100.0	100.0	100.0	100.0	0.1	0.1	-90.01	-90.01	0.0	-61.1	61.1	60.9	0.22	272.060	
200.0	200.0	200.0	200.0	0.3	0.3	-90.01	-90.01	0.0	-61.1	61.1	60.5	0.67	90.687 CC, ES	
300.0	300.0	298.0	297.9	0.6	0.6	-89.55	-89.55	0.5	-62.7	62.8	61.7	1.11	56.360	
400.0	400.0	395.7	395.6	0.8	0.8	-88.29	-88.29	2.0	-67.5	67.7	66.1	1.56	43.342	
500.0	500.0	493.0	492.5	1.0	1.0	-86.57	-86.57	4.5	-75.4	75.9	73.9	2.02	37.538	
600.0	600.0	589.6	588.4	1.2	1.3	-84.72	-84.72	8.0	-86.4	87.5	85.0	2.50	35.004	
700.0	700.0	685.3	683.0	1.5	1.6	-82.96	-82.96	12.4	-100.2	102.4	99.4	3.00	34.165	
800.0	800.0	782.2	778.3	1.7	2.0	-81.41	-81.41	17.6	-116.8	120.1	116.6	3.52	34.100	
900.0	900.0	880.5	875.0	1.9	2.3	-80.23	-80.23	23.1	-134.0	138.2	134.2	4.06	34.046	
1,000.0	1,000.0	978.8	971.6	2.1	2.7	-79.32	-79.32	28.5	-151.1	156.4	151.7	4.61	33.941	
1,100.0	1,100.0	1,077.4	1,068.6	2.4	3.1	-30.07	-30.07	33.9	-168.3	173.0	168.2	4.78	36.191	
1,200.0	1,199.8	1,176.5	1,165.9	2.6	3.5	-30.11	-30.11	39.4	-185.5	186.7	181.5	5.24	35.633	
1,304.8	1,304.3	1,280.7	1,268.4	2.8	4.0	-30.72	-30.72	45.2	-203.7	197.9	192.1	5.73	34.542	
1,400.0	1,398.9	1,375.4	1,361.5	3.1	4.3	-31.55	-31.55	50.4	-220.2	206.5	200.3	6.19	33.374	
1,500.0	1,498.3	1,474.9	1,459.4	3.3	4.8	-32.36	-32.36	55.9	-237.5	215.7	209.0	6.68	32.297	
1,600.0	1,597.8	1,574.5	1,557.2	3.6	5.2	-33.10	-33.10	61.4	-254.9	224.9	217.7	7.17	31.346	
1,700.0	1,697.2	1,674.0	1,655.1	3.8	5.6	-33.78	-33.78	66.9	-272.2	234.1	226.4	7.68	30.501	
1,800.0	1,796.6	1,773.6	1,753.0	4.1	6.0	-34.41	-34.41	72.4	-289.5	243.4	235.2	8.18	29.746	
1,900.0	1,896.1	1,873.1	1,850.8	4.4	6.4	-35.00	-35.00	77.9	-306.9	252.6	243.9	8.69	29.068	
2,000.0	1,995.5	1,972.6	1,948.7	4.6	6.8	-35.54	-35.54	83.4	-324.2	261.9	252.7	9.21	28.456	
2,100.0	2,094.9	2,072.2	2,046.5	4.9	7.2	-36.05	-36.05	88.8	-341.5	271.3	261.5	9.72	27.901	
2,200.0	2,194.4	2,171.7	2,144.4	5.2	7.6	-36.52	-36.52	94.3	-358.9	280.6	270.4	10.24	27.395	
2,300.0	2,293.8	2,271.2	2,242.3	5.5	8.1	-36.96	-36.96	99.8	-376.2	290.0	279.2	10.77	26.933	
2,400.0	2,393.2	2,370.8	2,340.1	5.8	8.5	-37.37	-37.37	105.3	-393.6	299.4	288.1	11.29	26.509	
2,500.0	2,492.7	2,470.3	2,438.0	6.1	8.9	-37.76	-37.76	110.8	-410.9	308.8	296.9	11.82	26.120	
2,600.0	2,592.1	2,569.8	2,535.8	6.4	9.3	-38.13	-38.13	116.3	-428.2	318.2	305.8	12.35	25.760	
2,700.0	2,691.5	2,669.4	2,633.7	6.6	9.7	-38.47	-38.47	121.8	-445.6	327.6	314.7	12.88	25.427	
2,800.0	2,791.0	2,768.9	2,731.6	6.9	10.1	-38.80	-38.80	127.3	-462.9	337.0	323.6	13.42	25.117	
2,900.0	2,890.4	2,868.5	2,829.4	7.2	10.5	-39.11	-39.11	132.8	-480.3	346.5	332.5	13.95	24.830	
3,000.0	2,989.8	2,968.0	2,927.3	7.5	10.9	-39.40	-39.40	138.3	-497.6	355.9	341.4	14.49	24.561	
3,100.0	3,089.3	3,067.5	3,025.2	7.8	11.4	-39.68	-39.68	143.8	-514.9	365.4	350.3	15.03	24.311	
3,200.0	3,188.7	3,167.1	3,123.0	8.1	11.8	-39.94	-39.94	149.3	-532.3	374.8	359.3	15.57	24.076	
3,300.0	3,288.1	3,266.6	3,220.9	8.4	12.2	-40.19	-40.19	154.8	-549.6	384.3	368.2	16.11	23.855	
3,400.0	3,387.6	3,366.1	3,318.7	8.7	12.6	-40.42	-40.42	160.3	-567.0	393.8	377.1	16.65	23.648	
3,500.0	3,487.0	3,465.7	3,416.6	9.0	13.0	-40.65	-40.65	165.8	-584.3	403.3	386.1	17.20	23.453	
3,600.0	3,586.4	3,565.2	3,514.5	9.3	13.4	-40.87	-40.87	171.3	-601.6	412.8	395.0	17.74	23.268	
3,700.0	3,685.9	3,664.7	3,612.3	9.6	13.9	-41.07	-41.07	176.8	-619.0	422.3	404.0	18.29	23.094	
3,800.0	3,785.3	3,764.3	3,710.2	9.9	14.3	-41.27	-41.27	182.3	-636.3	431.8	413.0	18.83	22.930	
3,900.0	3,884.7	3,863.8	3,808.0	10.2	14.7	-41.46	-41.46	187.7	-653.6	441.3	421.9	19.38	22.773	
4,000.0	3,984.2	3,963.4	3,905.9	10.5	15.1	-41.64	-41.64	193.2	-671.0	450.8	430.9	19.93	22.625	
4,100.0	4,083.6	4,062.9	4,003.8	10.7	15.5	-41.81	-41.81	198.7	-688.3	460.3	439.9	20.47	22.485	
4,200.0	4,183.0	4,162.4	4,101.6	11.0	15.9	-41.98	-41.98	204.2	-705.7	469.9	448.8	21.02	22.351	
4,300.0	4,282.5	4,262.0	4,199.5	11.3	16.3	-42.14	-42.14	209.7	-723.0	479.4	457.8	21.57	22.223	
4,400.0	4,381.9	4,361.5	4,297.3	11.6	16.8	-42.29	-42.29	215.2	-740.3	488.9	466.8	22.12	22.101	
4,500.0	4,481.4	4,461.0	4,395.2	11.9	17.2	-42.44	-42.44	220.7	-757.7	498.5	475.8	22.67	21.985	
4,600.0	4,580.8	4,560.6	4,493.1	12.2	17.6	-42.58	-42.58	226.2	-775.0	508.0	484.8	23.22	21.874	
4,700.0	4,680.2	4,660.1	4,590.9	12.5	18.0	-42.72	-42.72	231.7	-792.4	517.5	493.8	23.77	21.768	
4,800.0	4,779.7	4,759.6	4,688.8	12.8	18.4	-42.85	-42.85	237.2	-809.7	527.1	502.7	24.33	21.667	
4,900.0	4,879.1	4,859.2	4,786.6	13.1	18.8	-42.98	-42.98	242.7	-827.0	536.6	511.7	24.88	21.569	
5,000.0	4,978.5	4,958.7	4,884.5	13.4	19.2	-43.10	-43.10	248.2	-844.4	546.2	520.7	25.43	21.476	

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 34M-343
<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 34M-343	<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-323 - 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)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
5,100.0	5,078.0	5,058.3	4,982.4	13.7	19.7	-43.22	253.7	-861.7	555.7	529.7	25.98	21.386		
5,200.0	5,177.4	5,157.8	5,080.2	14.0	20.1	-43.33	259.2	-879.1	565.3	538.7	26.54	21.300		
5,218.4	5,195.7	5,176.1	5,098.3	14.1	20.1	-43.35	260.2	-882.3	567.0	540.4	26.64	21.285		
5,300.0	5,276.9	5,257.2	5,178.0	14.3	20.5	-43.48	264.7	-896.4	575.7	548.6	27.05	21.284		
5,400.0	5,376.8	5,356.4	5,275.5	14.5	20.9	-43.46	270.1	-913.6	588.5	561.1	27.47	21.425		
5,500.0	5,476.7	5,455.1	5,372.5	14.6	21.3	-43.25	275.6	-930.8	603.9	576.1	27.84	21.697		
5,523.3	5,500.0	5,478.0	5,395.0	14.7	21.4	-91.83	276.8	-934.8	607.9	580.0	27.91	21.778		
5,600.0	5,576.7	5,553.4	5,469.2	14.8	21.7	-91.40	281.0	-948.0	621.1	592.9	28.20	22.027		
5,700.0	5,676.7	5,676.1	5,590.2	15.0	22.1	-90.81	287.1	-967.2	636.7	608.2	28.60	22.267		
5,800.0	5,776.7	5,802.3	5,715.4	15.1	22.4	-90.38	291.7	-981.7	648.3	619.3	28.99	22.362		
5,900.0	5,876.7	5,929.6	5,842.3	15.3	22.6	-90.12	294.7	-991.1	655.6	626.2	29.38	22.314		
6,000.0	5,976.7	6,057.5	5,970.2	15.5	22.8	-90.00	295.9	-995.1	658.7	629.0	29.78	22.123		
6,100.0	6,076.7	6,164.0	6,076.7	15.7	23.0	-90.00	296.0	-995.2	658.9	628.7	30.15	21.849		
6,200.0	6,176.7	6,264.0	6,176.7	15.9	23.1	-90.00	296.0	-995.2	658.9	628.3	30.53	21.582		
6,300.0	6,276.7	6,364.0	6,276.7	16.1	23.2	-90.00	296.0	-995.2	658.9	628.0	30.90	21.320		
6,400.0	6,376.7	6,464.0	6,376.7	16.3	23.3	-90.00	296.0	-995.2	658.9	627.6	31.28	21.063		
6,500.0	6,476.7	6,564.0	6,476.7	16.5	23.5	-90.00	296.0	-995.2	658.9	627.2	31.66	20.810		
6,564.6	6,541.3	6,628.7	6,541.3	16.6	23.5	-90.00	296.0	-995.2	658.9	627.0	31.91	20.650		
6,600.0	6,576.7	6,664.0	6,576.7	16.6	23.6	90.00	295.2	-995.2	658.9	626.8	32.02	20.577		
6,650.0	6,626.5	6,714.0	6,626.5	16.7	23.6	90.00	291.2	-995.2	658.9	626.7	32.14	20.500		
6,700.0	6,676.0	6,764.0	6,676.0	16.7	23.7	90.00	284.0	-995.2	658.9	626.6	32.23	20.445		
6,750.0	6,724.9	6,814.0	6,724.9	16.8	23.7	90.00	273.6	-995.2	658.9	626.6	32.28	20.411		
6,800.0	6,773.0	6,864.0	6,773.0	16.8	23.7	90.00	260.0	-995.2	658.9	626.6	32.31	20.393		
6,850.0	6,820.1	6,914.0	6,820.1	16.8	23.7	90.00	243.3	-995.2	658.9	626.5	32.32	20.388		
6,900.0	6,866.0	6,964.0	6,866.1	16.8	23.7	90.00	223.6	-995.2	658.9	626.6	32.31	20.392		
6,950.0	6,910.6	7,014.0	6,910.6	16.8	23.7	90.00	200.9	-995.2	658.9	626.6	32.30	20.400		
7,000.0	6,953.5	7,064.0	6,953.5	16.8	23.7	90.00	175.3	-995.2	658.9	626.6	32.29	20.405		
7,050.0	6,994.7	7,114.0	6,994.7	16.8	23.7	90.00	147.0	-995.2	658.9	626.6	32.29	20.403		
7,100.0	7,034.0	7,164.0	7,034.0	16.7	23.7	90.00	116.0	-995.2	658.9	626.5	32.32	20.385		
7,150.0	7,071.1	7,214.0	7,071.1	16.7	23.6	90.01	82.5	-995.2	658.9	626.5	32.38	20.347		
7,200.0	7,106.0	7,264.1	7,106.0	16.7	23.6	90.01	46.7	-995.2	658.9	626.4	32.49	20.281		
7,250.0	7,138.4	7,314.1	7,138.5	16.7	23.6	90.01	8.7	-995.2	658.9	626.2	32.65	20.181		
7,300.0	7,168.3	7,364.1	7,168.4	16.7	23.6	90.01	-31.4	-995.2	658.9	626.0	32.87	20.044		
7,350.0	7,195.5	7,414.1	7,195.6	16.8	23.7	90.01	-73.3	-995.2	658.9	625.7	33.17	19.866		
7,400.0	7,219.9	7,464.1	7,220.0	16.8	23.7	90.01	-117.0	-995.2	658.9	625.3	33.54	19.645		
7,450.0	7,241.4	7,514.1	7,241.5	17.0	23.8	90.01	-162.1	-995.2	658.9	624.9	34.00	19.381		
7,500.0	7,259.9	7,564.1	7,260.0	17.2	23.9	90.01	-208.6	-995.2	658.9	624.3	34.54	19.077		
7,550.0	7,275.3	7,614.1	7,275.4	17.5	24.0	90.01	-256.1	-995.2	658.9	623.7	35.17	18.736		
7,600.0	7,287.6	7,664.1	7,287.7	17.8	24.1	90.01	-304.6	-995.2	658.9	623.0	35.88	18.363		
7,650.0	7,296.7	7,714.1	7,296.8	18.2	24.3	90.01	-353.7	-995.2	658.9	622.2	36.67	17.965		
7,700.0	7,302.5	7,764.1	7,302.6	18.7	24.5	90.01	-403.4	-995.2	658.9	621.3	37.55	17.548		
7,750.0	7,305.1	7,814.1	7,305.2	19.2	24.8	90.01	-453.3	-995.2	658.9	620.4	38.49	17.120		
7,774.2	7,305.2	7,838.3	7,305.3	19.4	24.9	90.01	-477.5	-995.2	658.9	619.9	38.96	16.910		
7,800.0	7,304.9	7,864.1	7,305.0	19.7	25.1	90.01	-503.3	-995.2	658.9	619.4	39.50	16.681		
7,900.0	7,303.6	7,964.1	7,303.7	20.8	25.8	90.01	-603.3	-995.2	658.9	617.2	41.71	15.796		
8,000.0	7,302.4	8,064.1	7,302.5	22.1	26.7	90.01	-703.3	-995.2	658.9	614.7	44.14	14.926		
8,100.0	7,301.1	8,164.1	7,301.2	23.4	27.7	90.01	-803.3	-995.2	658.9	612.1	46.77	14.089		
8,200.0	7,299.9	8,264.1	7,300.0	24.8	28.9	90.01	-903.3	-995.2	658.9	609.3	49.55	13.298		
8,300.0	7,298.6	8,364.1	7,298.7	26.3	30.1	90.01	-1,003.3	-995.2	658.9	606.4	52.46	12.558		
8,400.0	7,297.4	8,464.1	7,297.4	27.8	31.4	90.01	-1,103.3	-995.2	658.9	603.4	55.50	11.872		
8,500.0	7,296.1	8,564.1	7,296.2	29.4	32.8	90.01	-1,203.3	-995.2	658.9	600.2	58.62	11.239		

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 34M-343
<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 34M-343	<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-323 - 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)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
8,600.0	7,294.8	8,664.1	7,294.9	31.0	34.2	90.01	-1,303.3	-995.2	658.9	597.0	61.83	10.656	
8,700.0	7,293.6	8,764.1	7,293.7	32.6	35.7	90.01	-1,403.2	-995.2	658.9	593.8	65.11	10.120	
8,800.0	7,292.3	8,864.1	7,292.4	34.3	37.2	90.01	-1,503.2	-995.2	658.9	590.4	68.44	9.626	
8,900.0	7,291.1	8,964.1	7,291.2	36.0	38.8	90.01	-1,603.2	-995.2	658.9	587.0	71.83	9.172	
9,000.0	7,289.8	9,064.1	7,289.9	37.7	40.4	90.01	-1,703.2	-995.2	658.9	583.6	75.26	8.754	
9,100.0	7,288.6	9,164.1	7,288.7	39.4	42.0	90.01	-1,803.2	-995.2	658.9	580.1	78.73	8.368	
9,200.0	7,287.3	9,264.1	7,287.4	41.2	43.6	90.01	-1,903.2	-995.2	658.9	576.6	82.24	8.012	
9,300.0	7,286.0	9,364.1	7,286.1	42.9	45.3	90.01	-2,003.2	-995.2	658.9	573.1	85.77	7.682	
9,400.0	7,284.8	9,464.1	7,284.9	44.7	47.0	90.01	-2,103.2	-995.2	658.9	569.5	89.33	7.376	
9,500.0	7,283.5	9,564.1	7,283.6	46.5	48.7	90.01	-2,203.2	-995.2	658.9	565.9	92.91	7.091	
9,600.0	7,282.3	9,664.1	7,282.4	48.3	50.4	90.01	-2,303.2	-995.2	658.9	562.3	96.51	6.827	
9,700.0	7,281.0	9,764.1	7,281.1	50.1	52.2	90.01	-2,403.2	-995.2	658.9	558.7	100.14	6.580	
9,800.0	7,279.8	9,864.1	7,279.9	51.9	53.9	90.01	-2,503.2	-995.2	658.9	555.1	103.77	6.349	
9,900.0	7,278.5	9,964.1	7,278.6	53.8	55.7	90.01	-2,603.2	-995.2	658.9	551.4	107.42	6.133	
10,000.0	7,277.3	10,064.1	7,277.3	55.6	57.5	90.01	-2,703.1	-995.2	658.9	547.8	111.09	5.931	
10,100.0	7,276.0	10,164.1	7,276.1	57.4	59.2	90.01	-2,803.1	-995.2	658.9	544.1	114.77	5.741	
10,200.0	7,274.7	10,264.1	7,274.8	59.3	61.0	90.01	-2,903.1	-995.2	658.9	540.4	118.45	5.562	
10,300.0	7,273.5	10,364.1	7,273.6	61.1	62.8	90.01	-3,003.1	-995.2	658.9	536.7	122.15	5.394	
10,400.0	7,272.2	10,464.1	7,272.3	63.0	64.6	90.01	-3,103.1	-995.2	658.9	533.0	125.86	5.235	
10,500.0	7,271.0	10,564.1	7,271.1	64.8	66.4	90.01	-3,203.1	-995.2	658.9	529.3	129.57	5.085	
10,600.0	7,269.7	10,664.1	7,269.8	66.7	68.3	90.01	-3,303.1	-995.2	658.9	525.6	133.30	4.943	
10,700.0	7,268.5	10,764.1	7,268.5	68.6	70.1	90.01	-3,403.1	-995.2	658.9	521.8	137.03	4.808	
10,800.0	7,267.2	10,864.1	7,267.3	70.4	71.9	90.01	-3,503.1	-995.2	658.9	518.1	140.76	4.681	
10,900.0	7,265.9	10,964.1	7,266.0	72.3	73.7	90.01	-3,603.1	-995.2	658.9	514.4	144.50	4.560	
11,000.0	7,264.7	11,064.1	7,264.8	74.2	75.6	90.01	-3,703.1	-995.2	658.9	510.6	148.25	4.444	
11,100.0	7,263.4	11,164.1	7,263.5	76.0	77.4	90.01	-3,803.1	-995.2	658.9	506.9	152.00	4.335	
11,200.0	7,262.2	11,264.1	7,262.3	77.9	79.3	90.01	-3,903.1	-995.2	658.9	503.1	155.76	4.230	
11,300.0	7,260.9	11,364.1	7,261.0	79.8	81.1	90.01	-4,003.0	-995.2	658.9	499.3	159.52	4.130	
11,400.0	7,259.7	11,464.1	7,259.8	81.7	83.0	90.01	-4,103.0	-995.2	658.9	495.6	163.28	4.035	
11,500.0	7,258.4	11,564.1	7,258.5	83.6	84.8	90.01	-4,203.0	-995.2	658.9	491.8	167.05	3.944	
11,600.0	7,257.1	11,664.1	7,257.2	85.4	86.7	90.01	-4,303.0	-995.2	658.9	488.0	170.82	3.857	
11,700.0	7,255.9	11,764.1	7,256.0	87.3	88.6	90.01	-4,403.0	-995.2	658.9	484.3	174.60	3.774	
11,770.8	7,255.0	11,834.9	7,255.1	88.7	89.9	90.01	-4,473.8	-995.2	658.9	481.6	177.28	3.717 SF	

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Anderson 34M-343
<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 34M-343	<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		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)					
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-30.6	30.6						
100.0	100.0	100.0	100.0	0.1	0.1	-90.00	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	-90.00	0.0	-30.6	30.6	29.9	0.67	45.343			
300.0	300.0	300.0	300.0	0.6	0.6	-90.00	0.0	-30.6	30.6	29.5	1.12	27.206			
400.0	400.0	400.0	400.0	0.8	0.8	-90.00	0.0	-30.6	30.6	29.0	1.57	19.433			
500.0	500.0	499.0	499.0	1.0	1.0	-88.71	0.7	-32.1	32.2	30.1	2.01	15.956			
600.0	600.0	597.8	597.6	1.2	1.2	-85.53	2.9	-36.8	37.0	34.5	2.46	15.024			
700.0	700.0	696.1	695.5	1.5	1.5	-81.75	6.4	-44.4	45.1	42.2	2.91	15.481			
800.0	800.0	793.7	792.4	1.7	1.7	-78.32	11.4	-55.1	56.7	53.4	3.38	16.765			
900.0	900.0	891.9	889.6	1.9	2.0	-75.63	17.5	-68.1	71.1	67.2	3.87	18.354			
1,000.0	1,000.0	990.8	987.4	2.1	2.3	-73.81	23.7	-81.4	85.7	81.4	4.37	19.618			
1,100.0	1,100.0	1,089.9	1,085.4	2.4	2.7	-24.17	29.9	-94.8	98.9	94.2	4.71	20.977			
1,200.0	1,199.8	1,189.4	1,183.8	2.6	3.0	-24.15	36.1	-108.2	108.9	103.7	5.16	21.101			
1,304.8	1,304.3	1,294.0	1,287.2	2.8	3.4	-24.91	42.7	-122.3	115.9	110.3	5.63	20.584			
1,400.0	1,398.9	1,389.0	1,381.2	3.1	3.7	-25.93	48.6	-135.1	120.8	114.7	6.08	19.876			
1,500.0	1,498.3	1,488.9	1,479.9	3.3	4.0	-26.92	54.9	-148.6	126.0	119.4	6.55	19.224			
1,600.0	1,597.8	1,588.7	1,578.7	3.6	4.4	-27.83	61.1	-162.0	131.2	124.1	7.03	18.648			
1,700.0	1,697.2	1,688.5	1,677.4	3.8	4.7	-28.67	67.4	-175.5	136.4	128.9	7.52	18.137			
1,800.0	1,796.6	1,788.4	1,776.1	4.1	5.1	-29.45	73.6	-188.9	141.6	133.6	8.01	17.682			
1,900.0	1,896.1	1,888.2	1,874.9	4.4	5.4	-30.17	79.9	-202.4	146.9	138.4	8.50	17.273			
2,000.0	1,995.5	1,988.1	1,973.6	4.6	5.8	-30.84	86.1	-215.8	152.2	143.2	9.00	16.904			
2,100.0	2,094.9	2,087.9	2,072.3	4.9	6.2	-31.47	92.4	-229.3	157.5	148.0	9.51	16.570			
2,200.0	2,194.4	2,187.8	2,171.1	5.2	6.5	-32.05	98.6	-242.7	162.8	152.8	10.01	16.266			
2,300.0	2,293.8	2,287.6	2,269.8	5.5	6.9	-32.60	104.9	-256.2	168.2	157.7	10.52	15.988			
2,400.0	2,393.2	2,387.5	2,368.5	5.8	7.2	-33.11	111.2	-269.6	173.6	162.5	11.03	15.734			
2,500.0	2,492.7	2,487.3	2,467.3	6.1	7.6	-33.60	117.4	-283.1	178.9	167.4	11.54	15.499			
2,600.0	2,592.1	2,587.1	2,566.0	6.4	7.9	-34.05	123.7	-296.6	184.3	172.3	12.06	15.283			
2,700.0	2,691.5	2,687.0	2,664.8	6.6	8.3	-34.48	129.9	-310.0	189.7	177.1	12.58	15.083			
2,800.0	2,791.0	2,786.8	2,763.5	6.9	8.6	-34.89	136.2	-323.5	195.1	182.0	13.10	14.897			
2,900.0	2,890.4	2,886.7	2,862.2	7.2	9.0	-35.27	142.4	-336.9	200.5	186.9	13.62	14.725			
3,000.0	2,989.8	2,986.5	2,961.0	7.5	9.4	-35.64	148.7	-350.4	206.0	191.8	14.14	14.564			
3,100.0	3,089.3	3,086.4	3,059.7	7.8	9.7	-35.98	155.0	-363.8	211.4	196.7	14.67	14.413			
3,200.0	3,188.7	3,186.2	3,158.4	8.1	10.1	-36.31	161.2	-377.3	216.8	201.6	15.19	14.272			
3,300.0	3,288.1	3,286.1	3,257.2	8.4	10.4	-36.62	167.5	-390.7	222.3	206.6	15.72	14.140			
3,400.0	3,387.6	3,385.9	3,355.9	8.7	10.8	-36.92	173.7	-404.2	227.7	211.5	16.25	14.016			
3,500.0	3,487.0	3,485.7	3,454.6	9.0	11.2	-37.20	180.0	-417.6	233.2	216.4	16.78	13.898			
3,600.0	3,586.4	3,585.6	3,553.4	9.3	11.5	-37.47	186.2	-431.1	238.7	221.4	17.31	13.788			
3,700.0	3,685.9	3,685.4	3,652.1	9.6	11.9	-37.73	192.5	-444.5	244.1	226.3	17.84	13.684			
3,800.0	3,785.3	3,785.3	3,750.8	9.9	12.2	-37.97	198.7	-458.0	249.6	231.2	18.37	13.585			
3,900.0	3,884.7	3,885.1	3,849.6	10.2	12.6	-38.21	205.0	-471.5	255.1	236.2	18.91	13.491			
4,000.0	3,984.2	3,985.0	3,948.3	10.5	13.0	-38.44	211.3	-484.9	260.6	241.1	19.44	13.403			
4,100.0	4,083.6	4,084.8	4,047.1	10.7	13.3	-38.65	217.5	-498.4	266.1	246.1	19.98	13.318			
4,200.0	4,183.0	4,184.7	4,145.8	11.0	13.7	-38.86	223.8	-511.8	271.6	251.0	20.51	13.238			
4,300.0	4,282.5	4,284.5	4,244.5	11.3	14.0	-39.06	230.0	-525.3	277.0	256.0	21.05	13.162			
4,400.0	4,381.9	4,384.3	4,343.3	11.6	14.4	-39.25	236.3	-538.7	282.5	261.0	21.59	13.089			
4,500.0	4,481.4	4,484.2	4,442.0	11.9	14.7	-39.44	242.5	-552.2	288.0	265.9	22.12	13.019			
4,600.0	4,580.8	4,584.0	4,540.7	12.2	15.1	-39.61	248.8	-565.6	293.5	270.9	22.66	12.953			
4,700.0	4,680.2	4,683.9	4,639.5	12.5	15.5	-39.79	255.0	-579.1	299.1	275.9	23.20	12.890			
4,800.0	4,779.7	4,783.7	4,738.2	12.8	15.8	-39.95	261.3	-592.5	304.6	280.8	23.74	12.829			
4,900.0	4,879.1	4,883.6	4,836.9	13.1	16.2	-40.11	267.6	-606.0	310.1	285.8	24.28	12.771			
5,000.0	4,978.5	4,983.4	4,935.7	13.4	16.5	-40.26	273.8	-619.4	315.6	290.8	24.82	12.715			

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 34M-343
<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 34M-343	<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)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.0	5,078.0	5,083.3	5,034.4	13.7	16.9	-40.41	280.1	-632.9	321.1	295.7	25.36	12.661		
5,200.0	5,177.4	5,190.0	5,140.1	14.0	17.2	-40.62	286.4	-646.6	326.0	300.1	25.91	12.583		
5,218.4	5,195.7	5,210.5	5,160.5	14.1	17.3	-40.69	287.5	-648.9	326.6	300.6	26.01	12.556		
5,300.0	5,276.9	5,301.5	5,251.0	14.3	17.5	-40.99	291.4	-657.3	328.5	302.1	26.40	12.446		
5,400.0	5,376.8	5,413.2	5,362.4	14.5	17.7	-41.24	294.6	-664.2	330.1	303.3	26.79	12.323		
5,500.0	5,476.7	5,524.9	5,474.0	14.6	17.9	-41.34	296.0	-667.1	330.8	303.6	27.12	12.197		
5,523.3	5,500.0	5,550.9	5,500.0	14.7	17.9	-90.00	296.0	-667.2	330.8	303.6	27.19	12.167		
5,600.0	5,576.7	5,627.6	5,576.7	14.8	18.0	-90.00	296.0	-667.2	330.8	303.3	27.46	12.046		
5,700.0	5,676.7	5,727.6	5,676.7	15.0	18.2	-90.00	296.0	-667.2	330.8	303.0	27.84	11.883		
5,800.0	5,776.7	5,827.6	5,776.7	15.1	18.3	-90.00	296.0	-667.2	330.8	302.6	28.22	11.723		
5,900.0	5,876.7	5,927.6	5,876.7	15.3	18.5	-90.00	296.0	-667.2	330.8	302.2	28.60	11.566		
6,000.0	5,976.7	6,027.6	5,976.7	15.5	18.6	-90.00	296.0	-667.2	330.8	301.8	28.98	11.413		
6,100.0	6,076.7	6,127.6	6,076.7	15.7	18.8	-90.00	296.0	-667.2	330.8	301.4	29.37	11.263		
6,200.0	6,176.7	6,227.6	6,176.7	15.9	18.9	-90.00	296.0	-667.2	330.8	301.0	29.76	11.116		
6,300.0	6,276.7	6,327.6	6,276.7	16.1	19.1	-90.00	296.0	-667.2	330.8	300.6	30.15	10.972		
6,400.0	6,376.7	6,427.6	6,376.7	16.3	19.2	-90.00	296.0	-667.2	330.8	300.3	30.54	10.832		
6,500.0	6,476.7	6,527.6	6,476.7	16.5	19.4	-90.00	296.0	-667.2	330.8	299.9	30.93	10.694		
6,564.6	6,541.3	6,592.2	6,541.3	16.6	19.5	-90.00	296.0	-667.2	330.8	299.6	31.19	10.607		
6,570.9	6,547.6	6,598.4	6,547.6	16.6	19.5	90.00	296.0	-667.2	330.8	299.6	31.21	10.599		
6,600.0	6,576.7	6,627.6	6,576.7	16.6	19.6	90.14	296.0	-667.2	330.8	299.5	31.30	10.568		
6,650.0	6,626.5	6,677.6	6,626.7	16.7	19.6	90.74	295.5	-667.2	330.8	299.4	31.39	10.538		
6,700.0	6,676.0	6,727.8	6,676.8	16.7	19.7	91.41	292.1	-667.2	330.9	299.5	31.44	10.524		
6,750.0	6,724.9	6,778.3	6,726.9	16.8	19.7	92.07	285.4	-667.2	331.0	299.6	31.46	10.523		
6,800.0	6,773.0	6,829.1	6,776.6	16.8	19.8	92.72	275.3	-667.2	331.2	299.7	31.45	10.531		
6,850.0	6,820.1	6,880.2	6,825.9	16.8	19.8	93.36	261.9	-667.2	331.4	299.9	31.42	10.547		
6,900.0	6,866.0	6,931.5	6,874.3	16.8	19.8	93.98	245.1	-667.2	331.6	300.2	31.38	10.568		
6,950.0	6,910.6	6,983.0	6,921.8	16.8	19.8	94.59	225.0	-667.2	331.9	300.5	31.33	10.591		
7,000.0	6,953.5	7,034.8	6,968.0	16.8	19.8	95.18	201.6	-667.2	332.2	300.9	31.30	10.614		
7,050.0	6,994.7	7,086.9	7,012.7	16.8	19.8	95.75	175.0	-667.2	332.5	301.2	31.27	10.632		
7,100.0	7,034.0	7,139.2	7,055.8	16.7	19.7	96.30	145.3	-667.2	332.8	301.5	31.27	10.643		
7,150.0	7,071.1	7,191.7	7,096.8	16.7	19.7	96.81	112.6	-667.2	333.1	301.8	31.30	10.642		
7,200.0	7,106.0	7,244.4	7,135.7	16.7	19.7	97.30	76.9	-667.2	333.5	302.1	31.38	10.628		
7,250.0	7,138.4	7,297.4	7,172.1	16.7	19.7	97.75	38.5	-667.2	333.8	302.3	31.51	10.595		
7,300.0	7,168.3	7,350.6	7,206.0	16.7	19.7	98.17	-2.5	-667.2	334.2	302.5	31.70	10.542		
7,350.0	7,195.5	7,403.9	7,237.0	16.8	19.7	98.55	-45.9	-667.2	334.5	302.6	31.96	10.466		
7,400.0	7,219.9	7,457.4	7,265.0	16.8	19.8	98.89	-91.5	-667.2	334.8	302.5	32.30	10.367		
7,450.0	7,241.4	7,511.1	7,289.7	17.0	19.8	99.19	-139.1	-667.2	335.1	302.4	32.71	10.243		
7,500.0	7,259.9	7,564.9	7,311.2	17.2	20.0	99.45	-188.4	-667.2	335.3	302.1	33.21	10.097		
7,550.0	7,275.3	7,618.8	7,329.1	17.5	20.1	99.67	-239.3	-667.2	335.6	301.8	33.80	9.928		
7,600.0	7,287.6	7,672.8	7,343.4	17.8	20.3	99.84	-291.3	-667.2	335.7	301.3	34.47	9.740		
7,650.0	7,296.7	7,726.9	7,354.1	18.2	20.6	99.97	-344.3	-667.2	335.9	300.6	35.22	9.537		
7,700.0	7,302.5	7,780.3	7,360.9	18.7	20.9	100.06	-397.3	-667.2	336.0	299.9	36.04	9.323		
7,750.0	7,305.1	7,830.2	7,366.1	19.2	21.3	100.47	-446.9	-667.2	336.4	299.6	36.85	9.130		
7,774.2	7,305.2	7,854.9	7,368.7	19.4	21.5	100.85	-471.4	-667.2	336.9	299.6	37.23	9.047		
7,800.0	7,304.9	7,882.1	7,371.0	19.7	21.7	101.28	-498.5	-667.2	337.4	299.7	37.70	8.948		
7,900.0	7,303.6	7,987.0	7,374.0	20.8	22.7	102.00	-603.4	-667.2	338.2	298.4	39.81	8.495		
8,000.0	7,302.4	8,087.0	7,373.8	22.1	23.8	102.19	-703.4	-667.2	338.4	296.2	42.17	8.025		
8,100.0	7,301.1	8,187.0	7,373.7	23.4	25.0	102.38	-803.4	-667.2	338.7	293.9	44.72	7.573		
8,200.0	7,299.9	8,287.0	7,373.6	24.8	26.3	102.57	-903.4	-667.2	338.9	291.5	47.42	7.147		
8,300.0	7,298.6	8,387.0	7,373.5	26.3	27.7	102.76	-1,003.4	-667.2	339.2	288.9	50.26	6.749		
8,400.0	7,297.4	8,486.9	7,373.4	27.8	29.2	102.95	-1,103.3	-667.2	339.4	286.2	53.20	6.381		

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 34M-343
<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 34M-343	<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
8,500.0	7,296.1	8,586.9	7,373.3	29.4	30.7	103.14	-1,203.3	-667.2	339.7	283.5	56.22	6.042	
8,600.0	7,294.8	8,686.9	7,373.2	31.0	32.2	103.33	-1,303.3	-667.2	340.0	280.6	59.33	5.730	
8,700.0	7,293.6	8,786.9	7,373.1	32.6	33.8	103.52	-1,403.3	-667.2	340.2	277.7	62.50	5.444	
8,800.0	7,292.3	8,886.9	7,373.0	34.3	35.4	103.71	-1,503.3	-667.2	340.5	274.8	65.72	5.181	
8,900.0	7,291.1	8,986.9	7,372.9	36.0	37.0	103.90	-1,603.3	-667.2	340.8	271.8	68.98	4.940	
9,000.0	7,289.8	9,086.9	7,372.8	37.7	38.7	104.09	-1,703.3	-667.2	341.1	268.8	72.28	4.718	
9,100.0	7,288.6	9,186.9	7,372.7	39.4	40.4	104.27	-1,803.3	-667.2	341.3	265.7	75.61	4.514	
9,200.0	7,287.3	9,286.9	7,372.6	41.2	42.1	104.46	-1,903.3	-667.2	341.6	262.7	78.97	4.326	
9,300.0	7,286.0	9,386.9	7,372.5	42.9	43.8	104.65	-2,003.3	-667.2	341.9	259.6	82.36	4.152	
9,400.0	7,284.8	9,486.9	7,372.4	44.7	45.6	104.84	-2,103.3	-667.2	342.2	256.5	85.76	3.991	
9,500.0	7,283.5	9,586.9	7,372.3	46.5	47.3	105.02	-2,203.3	-667.2	342.5	253.3	89.17	3.841	
9,600.0	7,282.3	9,686.9	7,372.2	48.3	49.1	105.21	-2,303.3	-667.2	342.8	250.2	92.60	3.702	
9,700.0	7,281.0	9,786.9	7,372.1	50.1	50.9	105.39	-2,403.3	-667.2	343.1	247.1	96.05	3.572	
9,800.0	7,279.8	9,886.9	7,372.0	51.9	52.7	105.58	-2,503.3	-667.2	343.4	243.9	99.50	3.452	
9,900.0	7,278.5	9,986.8	7,371.9	53.8	54.5	105.77	-2,603.2	-667.2	343.7	240.8	102.96	3.339	
10,000.0	7,277.3	10,086.8	7,371.8	55.6	56.3	105.95	-2,703.2	-667.2	344.1	237.6	106.42	3.233	
10,100.0	7,276.0	10,186.8	7,371.7	57.4	58.1	106.14	-2,803.2	-667.2	344.4	234.5	109.89	3.134	
10,200.0	7,274.7	10,286.8	7,371.6	59.3	59.9	106.32	-2,903.2	-667.2	344.7	231.3	113.37	3.041	
10,300.0	7,273.5	10,386.8	7,371.5	61.1	61.8	106.50	-3,003.2	-667.2	345.0	228.2	116.84	2.953	
10,400.0	7,272.2	10,486.8	7,371.4	63.0	63.6	106.69	-3,103.2	-667.2	345.4	225.0	120.32	2.870	
10,500.0	7,271.0	10,586.8	7,371.3	64.8	65.4	106.87	-3,203.2	-667.2	345.7	221.9	123.80	2.792	
10,600.0	7,269.7	10,686.8	7,371.2	66.7	67.3	107.05	-3,303.2	-667.2	346.0	218.7	127.28	2.719	
10,700.0	7,268.5	10,786.8	7,371.1	68.6	69.1	107.24	-3,403.2	-667.2	346.4	215.6	130.76	2.649	
10,800.0	7,267.2	10,886.8	7,371.0	70.4	71.0	107.42	-3,503.2	-667.2	346.7	212.5	134.24	2.583	
10,900.0	7,265.9	10,986.8	7,370.9	72.3	72.8	107.60	-3,603.2	-667.2	347.1	209.3	137.72	2.520	
11,000.0	7,264.7	11,086.8	7,370.8	74.2	74.7	107.78	-3,703.2	-667.2	347.4	206.2	141.19	2.461	
11,100.0	7,263.4	11,186.8	7,370.7	76.0	76.5	107.96	-3,803.2	-667.2	347.8	203.1	144.67	2.404	
11,200.0	7,262.2	11,286.8	7,370.6	77.9	78.4	108.14	-3,903.2	-667.2	348.1	200.0	148.14	2.350	
11,300.0	7,260.9	11,386.8	7,370.5	79.8	80.3	108.32	-4,003.2	-667.2	348.5	196.9	151.60	2.299	
11,400.0	7,259.7	11,486.7	7,370.4	81.7	82.1	108.50	-4,103.1	-667.2	348.9	193.8	155.07	2.250	
11,500.0	7,258.4	11,586.7	7,370.3	83.6	84.0	108.68	-4,203.1	-667.2	349.2	190.7	158.53	2.203	
11,600.0	7,257.1	11,686.7	7,370.2	85.4	85.9	108.86	-4,303.1	-667.2	349.6	187.6	161.98	2.158	
11,700.0	7,255.9	11,786.7	7,370.1	87.3	87.8	109.04	-4,403.1	-667.2	350.0	184.5	165.43	2.115	
11,770.8	7,255.0	11,857.5	7,370.0	88.7	89.1	109.17	-4,473.9	-667.2	350.2	182.4	167.88	2.086 SF	

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Anderson 34M-343
<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 34M-343	<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-403 - 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)	Offset Wellbore Centre +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	89.98	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	
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	89.98	0.0	30.6	30.6	29.5	1.12	27.206	
400.0	400.0	400.0	400.0	0.8	0.8	89.98	0.0	30.6	30.6	29.0	1.57	19.433	
500.0	500.0	500.0	500.0	1.0	1.0	89.98	0.0	30.6	30.6	28.6	2.02	15.114	
600.0	600.0	600.0	600.0	1.2	1.2	89.98	0.0	30.6	30.6	28.1	2.47	12.366	
700.0	700.0	700.0	700.0	1.5	1.5	89.98	0.0	30.6	30.6	27.7	2.92	10.464	
800.0	800.0	800.0	800.0	1.7	1.7	89.98	0.0	30.6	30.6	27.2	3.37	9.069	
900.0	900.0	900.0	900.0	1.9	1.9	89.98	0.0	30.6	30.6	26.8	3.82	8.002	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	89.98	0.0	30.6	30.6	26.3	4.27	7.159 CC, ES	
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	140.69	0.0	30.6	31.9	27.2	4.71	6.768	
1,200.0	1,199.8	1,199.8	1,199.8	2.6	2.6	145.91	0.0	30.6	36.1	31.0	5.15	7.008	
1,304.8	1,304.3	1,304.3	1,304.3	2.8	2.8	152.57	0.0	30.6	44.1	38.5	5.61	7.856	
1,400.0	1,398.9	1,398.9	1,398.9	3.1	3.0	157.58	0.0	30.6	53.2	47.2	6.03	8.831	
1,500.0	1,498.3	1,498.3	1,498.3	3.3	3.3	161.26	0.0	30.6	63.2	56.7	6.47	9.762	
1,600.0	1,597.8	1,597.8	1,597.8	3.6	3.5	163.92	0.0	30.6	73.3	66.4	6.92	10.597	
1,700.0	1,697.2	1,697.2	1,697.2	3.8	3.7	165.94	0.0	30.6	83.6	76.2	7.37	11.345	
1,800.0	1,796.6	1,796.6	1,796.6	4.1	3.9	167.51	0.0	30.6	93.9	86.1	7.82	12.015	
1,900.0	1,896.1	1,896.1	1,896.1	4.4	4.1	168.77	0.0	30.6	104.3	96.1	8.27	12.618	
2,000.0	1,995.5	1,995.5	1,995.5	4.6	4.4	169.81	0.0	30.6	114.8	106.1	8.72	13.161	
2,100.0	2,094.9	2,097.6	2,097.6	4.9	4.6	170.09	1.7	30.4	124.2	115.0	9.18	13.535	
2,200.0	2,194.4	2,200.2	2,200.0	5.2	4.8	169.10	6.9	29.7	131.5	121.8	9.64	13.641	
2,300.0	2,293.8	2,301.7	2,301.2	5.5	5.1	167.10	15.5	28.5	136.7	126.6	10.10	13.540	
2,400.0	2,393.2	2,401.5	2,400.5	5.8	5.3	165.06	24.6	27.3	141.8	131.2	10.57	13.420	
2,500.0	2,492.7	2,501.2	2,499.8	6.1	5.5	163.15	33.7	26.2	147.0	136.0	11.04	13.318	
2,600.0	2,592.1	2,601.0	2,599.2	6.4	5.8	161.38	42.7	25.0	152.4	140.9	11.52	13.231	
2,700.0	2,691.5	2,700.7	2,698.5	6.6	6.0	159.73	51.8	23.8	157.9	145.9	12.00	13.155	
2,800.0	2,791.0	2,800.5	2,797.8	6.9	6.2	158.19	60.9	22.6	163.5	151.0	12.49	13.088	
2,900.0	2,890.4	2,900.2	2,897.1	7.2	6.5	156.76	70.0	21.4	169.3	156.3	12.99	13.030	
3,000.0	2,989.8	3,000.0	2,996.5	7.5	6.7	155.42	79.1	20.2	175.1	161.6	13.49	12.979	
3,100.0	3,089.3	3,099.7	3,095.8	7.8	7.0	154.17	88.2	19.0	181.0	167.0	14.00	12.934	
3,200.0	3,188.7	3,199.5	3,195.1	8.1	7.2	153.00	97.3	17.8	187.0	172.5	14.51	12.894	
3,300.0	3,288.1	3,299.2	3,294.5	8.4	7.5	151.90	106.3	16.6	193.1	178.1	15.02	12.858	
3,400.0	3,387.6	3,399.0	3,393.8	8.7	7.8	150.86	115.4	15.4	199.3	183.7	15.54	12.826	
3,500.0	3,487.0	3,498.7	3,493.1	9.0	8.0	149.89	124.5	14.2	205.5	189.4	16.06	12.797	
3,600.0	3,586.4	3,598.4	3,592.4	9.3	8.3	148.98	133.6	13.0	211.7	195.2	16.58	12.772	
3,700.0	3,685.9	3,698.2	3,691.8	9.6	8.5	148.12	142.7	11.8	218.1	201.0	17.10	12.749	
3,800.0	3,785.3	3,797.9	3,791.1	9.9	8.8	147.31	151.8	10.6	224.4	206.8	17.63	12.728	
3,900.0	3,884.7	3,897.7	3,890.4	10.2	9.1	146.54	160.9	9.4	230.8	212.7	18.16	12.709	
4,000.0	3,984.2	3,997.4	3,989.7	10.5	9.3	145.82	169.9	8.2	237.3	218.6	18.69	12.692	
4,100.0	4,083.6	4,097.2	4,089.1	10.7	9.6	145.13	179.0	7.0	243.7	224.5	19.23	12.677	
4,200.0	4,183.0	4,196.9	4,188.4	11.0	9.9	144.48	188.1	5.9	250.3	230.5	19.76	12.663	
4,300.0	4,282.5	4,296.7	4,287.7	11.3	10.1	143.86	197.2	4.7	256.8	236.5	20.30	12.650	
4,400.0	4,381.9	4,396.4	4,387.0	11.6	10.4	143.27	206.3	3.5	263.4	242.5	20.84	12.639	
4,500.0	4,481.4	4,496.2	4,486.4	11.9	10.7	142.72	215.4	2.3	270.0	248.6	21.38	12.628	
4,600.0	4,580.8	4,595.9	4,585.7	12.2	10.9	142.18	224.4	1.1	276.6	254.7	21.92	12.619	
4,700.0	4,680.2	4,695.7	4,685.0	12.5	11.2	141.68	233.5	-0.1	283.2	260.8	22.46	12.610	
4,800.0	4,779.7	4,795.4	4,784.4	12.8	11.5	141.19	242.6	-1.3	289.9	266.9	23.00	12.602	
4,900.0	4,879.1	4,895.2	4,883.7	13.1	11.7	140.73	251.7	-2.5	296.6	273.0	23.55	12.595	
5,000.0	4,978.5	4,994.9	4,983.0	13.4	12.0	140.29	260.8	-3.7	303.3	279.2	24.09	12.589	

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 34M-343
<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 34M-343	<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-403 - 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	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	5,078.0	5,094.7	5,082.3	13.7	12.3	139.87		269.9	-4.9	310.0	285.4	24.64	12.583	
5,200.0	5,177.4	5,194.4	5,181.7	14.0	12.5	139.46		279.0	-6.1	316.7	291.6	25.18	12.578	
5,218.4	5,195.7	5,212.8	5,200.0	14.1	12.6	139.39		280.6	-6.3	318.0	292.7	25.28	12.577	
5,300.0	5,276.9	5,293.5	5,280.4	14.3	12.8	139.06		287.6	-7.2	322.7	297.0	25.70	12.553	
5,400.0	5,376.8	5,391.9	5,378.6	14.5	13.0	138.78		293.5	-8.0	326.4	300.3	26.10	12.504	
5,500.0	5,476.7	5,490.4	5,477.1	14.6	13.2	138.66		295.9	-8.3	328.0	301.6	26.45	12.403	
5,523.3	5,500.0	5,513.4	5,500.0	14.7	13.2	90.00		296.0	-8.3	328.1	301.5	26.52	12.371	
5,600.0	5,576.7	5,590.1	5,576.7	14.8	13.3	90.00		296.0	-8.3	328.1	301.3	26.80	12.243	
5,700.0	5,676.7	5,690.1	5,676.7	15.0	13.5	90.00		296.0	-8.3	328.1	300.9	27.19	12.064	
5,800.0	5,776.7	5,790.1	5,776.7	15.1	13.7	90.00		296.0	-8.3	328.1	300.5	27.59	11.889	
5,900.0	5,876.7	5,890.1	5,876.7	15.3	13.9	90.00		296.0	-8.3	328.1	300.1	28.00	11.718	
6,000.0	5,976.7	5,990.1	5,976.7	15.5	14.2	90.00		296.0	-8.3	328.1	299.7	28.40	11.551	
6,100.0	6,076.7	6,090.1	6,076.7	15.7	14.4	90.00		296.0	-8.3	328.1	299.3	28.81	11.388	
6,200.0	6,176.7	6,190.1	6,176.7	15.9	14.6	90.00		296.0	-8.3	328.1	298.8	29.21	11.230	
6,300.0	6,276.7	6,290.1	6,276.7	16.1	14.8	90.00		296.0	-8.3	328.1	298.4	29.62	11.075	
6,400.0	6,376.7	6,390.1	6,376.7	16.3	15.0	90.00		296.0	-8.3	328.1	298.0	30.03	10.924	
6,500.0	6,476.7	6,490.1	6,476.7	16.5	15.2	90.00		296.0	-8.3	328.1	297.6	30.44	10.777	
6,564.6	6,541.3	6,554.7	6,541.3	16.6	15.3	90.00		296.0	-8.3	328.1	297.4	30.71	10.684	
6,570.6	6,547.3	6,560.7	6,547.3	16.6	15.3	-90.01		296.0	-8.3	328.1	297.3	30.73	10.676	
6,600.0	6,576.7	6,590.1	6,576.7	16.6	15.4	-90.14		296.0	-8.3	328.1	297.2	30.85	10.635	
6,650.0	6,626.5	6,639.9	6,626.5	16.7	15.5	-90.83		296.0	-8.3	328.1	297.1	31.04	10.571	
6,700.0	6,676.0	6,689.4	6,676.0	16.7	15.6	-92.06		296.0	-8.3	328.3	297.0	31.23	10.512	
6,750.0	6,724.9	6,738.3	6,724.9	16.8	15.7	-93.79		296.0	-8.3	328.8	297.4	31.42	10.467	
6,800.0	6,773.0	6,786.4	6,773.0	16.8	15.8	-95.97		296.0	-8.3	330.0	298.4	31.59	10.447	
6,850.0	6,820.1	6,833.5	6,820.1	16.8	15.9	-98.51		296.0	-8.3	332.3	300.5	31.74	10.468	
6,900.0	6,866.0	6,879.4	6,866.0	16.8	16.0	-101.30		296.0	-8.3	336.0	304.1	31.85	10.548	
6,950.0	6,910.6	6,923.9	6,910.6	16.8	16.1	-104.25		296.0	-8.3	341.6	309.7	31.90	10.707	
7,000.0	6,953.5	6,966.9	6,953.5	16.8	16.2	-107.22		296.0	-8.3	349.6	317.7	31.88	10.964	
7,050.0	6,994.7	7,008.1	6,994.7	16.8	16.3	-110.09		296.0	-8.3	360.3	328.6	31.79	11.335	
7,100.0	7,034.0	7,047.3	7,034.0	16.7	16.4	-112.76		296.0	-8.3	374.2	342.6	31.63	11.832	
7,150.0	7,071.1	7,084.5	7,071.1	16.7	16.4	-115.12		296.0	-8.3	391.4	360.0	31.41	12.461	
7,200.0	7,106.0	7,122.1	7,108.7	16.7	16.5	-117.39		296.0	-8.3	412.0	380.9	31.14	13.230	
7,250.0	7,138.4	7,174.7	7,161.2	16.7	16.6	-120.81		293.6	-8.3	435.1	404.4	30.70	14.175	
7,300.0	7,168.3	7,231.8	7,217.9	16.7	16.7	-124.16		286.9	-8.3	459.8	429.7	30.14	15.256	
7,350.0	7,195.5	7,294.6	7,279.6	16.8	16.7	-127.50		274.7	-8.3	485.6	456.1	29.48	16.470	
7,400.0	7,219.9	7,364.7	7,346.8	16.8	16.7	-130.85		255.1	-8.3	512.1	483.3	28.74	17.818	
7,450.0	7,241.4	7,444.0	7,420.5	17.0	16.7	-134.23		225.6	-8.3	538.6	510.6	27.92	19.291	
7,500.0	7,259.9	7,535.2	7,500.8	17.2	16.7	-137.61		182.6	-8.3	564.5	537.4	27.06	20.862	
7,550.0	7,275.3	7,641.4	7,587.0	17.5	16.8	-140.92		120.8	-8.3	588.9	562.7	26.22	22.459	
7,600.0	7,287.6	7,765.9	7,676.1	17.8	16.9	-144.02		34.0	-8.3	610.9	585.4	25.53	23.930	
7,650.0	7,296.7	7,911.4	7,760.7	18.2	17.2	-146.68		-84.1	-8.3	629.0	603.9	25.15	25.014	
7,700.0	7,302.5	8,077.7	7,828.0	18.7	18.0	-148.61		-235.8	-8.3	641.7	616.4	25.30	25.370	
7,750.0	7,305.1	8,240.5	7,860.7	19.2	19.2	-149.48		-394.9	-8.3	647.8	621.7	26.08	24.838	
7,774.2	7,305.2	8,264.6	7,863.2	19.4	19.5	-149.51		-418.9	-8.3	649.9	623.5	26.41	24.610	
7,800.0	7,304.9	8,290.2	7,865.9	19.7	19.7	-149.65		-444.4	-8.3	652.5	625.9	26.67	24.468	
7,900.0	7,303.6	8,471.1	7,873.1	20.8	21.6	-150.07		-624.9	-8.3	657.6	629.3	28.31	23.227	
8,000.0	7,302.4	8,623.7	7,858.1	22.1	23.5	-149.49		-776.8	-8.3	649.5	619.1	30.37	21.388	
8,100.0	7,301.1	8,723.0	7,845.1	23.4	24.9	-148.95		-875.2	-8.3	639.3	607.1	32.18	19.869	
8,200.0	7,299.9	8,822.3	7,832.1	24.8	26.3	-148.39		-973.6	-8.3	629.2	595.1	34.11	18.445	
8,300.0	7,298.6	8,921.6	7,819.1	26.3	27.8	-147.82		-1,072.1	-8.3	619.1	582.9	36.17	17.117	
8,400.0	7,297.4	9,020.9	7,806.1	27.8	29.3	-147.23		-1,170.5	-8.3	609.1	570.7	38.34	15.887	

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 34M-343
<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 34M-343	<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-403 - 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	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
8,500.0	7,296.1	9,120.2	7,793.1	29.4	30.8	-146.61	-1,268.9	-8.3	599.1	558.5	40.62	14.750		
8,600.0	7,294.8	9,219.5	7,780.1	31.0	32.4	-145.98	-1,367.4	-8.3	589.2	546.2	43.00	13.702		
8,700.0	7,293.6	9,318.8	7,767.1	32.6	34.0	-145.33	-1,465.8	-8.3	579.4	533.9	45.49	12.738		
8,800.0	7,292.3	9,418.0	7,754.0	34.3	35.7	-144.65	-1,564.3	-8.3	569.7	521.6	48.08	11.850		
8,900.0	7,291.1	9,517.3	7,741.0	36.0	37.4	-143.95	-1,662.7	-8.3	560.0	509.3	50.76	11.032		
9,000.0	7,289.8	9,616.6	7,728.0	37.7	39.1	-143.22	-1,761.1	-8.3	550.5	496.9	53.55	10.280		
9,100.0	7,288.6	9,715.9	7,715.0	39.4	40.8	-142.47	-1,859.6	-8.3	541.0	484.6	56.43	9.586		
9,200.0	7,287.3	9,815.2	7,702.0	41.2	42.5	-141.70	-1,958.0	-8.3	531.6	472.2	59.41	8.947		
9,300.0	7,286.0	9,914.5	7,689.0	42.9	44.3	-140.89	-2,056.5	-8.3	522.3	459.8	62.50	8.358		
9,400.0	7,284.8	10,013.8	7,676.0	44.7	46.0	-140.06	-2,154.9	-8.3	513.2	447.5	65.68	7.813		
9,500.0	7,283.5	10,113.1	7,663.0	46.5	47.8	-139.20	-2,253.3	-8.3	504.1	435.1	68.97	7.309		
9,600.0	7,282.3	10,212.4	7,650.0	48.3	49.5	-138.31	-2,351.8	-8.3	495.2	422.8	72.36	6.843		
9,700.0	7,281.0	10,311.7	7,637.0	50.1	51.3	-137.38	-2,450.2	-8.3	486.3	410.5	75.85	6.412		
9,800.0	7,279.8	10,411.0	7,624.0	51.9	53.1	-136.42	-2,548.6	-8.3	477.7	398.2	79.45	6.012		
9,900.0	7,278.5	10,510.3	7,610.9	53.8	54.9	-135.43	-2,647.1	-8.3	469.1	385.9	83.16	5.641		
10,000.0	7,277.3	10,609.6	7,597.9	55.6	56.7	-134.39	-2,745.5	-8.3	460.7	373.7	86.97	5.297		
10,100.0	7,276.0	10,708.9	7,584.9	57.4	58.5	-133.33	-2,844.0	-8.3	452.5	361.6	90.90	4.978		
10,200.0	7,274.7	10,808.2	7,571.9	59.3	60.3	-132.22	-2,942.4	-8.3	444.4	349.4	94.93	4.681		
10,300.0	7,273.5	10,907.5	7,558.9	61.1	62.2	-131.07	-3,040.8	-8.3	436.5	337.4	99.07	4.406		
10,400.0	7,272.2	11,006.8	7,545.9	63.0	64.0	-129.88	-3,139.3	-8.3	428.7	325.4	103.32	4.149		
10,500.0	7,271.0	11,106.1	7,532.9	64.8	65.8	-128.65	-3,237.7	-8.3	421.2	313.5	107.68	3.911		
10,600.0	7,269.7	11,205.4	7,519.9	66.7	67.6	-127.37	-3,336.2	-8.3	413.9	301.7	112.15	3.690		
10,700.0	7,268.5	11,304.6	7,506.9	68.6	69.5	-126.05	-3,434.6	-8.3	406.7	290.0	116.72	3.485		
10,800.0	7,267.2	11,403.9	7,493.9	70.4	71.3	-124.68	-3,533.0	-8.3	399.9	278.5	121.38	3.294		
10,900.0	7,265.9	11,503.2	7,480.8	72.3	73.1	-123.27	-3,631.5	-8.3	393.2	267.1	126.14	3.117		
11,000.0	7,264.7	11,602.5	7,467.8	74.2	75.0	-121.81	-3,729.9	-8.3	386.8	255.8	130.98	2.953		
11,100.0	7,263.4	11,701.8	7,454.8	76.0	76.8	-120.30	-3,828.4	-8.3	380.6	244.7	135.91	2.801		
11,200.0	7,262.2	11,801.1	7,441.8	77.9	78.7	-118.74	-3,926.8	-8.3	374.8	233.9	140.90	2.660		
11,300.0	7,260.9	11,900.4	7,428.8	79.8	80.5	-117.14	-4,025.2	-8.3	369.2	223.2	145.94	2.530		
11,400.0	7,259.7	11,999.7	7,415.8	81.7	82.4	-115.49	-4,123.7	-8.3	363.9	212.9	151.03	2.409		
11,500.0	7,258.4	12,099.0	7,402.8	83.6	84.2	-113.79	-4,222.1	-8.3	358.9	202.8	156.15	2.298		
11,600.0	7,257.1	12,198.3	7,389.8	85.4	86.1	-112.05	-4,320.5	-8.3	354.3	193.0	161.28	2.197		
11,700.0	7,255.9	12,297.6	7,376.8	87.3	87.9	-110.26	-4,419.0	-8.3	350.0	183.6	166.41	2.103		
11,765.7	7,255.1	12,349.2	7,370.0	88.6	88.9	-109.31	-4,470.2	-8.3	347.6	178.3	169.32	2.053		
11,770.8	7,255.0	12,349.2	7,370.0	88.7	88.9	-109.31	-4,470.2	-8.3	347.6	178.2	169.41	2.052 SF		

Reference Depths are relative to WELL @ 4930.0ft (Original Well Elev) Coordinates are relative to: Anderson 34M-343  
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone  
Central Meridian is -105.500000 ° Grid Convergence at Surface is: 0.47°



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Anderson 34M-343
<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 34M-343	<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

Reference Depths are relative to WELL @ 4930.0ft (Original Well Elev) Coordinates are relative to: Anderson 34M-343  
Offset Depths are relative to Offset Datum  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Central Meridian is -105.500000 °  
Grid Convergence at Surface is: 0.47°

