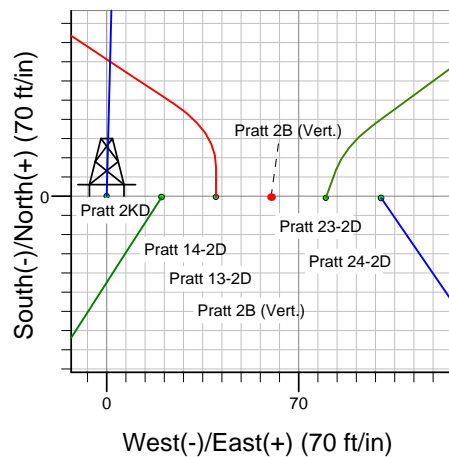
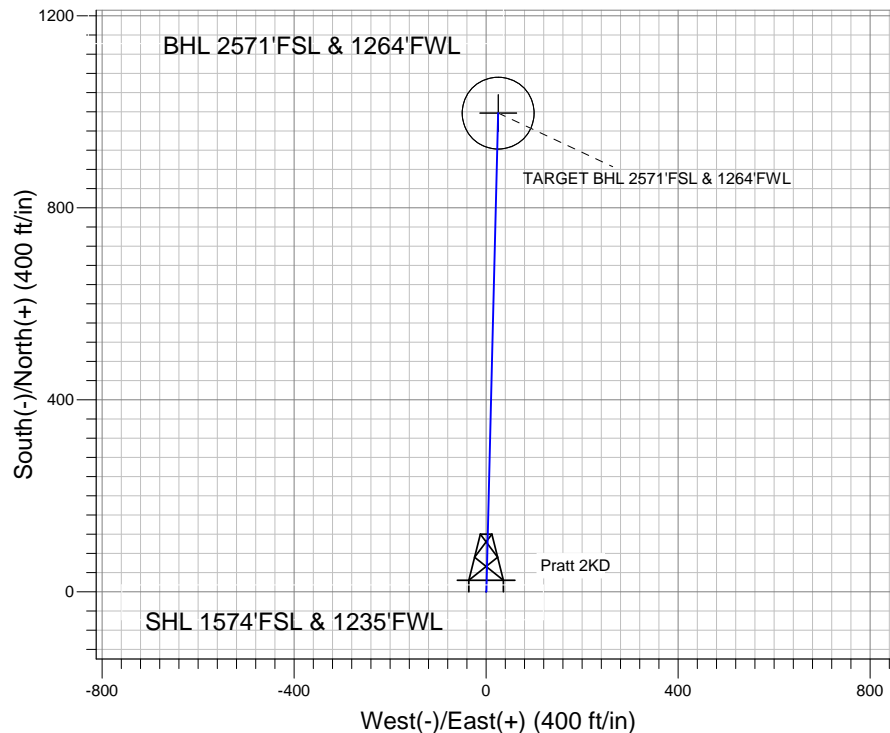
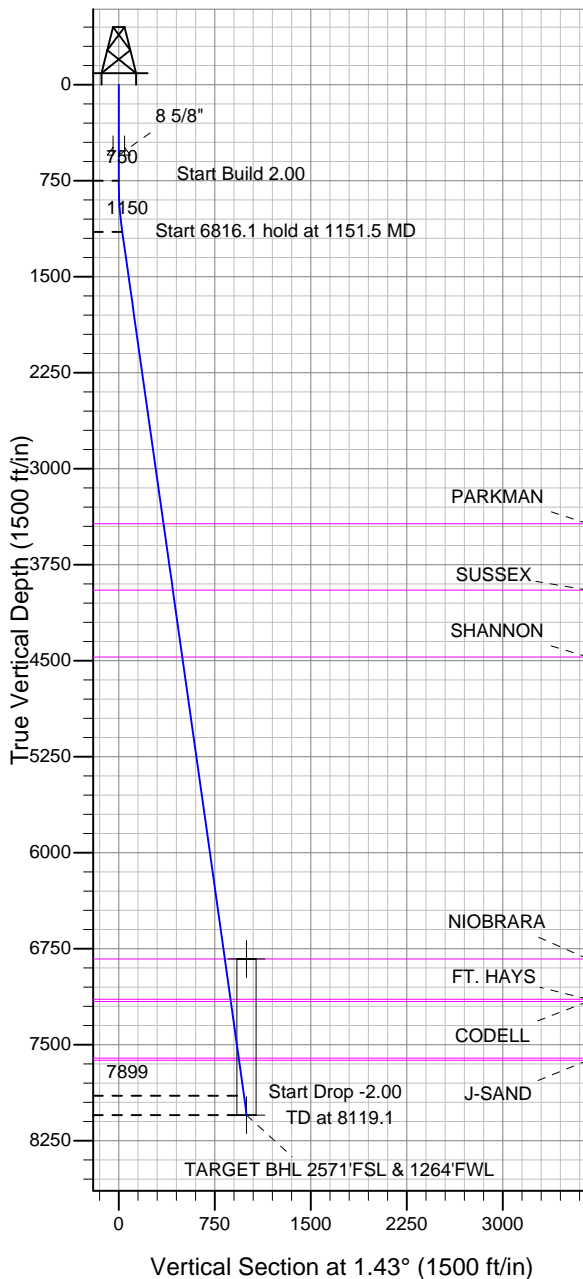


### Well Name: Pratt 2KD

Surface Location: Pratt 14-2D Pad Sec.2-T4N-R68W  
 North American Datum 1983 US State Plane 1983 Colorado Northern Zone  
 Ground Elevation: 5002.0  
 +N/-S +E/-W Northing Easting Latitude Longitude Slot  
 0.0 0.0 1367080.67 3146241.72 40.339850 -104.975377  
 Original Well Elev WELL @ 5015.0ft (Original Well Elev)

### Synergy Resources



Pratt 14-2D Pad Sec.2-T4N-R68W  
 Pratt 2KD  
 Plan #1 (11-12-12)



Azimuths to True North  
 Magnetic North: 8.78°

Magnetic Field  
 Strength: 52926.7nT  
 Dip Angle: 66.92°  
 Date: 11/13/2012  
 Model: IGRF2010

### WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET CIRCLE 2571' FSL & 1264' FWL	6831.0	997.1	24.8	40.342587	-104.975288	Circle (Radius: 75.0)
TARGET BHL 2571' FSL & 1264' FWL	8050.0	997.1	24.8	40.342587	-104.975288	Point

### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	750.0	0.00	0.00	750.0	0.0	0.0	0.00	0.00	0.0	
3	1151.5	8.03	1.43	1150.2	28.1	0.7	2.00	1.43	28.1	
4	7967.6	8.03	1.43	7899.5	979.9	24.4	0.00	0.00	980.2	
5	8119.1	5.00	1.43	8050.0	997.1	24.8	2.00	180.00	997.4	TARGET BHL 2571' FSL & 1264' FWL



## **Directional**

### **Synergy Resources**

**SEC.2-T4N-R68W**

**Pratt 14-2D Pad Sec.2-T4N-R68W**

**Pratt 2KD**

**Wellbore #1**

**Plan: Plan #1 (11-12-12)**

### **Standard Planning Report**

**13 November, 2012**

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
750.0	0.00	0.00	750.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,151.5	8.03	1.43	1,150.2	28.1	0.7	2.00	2.00	0.00	1.43	
7,967.6	8.03	1.43	7,899.5	979.9	24.4	0.00	0.00	0.00	0.00	
8,119.1	5.00	1.43	8,050.0	997.1	24.8	2.00	-2.00	0.00	180.00	TARGET BHL 2571

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Pratt 2KD
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 5015.0ft (Original Well Elev)
<b>Project:</b>	SEC.2-T4N-R68W	<b>MD Reference:</b>	WELL @ 5015.0ft (Original Well Elev)
<b>Site:</b>	Pratt 14-2D Pad Sec.2-T4N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	Pratt 2KD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (11-12-12)		

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
550.0	0.00	0.00	550.0	0.0	0.0	0.0	0.00	0.00	0.00
8 5/8"									
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
750.0	0.00	0.00	750.0	0.0	0.0	0.0	0.00	0.00	0.00
760.0	0.20	1.43	760.0	0.0	0.0	0.0	2.00	2.00	0.00
800.0	1.00	1.43	800.0	0.4	0.0	0.4	2.00	2.00	0.00
840.0	1.80	1.43	840.0	1.4	0.0	1.4	2.00	2.00	0.00
880.0	2.60	1.43	880.0	2.9	0.1	2.9	2.00	2.00	0.00
920.0	3.40	1.43	919.9	5.0	0.1	5.0	2.00	2.00	0.00
960.0	4.20	1.43	959.8	7.7	0.2	7.7	2.00	2.00	0.00
1,000.0	5.00	1.43	999.7	10.9	0.3	10.9	2.00	2.00	0.00
1,040.0	5.80	1.43	1,039.5	14.7	0.4	14.7	2.00	2.00	0.00
1,080.0	6.60	1.43	1,079.3	19.0	0.5	19.0	2.00	2.00	0.00
1,120.0	7.40	1.43	1,119.0	23.9	0.6	23.9	2.00	2.00	0.00
1,151.5	8.03	1.43	1,150.2	28.1	0.7	28.1	2.00	2.00	0.00
1,160.0	8.03	1.43	1,158.6	29.3	0.7	29.3	0.00	0.00	0.00
1,200.0	8.03	1.43	1,198.2	34.9	0.9	34.9	0.00	0.00	0.00
1,240.0	8.03	1.43	1,237.8	40.4	1.0	40.5	0.00	0.00	0.00
1,280.0	8.03	1.43	1,277.4	46.0	1.1	46.0	0.00	0.00	0.00
1,320.0	8.03	1.43	1,317.0	51.6	1.3	51.6	0.00	0.00	0.00
1,360.0	8.03	1.43	1,356.6	57.2	1.4	57.2	0.00	0.00	0.00
1,400.0	8.03	1.43	1,396.3	62.8	1.6	62.8	0.00	0.00	0.00
1,440.0	8.03	1.43	1,435.9	68.4	1.7	68.4	0.00	0.00	0.00
1,480.0	8.03	1.43	1,475.5	74.0	1.8	74.0	0.00	0.00	0.00
1,520.0	8.03	1.43	1,515.1	79.5	2.0	79.6	0.00	0.00	0.00
1,560.0	8.03	1.43	1,554.7	85.1	2.1	85.2	0.00	0.00	0.00
1,600.0	8.03	1.43	1,594.3	90.7	2.3	90.7	0.00	0.00	0.00
1,640.0	8.03	1.43	1,633.9	96.3	2.4	96.3	0.00	0.00	0.00
1,680.0	8.03	1.43	1,673.5	101.9	2.5	101.9	0.00	0.00	0.00
1,720.0	8.03	1.43	1,713.1	107.5	2.7	107.5	0.00	0.00	0.00
1,760.0	8.03	1.43	1,752.7	113.1	2.8	113.1	0.00	0.00	0.00
1,800.0	8.03	1.43	1,792.3	118.6	3.0	118.7	0.00	0.00	0.00
1,840.0	8.03	1.43	1,831.9	124.2	3.1	124.3	0.00	0.00	0.00
1,880.0	8.03	1.43	1,871.5	129.8	3.2	129.9	0.00	0.00	0.00
1,920.0	8.03	1.43	1,911.2	135.4	3.4	135.4	0.00	0.00	0.00
1,960.0	8.03	1.43	1,950.8	141.0	3.5	141.0	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Pratt 2KD
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 5015.0ft (Original Well Elev)
<b>Project:</b>	SEC.2-T4N-R68W	<b>MD Reference:</b>	WELL @ 5015.0ft (Original Well Elev)
<b>Site:</b>	Pratt 14-2D Pad Sec.2-T4N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	Pratt 2KD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (11-12-12)		

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)
2,000.0	8.03	1.43	1,990.4	146.6	3.6	146.6	0.00	0.00	0.00
2,040.0	8.03	1.43	2,030.0	152.2	3.8	152.2	0.00	0.00	0.00
2,080.0	8.03	1.43	2,069.6	157.7	3.9	157.8	0.00	0.00	0.00
2,120.0	8.03	1.43	2,109.2	163.3	4.1	163.4	0.00	0.00	0.00
2,160.0	8.03	1.43	2,148.8	168.9	4.2	169.0	0.00	0.00	0.00
2,200.0	8.03	1.43	2,188.4	174.5	4.3	174.6	0.00	0.00	0.00
2,240.0	8.03	1.43	2,228.0	180.1	4.5	180.1	0.00	0.00	0.00
2,280.0	8.03	1.43	2,267.6	185.7	4.6	185.7	0.00	0.00	0.00
2,320.0	8.03	1.43	2,307.2	191.3	4.8	191.3	0.00	0.00	0.00
2,360.0	8.03	1.43	2,346.8	196.8	4.9	196.9	0.00	0.00	0.00
2,400.0	8.03	1.43	2,386.4	202.4	5.0	202.5	0.00	0.00	0.00
2,440.0	8.03	1.43	2,426.1	208.0	5.2	208.1	0.00	0.00	0.00
2,480.0	8.03	1.43	2,465.7	213.6	5.3	213.7	0.00	0.00	0.00
2,520.0	8.03	1.43	2,505.3	219.2	5.5	219.3	0.00	0.00	0.00
2,560.0	8.03	1.43	2,544.9	224.8	5.6	224.8	0.00	0.00	0.00
2,600.0	8.03	1.43	2,584.5	230.4	5.7	230.4	0.00	0.00	0.00
2,640.0	8.03	1.43	2,624.1	235.9	5.9	236.0	0.00	0.00	0.00
2,680.0	8.03	1.43	2,663.7	241.5	6.0	241.6	0.00	0.00	0.00
2,720.0	8.03	1.43	2,703.3	247.1	6.1	247.2	0.00	0.00	0.00
2,760.0	8.03	1.43	2,742.9	252.7	6.3	252.8	0.00	0.00	0.00
2,800.0	8.03	1.43	2,782.5	258.3	6.4	258.4	0.00	0.00	0.00
2,840.0	8.03	1.43	2,822.1	263.9	6.6	264.0	0.00	0.00	0.00
2,880.0	8.03	1.43	2,861.7	269.5	6.7	269.5	0.00	0.00	0.00
2,920.0	8.03	1.43	2,901.3	275.0	6.8	275.1	0.00	0.00	0.00
2,960.0	8.03	1.43	2,941.0	280.6	7.0	280.7	0.00	0.00	0.00
3,000.0	8.03	1.43	2,980.6	286.2	7.1	286.3	0.00	0.00	0.00
3,040.0	8.03	1.43	3,020.2	291.8	7.3	291.9	0.00	0.00	0.00
3,080.0	8.03	1.43	3,059.8	297.4	7.4	297.5	0.00	0.00	0.00
3,120.0	8.03	1.43	3,099.4	303.0	7.5	303.1	0.00	0.00	0.00
3,160.0	8.03	1.43	3,139.0	308.6	7.7	308.7	0.00	0.00	0.00
3,200.0	8.03	1.43	3,178.6	314.1	7.8	314.2	0.00	0.00	0.00
3,240.0	8.03	1.43	3,218.2	319.7	8.0	319.8	0.00	0.00	0.00
3,280.0	8.03	1.43	3,257.8	325.3	8.1	325.4	0.00	0.00	0.00
3,320.0	8.03	1.43	3,297.4	330.9	8.2	331.0	0.00	0.00	0.00
3,360.0	8.03	1.43	3,337.0	336.5	8.4	336.6	0.00	0.00	0.00
3,400.0	8.03	1.43	3,376.6	342.1	8.5	342.2	0.00	0.00	0.00
3,440.0	8.03	1.43	3,416.2	347.7	8.7	347.8	0.00	0.00	0.00
3,453.9	8.03	1.43	3,430.0	349.6	8.7	349.7	0.00	0.00	0.00
<b>PARKMAN</b>									
3,480.0	8.03	1.43	3,455.9	353.2	8.8	353.4	0.00	0.00	0.00
3,520.0	8.03	1.43	3,495.5	358.8	8.9	358.9	0.00	0.00	0.00
3,560.0	8.03	1.43	3,535.1	364.4	9.1	364.5	0.00	0.00	0.00
3,600.0	8.03	1.43	3,574.7	370.0	9.2	370.1	0.00	0.00	0.00
3,640.0	8.03	1.43	3,614.3	375.6	9.3	375.7	0.00	0.00	0.00
3,680.0	8.03	1.43	3,653.9	381.2	9.5	381.3	0.00	0.00	0.00
3,720.0	8.03	1.43	3,693.5	386.8	9.6	386.9	0.00	0.00	0.00
3,760.0	8.03	1.43	3,733.1	392.4	9.8	392.5	0.00	0.00	0.00
3,800.0	8.03	1.43	3,772.7	397.9	9.9	398.1	0.00	0.00	0.00
3,840.0	8.03	1.43	3,812.3	403.5	10.0	403.6	0.00	0.00	0.00
3,880.0	8.03	1.43	3,851.9	409.1	10.2	409.2	0.00	0.00	0.00
3,920.0	8.03	1.43	3,891.5	414.7	10.3	414.8	0.00	0.00	0.00
3,960.0	8.03	1.43	3,931.2	420.3	10.5	420.4	0.00	0.00	0.00
3,979.0	8.03	1.43	3,950.0	422.9	10.5	423.1	0.00	0.00	0.00
<b>SUSSEX</b>									

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Pratt 2KD
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 5015.0ft (Original Well Elev)
<b>Project:</b>	SEC.2-T4N-R68W	<b>MD Reference:</b>	WELL @ 5015.0ft (Original Well Elev)
<b>Site:</b>	Pratt 14-2D Pad Sec.2-T4N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	Pratt 2KD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (11-12-12)		

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)
4,000.0	8.03	1.43	3,970.8	425.9	10.6	426.0	0.00	0.00	0.00
4,040.0	8.03	1.43	4,010.4	431.5	10.7	431.6	0.00	0.00	0.00
4,080.0	8.03	1.43	4,050.0	437.0	10.9	437.2	0.00	0.00	0.00
4,120.0	8.03	1.43	4,089.6	442.6	11.0	442.8	0.00	0.00	0.00
4,160.0	8.03	1.43	4,129.2	448.2	11.2	448.3	0.00	0.00	0.00
4,200.0	8.03	1.43	4,168.8	453.8	11.3	453.9	0.00	0.00	0.00
4,240.0	8.03	1.43	4,208.4	459.4	11.4	459.5	0.00	0.00	0.00
4,280.0	8.03	1.43	4,248.0	465.0	11.6	465.1	0.00	0.00	0.00
4,320.0	8.03	1.43	4,287.6	470.6	11.7	470.7	0.00	0.00	0.00
4,360.0	8.03	1.43	4,327.2	476.1	11.8	476.3	0.00	0.00	0.00
4,400.0	8.03	1.43	4,366.8	481.7	12.0	481.9	0.00	0.00	0.00
4,440.0	8.03	1.43	4,406.4	487.3	12.1	487.5	0.00	0.00	0.00
4,480.0	8.03	1.43	4,446.1	492.9	12.3	493.0	0.00	0.00	0.00
4,506.2	8.03	1.43	4,472.0	496.6	12.4	496.7	0.00	0.00	0.00
<b>SHANNON</b>									
4,520.0	8.03	1.43	4,485.7	498.5	12.4	498.6	0.00	0.00	0.00
4,560.0	8.03	1.43	4,525.3	504.1	12.5	504.2	0.00	0.00	0.00
4,600.0	8.03	1.43	4,564.9	509.7	12.7	509.8	0.00	0.00	0.00
4,640.0	8.03	1.43	4,604.5	515.2	12.8	515.4	0.00	0.00	0.00
4,680.0	8.03	1.43	4,644.1	520.8	13.0	521.0	0.00	0.00	0.00
4,720.0	8.03	1.43	4,683.7	526.4	13.1	526.6	0.00	0.00	0.00
4,760.0	8.03	1.43	4,723.3	532.0	13.2	532.2	0.00	0.00	0.00
4,800.0	8.03	1.43	4,762.9	537.6	13.4	537.8	0.00	0.00	0.00
4,840.0	8.03	1.43	4,802.5	543.2	13.5	543.3	0.00	0.00	0.00
4,880.0	8.03	1.43	4,842.1	548.8	13.7	548.9	0.00	0.00	0.00
4,920.0	8.03	1.43	4,881.7	554.3	13.8	554.5	0.00	0.00	0.00
4,960.0	8.03	1.43	4,921.3	559.9	13.9	560.1	0.00	0.00	0.00
5,000.0	8.03	1.43	4,961.0	565.5	14.1	565.7	0.00	0.00	0.00
5,040.0	8.03	1.43	5,000.6	571.1	14.2	571.3	0.00	0.00	0.00
5,080.0	8.03	1.43	5,040.2	576.7	14.3	576.9	0.00	0.00	0.00
5,120.0	8.03	1.43	5,079.8	582.3	14.5	582.5	0.00	0.00	0.00
5,160.0	8.03	1.43	5,119.4	587.9	14.6	588.0	0.00	0.00	0.00
5,200.0	8.03	1.43	5,159.0	593.4	14.8	593.6	0.00	0.00	0.00
5,240.0	8.03	1.43	5,198.6	599.0	14.9	599.2	0.00	0.00	0.00
5,280.0	8.03	1.43	5,238.2	604.6	15.0	604.8	0.00	0.00	0.00
5,320.0	8.03	1.43	5,277.8	610.2	15.2	610.4	0.00	0.00	0.00
5,360.0	8.03	1.43	5,317.4	615.8	15.3	616.0	0.00	0.00	0.00
5,400.0	8.03	1.43	5,357.0	621.4	15.5	621.6	0.00	0.00	0.00
5,440.0	8.03	1.43	5,396.6	627.0	15.6	627.2	0.00	0.00	0.00
5,480.0	8.03	1.43	5,436.2	632.5	15.7	632.7	0.00	0.00	0.00
5,520.0	8.03	1.43	5,475.9	638.1	15.9	638.3	0.00	0.00	0.00
5,560.0	8.03	1.43	5,515.5	643.7	16.0	643.9	0.00	0.00	0.00
5,600.0	8.03	1.43	5,555.1	649.3	16.2	649.5	0.00	0.00	0.00
5,640.0	8.03	1.43	5,594.7	654.9	16.3	655.1	0.00	0.00	0.00
5,680.0	8.03	1.43	5,634.3	660.5	16.4	660.7	0.00	0.00	0.00
5,720.0	8.03	1.43	5,673.9	666.1	16.6	666.3	0.00	0.00	0.00
5,760.0	8.03	1.43	5,713.5	671.6	16.7	671.9	0.00	0.00	0.00
5,800.0	8.03	1.43	5,753.1	677.2	16.9	677.4	0.00	0.00	0.00
5,840.0	8.03	1.43	5,792.7	682.8	17.0	683.0	0.00	0.00	0.00
5,880.0	8.03	1.43	5,832.3	688.4	17.1	688.6	0.00	0.00	0.00
5,920.0	8.03	1.43	5,871.9	694.0	17.3	694.2	0.00	0.00	0.00
5,960.0	8.03	1.43	5,911.5	699.6	17.4	699.8	0.00	0.00	0.00
6,000.0	8.03	1.43	5,951.1	705.2	17.5	705.4	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Pratt 2KD
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 5015.0ft (Original Well Elev)
<b>Project:</b>	SEC.2-T4N-R68W	<b>MD Reference:</b>	WELL @ 5015.0ft (Original Well Elev)
<b>Site:</b>	Pratt 14-2D Pad Sec.2-T4N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	Pratt 2KD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (11-12-12)		

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)
6,040.0	8.03	1.43	5,990.8	710.7	17.7	711.0	0.00	0.00	0.00
6,080.0	8.03	1.43	6,030.4	716.3	17.8	716.6	0.00	0.00	0.00
6,120.0	8.03	1.43	6,070.0	721.9	18.0	722.1	0.00	0.00	0.00
6,160.0	8.03	1.43	6,109.6	727.5	18.1	727.7	0.00	0.00	0.00
6,200.0	8.03	1.43	6,149.2	733.1	18.2	733.3	0.00	0.00	0.00
6,240.0	8.03	1.43	6,188.8	738.7	18.4	738.9	0.00	0.00	0.00
6,280.0	8.03	1.43	6,228.4	744.3	18.5	744.5	0.00	0.00	0.00
6,320.0	8.03	1.43	6,268.0	749.8	18.7	750.1	0.00	0.00	0.00
6,360.0	8.03	1.43	6,307.6	755.4	18.8	755.7	0.00	0.00	0.00
6,400.0	8.03	1.43	6,347.2	761.0	18.9	761.3	0.00	0.00	0.00
6,440.0	8.03	1.43	6,386.8	766.6	19.1	766.8	0.00	0.00	0.00
6,480.0	8.03	1.43	6,426.4	772.2	19.2	772.4	0.00	0.00	0.00
6,520.0	8.03	1.43	6,466.0	777.8	19.4	778.0	0.00	0.00	0.00
6,560.0	8.03	1.43	6,505.7	783.4	19.5	783.6	0.00	0.00	0.00
6,600.0	8.03	1.43	6,545.3	789.0	19.6	789.2	0.00	0.00	0.00
6,640.0	8.03	1.43	6,584.9	794.5	19.8	794.8	0.00	0.00	0.00
6,680.0	8.03	1.43	6,624.5	800.1	19.9	800.4	0.00	0.00	0.00
6,720.0	8.03	1.43	6,664.1	805.7	20.0	806.0	0.00	0.00	0.00
6,760.0	8.03	1.43	6,703.7	811.3	20.2	811.5	0.00	0.00	0.00
6,800.0	8.03	1.43	6,743.3	816.9	20.3	817.1	0.00	0.00	0.00
6,840.0	8.03	1.43	6,782.9	822.5	20.5	822.7	0.00	0.00	0.00
6,880.0	8.03	1.43	6,822.5	828.1	20.6	828.3	0.00	0.00	0.00
6,888.6	8.03	1.43	6,831.0	829.2	20.6	829.5	0.00	0.00	0.00
NIOBRARA									
6,920.0	8.03	1.43	6,862.1	833.6	20.7	833.9	0.00	0.00	0.00
6,960.0	8.03	1.43	6,901.7	839.2	20.9	839.5	0.00	0.00	0.00
7,000.0	8.03	1.43	6,941.3	844.8	21.0	845.1	0.00	0.00	0.00
7,040.0	8.03	1.43	6,981.0	850.4	21.2	850.7	0.00	0.00	0.00
7,080.0	8.03	1.43	7,020.6	856.0	21.3	856.2	0.00	0.00	0.00
7,120.0	8.03	1.43	7,060.2	861.6	21.4	861.8	0.00	0.00	0.00
7,160.0	8.03	1.43	7,099.8	867.2	21.6	867.4	0.00	0.00	0.00
7,200.0	8.03	1.43	7,139.4	872.7	21.7	873.0	0.00	0.00	0.00
7,206.7	8.03	1.43	7,146.0	873.7	21.7	873.9	0.00	0.00	0.00
FT. HAYS									
7,223.9	8.03	1.43	7,163.0	876.1	21.8	876.3	0.00	0.00	0.00
CODELL									
7,240.0	8.03	1.43	7,179.0	878.3	21.9	878.6	0.00	0.00	0.00
7,280.0	8.03	1.43	7,218.6	883.9	22.0	884.2	0.00	0.00	0.00
7,320.0	8.03	1.43	7,258.2	889.5	22.1	889.8	0.00	0.00	0.00
7,360.0	8.03	1.43	7,297.8	895.1	22.3	895.4	0.00	0.00	0.00
7,400.0	8.03	1.43	7,337.4	900.7	22.4	900.9	0.00	0.00	0.00
7,440.0	8.03	1.43	7,377.0	906.3	22.5	906.5	0.00	0.00	0.00
7,480.0	8.03	1.43	7,416.6	911.8	22.7	912.1	0.00	0.00	0.00
7,520.0	8.03	1.43	7,456.2	917.4	22.8	917.7	0.00	0.00	0.00
7,560.0	8.03	1.43	7,495.9	923.0	23.0	923.3	0.00	0.00	0.00
7,600.0	8.03	1.43	7,535.5	928.6	23.1	928.9	0.00	0.00	0.00
7,640.0	8.03	1.43	7,575.1	934.2	23.2	934.5	0.00	0.00	0.00
7,670.2	8.03	1.43	7,605.0	938.4	23.3	938.7	0.00	0.00	0.00
J SILT									
7,680.0	8.03	1.43	7,614.7	939.8	23.4	940.1	0.00	0.00	0.00
7,686.4	8.03	1.43	7,621.0	940.7	23.4	941.0	0.00	0.00	0.00
J-SAND									
7,720.0	8.03	1.43	7,654.3	945.4	23.5	945.6	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Pratt 2KD
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 5015.0ft (Original Well Elev)
<b>Project:</b>	SEC.2-T4N-R68W	<b>MD Reference:</b>	WELL @ 5015.0ft (Original Well Elev)
<b>Site:</b>	Pratt 14-2D Pad Sec.2-T4N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	Pratt 2KD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (11-12-12)		

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)	
7,760.0	8.03	1.43	7,693.9	950.9	23.7	951.2	0.00	0.00	0.00	
7,800.0	8.03	1.43	7,733.5	956.5	23.8	956.8	0.00	0.00	0.00	
7,840.0	8.03	1.43	7,773.1	962.1	23.9	962.4	0.00	0.00	0.00	
7,880.0	8.03	1.43	7,812.7	967.7	24.1	968.0	0.00	0.00	0.00	
7,920.0	8.03	1.43	7,852.3	973.3	24.2	973.6	0.00	0.00	0.00	
7,960.0	8.03	1.43	7,891.9	978.9	24.4	979.2	0.00	0.00	0.00	
7,967.6	8.03	1.43	7,899.5	979.9	24.4	980.2	0.00	0.00	0.00	
8,000.0	7.38	1.43	7,931.6	984.3	24.5	984.6	2.00	-2.00	0.00	
8,040.0	6.58	1.43	7,971.3	989.1	24.6	989.4	2.00	-2.00	0.00	
8,080.0	5.78	1.43	8,011.0	993.4	24.7	993.8	2.00	-2.00	0.00	
8,119.1	5.00	1.43	8,050.0	997.1	24.8	997.4	2.00	-2.00	0.00	

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
550.0	550.0	8 5/8"	8-5/8	12-1/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,453.9	3,430.0	PARKMAN		0.00		
3,979.0	3,950.0	SUSSEX		0.00		
4,506.2	4,472.0	SHANNON		0.00		
6,888.6	6,831.0	NIOBRARA		0.00		
7,206.7	7,146.0	FT. HAYS		0.00		
7,223.9	7,163.0	CODELL		0.00		
7,670.2	7,605.0	J SILT		0.00		
7,686.4	7,621.0	J-SAND		0.00		





# **Directional**

## **Synergy Resources**

**SEC.2-T4N-R68W**

**Pratt 14-2D Pad Sec.2-T4N-R68W**

**Pratt 2KD**

**Wellbore #1**

**Plan #1 (11-12-12)**

## **Anticollision Report**

**13 November, 2012**

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well Pratt 2KD
<b>Project:</b>	SEC.2-T4N-R68W	<b>TVD Reference:</b>	WELL @ 5015.0ft (Original Well Elev)
<b>Reference Site:</b>	Pratt 14-2D Pad Sec.2-T4N-R68W	<b>MD Reference:</b>	WELL @ 5015.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Pratt 2KD	<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 (11-12-12)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #1 (11-12-12)		
<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> 11/13/2012			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	8,118.7	Plan #1 (11-12-12) (Wellbore #1)	MWD	MWD - Standard

<b>Summary</b>						
<b>Site Name</b>	<b>Reference Measured Depth (ft)</b>	<b>Offset Measured Depth (ft)</b>	<b>Distance Between Centres (ft)</b>	<b>Distance Between Ellipses (ft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Offset Well - Wellbore - Design</b>						
Pratt 14-2D Pad Sec.2-T4N-R68W						
Pratt 13-2D - Wellbore #1 - Plan #2 (11-09-12)	1,188.0	1,189.2	36.6	31.5	7.111	CC
Pratt 13-2D - Wellbore #1 - Plan #2 (11-09-12)	1,200.0	1,201.1	36.7	31.5	7.043	ES
Pratt 13-2D - Wellbore #1 - Plan #2 (11-09-12)	1,300.0	1,300.3	39.3	33.6	6.866	SF
Pratt 14-2D - Wellbore #1 - Plan #2 (11-09-12)	777.0	780.0	20.1	16.8	6.131	CC
Pratt 14-2D - Wellbore #1 - Plan #2 (11-09-12)	900.0	902.9	20.4	16.6	5.340	ES, SF

<b>Offset Design</b>												
Pratt 14-2D Pad Sec.2-T4N-R68W - Pratt 13-2D - Wellbore #1 - Plan #2 (11-09-12)												
Survey Program: 0-MWD												
<b>Reference</b>	<b>Offset</b>	<b>Semi Major Axis</b>		<b>Distance</b>		<b>Offset Wellbore Centre</b>		<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>	<b>Highside Toolface (°)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>				
0.0	0.0	2.0	2.0	0.0	0.0	90.54	-0.4	39.9	39.9	39.9	0.00	N/A
100.0	100.0	102.0	102.0	0.1	0.1	90.54	-0.4	39.9	39.9	39.6	0.23	173.888
200.0	200.0	202.0	202.0	0.3	0.3	90.53	-0.4	39.9	39.9	39.2	0.68	58.731
244.2	244.2	246.2	246.2	0.4	0.4	90.00	0.0	39.9	39.9	39.0	0.88	45.437
300.0	300.0	302.0	301.9	0.6	0.6	87.93	1.4	39.9	39.9	38.8	1.13	35.360
400.0	400.0	401.7	401.5	0.8	0.8	80.43	6.7	39.9	40.4	38.8	1.58	25.526
500.0	500.0	502.0	501.4	1.0	1.0	69.20	15.0	39.4	42.2	40.1	2.05	20.572
600.0	600.0	603.0	602.1	1.2	1.3	57.23	23.1	35.9	42.6	40.1	2.51	17.002
700.0	700.0	703.8	702.4	1.5	1.5	43.42	30.5	28.8	42.0	39.0	2.98	14.081
750.0	750.0	753.9	752.2	1.6	1.7	35.38	33.9	24.1	41.6	38.3	3.22	12.917
800.0	800.0	803.6	801.5	1.7	1.8	25.93	37.2	19.0	41.4	38.0	3.46	11.972
900.0	899.9	903.0	900.1	1.9	2.1	11.09	43.9	9.0	41.0	37.0	3.93	10.426
1,000.0	999.7	1,002.5	998.9	2.1	2.4	-3.39	50.5	-1.1	39.8	35.4	4.37	9.092
1,100.0	1,099.1	1,101.9	1,097.5	2.4	2.7	-19.40	57.2	-11.2	37.9	33.1	4.79	7.914
1,151.5	1,150.2	1,153.0	1,148.3	2.5	2.8	-28.88	60.6	-16.3	36.9	31.9	4.99	7.395
1,188.0	1,186.3	1,189.2	1,184.2	2.6	3.0	-36.04	63.0	-20.0	36.6	31.5	5.15	7.111 CC
1,200.0	1,198.2	1,201.1	1,196.0	2.6	3.0	-38.41	63.8	-21.2	36.7	31.5	5.21	7.043 ES
1,300.0	1,297.2	1,300.3	1,294.5	2.9	3.3	-57.14	70.5	-31.2	39.3	33.6	5.73	6.866 SF
1,400.0	1,396.3	1,399.5	1,392.9	3.2	3.6	-72.18	77.1	-41.3	45.5	39.2	6.34	7.178
1,500.0	1,495.3	1,498.6	1,491.4	3.5	3.9	-83.10	83.8	-51.3	54.0	47.0	6.99	7.733
1,600.0	1,594.3	1,597.8	1,589.8	3.8	4.2	-90.87	90.4	-61.4	64.0	56.3	7.63	8.378
1,700.0	1,693.3	1,697.0	1,688.3	4.1	4.5	-96.48	97.1	-71.4	74.7	66.5	8.27	9.035

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

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well Pratt 2KD
<b>Project:</b>	SEC.2-T4N-R68W	<b>TVD Reference:</b>	WELL @ 5015.0ft (Original Well Elev)
<b>Reference Site:</b>	Pratt 14-2D Pad Sec.2-T4N-R68W	<b>MD Reference:</b>	WELL @ 5015.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Pratt 2KD	<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 (11-12-12)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												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	
1,800.0	1,792.3	1,796.2	1,786.7	4.4	4.9	-100.66	103.7	-81.5	86.1	77.2	8.90	9.665	
1,900.0	1,891.3	1,895.4	1,885.2	4.8	5.2	-103.86	110.3	-91.5	97.7	88.2	9.53	10.254	
2,000.0	1,990.4	1,994.6	1,983.6	5.1	5.5	-106.37	117.0	-101.5	109.6	99.5	10.15	10.799	
2,100.0	2,089.4	2,093.8	2,082.1	5.4	5.8	-108.38	123.6	-111.6	121.7	110.9	10.77	11.299	
2,200.0	2,188.4	2,193.0	2,180.5	5.7	6.1	-110.03	130.3	-121.6	133.9	122.5	11.39	11.758	
2,300.0	2,287.4	2,292.1	2,279.0	6.1	6.4	-111.41	136.9	-131.7	146.1	134.1	12.00	12.178	
2,400.0	2,386.4	2,391.3	2,377.5	6.4	6.7	-112.57	143.6	-141.7	158.5	145.9	12.62	12.564	
2,500.0	2,485.5	2,490.5	2,475.9	6.7	7.1	-113.56	150.2	-151.7	170.9	157.7	13.23	12.918	
2,600.0	2,584.5	2,589.7	2,574.4	7.0	7.4	-114.42	156.8	-161.8	183.3	169.5	13.84	13.245	
2,700.0	2,683.5	2,688.9	2,672.8	7.4	7.7	-115.17	163.5	-171.8	195.8	181.4	14.46	13.547	
2,800.0	2,782.5	2,788.1	2,771.3	7.7	8.0	-115.83	170.1	-181.9	208.3	193.3	15.07	13.826	
2,900.0	2,881.5	2,887.3	2,869.7	8.0	8.3	-116.42	176.8	-191.9	220.9	205.2	15.68	14.085	
3,000.0	2,980.6	2,986.5	2,968.2	8.4	8.6	-116.94	183.4	-202.0	233.4	217.1	16.29	14.326	
3,100.0	3,079.6	3,085.6	3,066.6	8.7	8.9	-117.41	190.0	-212.0	246.0	229.1	16.91	14.551	
3,200.0	3,178.6	3,184.8	3,165.1	9.0	9.3	-117.83	196.7	-222.0	258.6	241.1	17.52	14.760	
3,300.0	3,277.6	3,284.0	3,263.5	9.4	9.6	-118.21	203.3	-232.1	271.2	253.1	18.13	14.957	
3,400.0	3,376.6	3,383.2	3,362.0	9.7	9.9	-118.56	210.0	-242.1	283.8	265.1	18.74	15.140	
3,500.0	3,475.7	3,482.4	3,460.4	10.1	10.2	-118.88	216.6	-252.2	296.4	277.1	19.36	15.313	
3,600.0	3,574.7	3,581.6	3,558.9	10.4	10.5	-119.18	223.3	-262.2	309.1	289.1	19.97	15.476	
3,700.0	3,673.7	3,680.8	3,657.4	10.7	10.8	-119.45	229.9	-272.2	321.7	301.1	20.58	15.629	
3,800.0	3,772.7	3,780.0	3,755.8	11.1	11.2	-119.70	236.5	-282.3	334.3	313.1	21.20	15.773	
3,900.0	3,871.7	3,879.1	3,854.3	11.4	11.5	-119.93	243.2	-292.3	347.0	325.2	21.81	15.910	
4,000.0	3,970.8	3,978.3	3,952.7	11.7	11.8	-120.15	249.8	-302.4	359.6	337.2	22.42	16.040	
4,100.0	4,069.8	4,077.5	4,051.2	12.1	12.1	-120.35	256.5	-312.4	372.3	349.3	23.04	16.162	
4,200.0	4,168.8	4,176.7	4,149.6	12.4	12.4	-120.54	263.1	-322.5	385.0	361.3	23.65	16.279	
4,300.0	4,267.8	4,275.9	4,248.1	12.7	12.7	-120.71	269.8	-332.5	397.6	373.4	24.26	16.389	
4,400.0	4,366.8	4,375.1	4,346.5	13.1	13.1	-120.88	276.4	-342.5	410.3	385.4	24.87	16.495	
4,500.0	4,465.9	4,474.3	4,445.0	13.4	13.4	-121.03	283.0	-352.6	423.0	397.5	25.49	16.595	
4,600.0	4,564.9	4,573.5	4,543.4	13.8	13.7	-121.18	289.7	-362.6	435.6	409.5	26.10	16.691	
4,700.0	4,663.9	4,672.6	4,641.9	14.1	14.0	-121.32	296.3	-372.7	448.3	421.6	26.71	16.782	
4,800.0	4,762.9	4,771.8	4,740.3	14.4	14.3	-121.45	303.0	-382.7	461.0	433.7	27.33	16.870	
4,900.0	4,861.9	4,871.0	4,838.8	14.8	14.6	-121.57	309.6	-392.8	473.7	445.8	27.94	16.953	
5,000.0	4,961.0	4,970.2	4,937.3	15.1	15.0	-121.69	316.3	-402.8	486.4	457.8	28.55	17.033	
5,100.0	5,060.0	5,069.4	5,035.7	15.4	15.3	-121.80	322.9	-412.8	499.1	469.9	29.17	17.110	
5,200.0	5,159.0	5,168.6	5,134.2	15.8	15.6	-121.90	329.5	-422.9	511.8	482.0	29.78	17.183	
5,300.0	5,258.0	5,267.8	5,232.6	16.1	15.9	-122.00	336.2	-432.9	524.4	494.1	30.40	17.254	
5,400.0	5,357.0	5,367.0	5,331.1	16.5	16.2	-122.10	342.8	-443.0	537.1	506.1	31.01	17.322	
5,500.0	5,456.1	5,466.1	5,429.5	16.8	16.5	-122.19	349.5	-453.0	549.8	518.2	31.62	17.387	
5,600.0	5,555.1	5,565.3	5,528.0	17.1	16.9	-122.28	356.1	-463.0	562.5	530.3	32.24	17.450	
5,700.0	5,654.1	5,664.5	5,626.4	17.5	17.2	-122.36	362.8	-473.1	575.2	542.4	32.85	17.511	
5,800.0	5,753.1	5,763.7	5,724.9	17.8	17.5	-122.44	369.4	-483.1	587.9	554.5	33.46	17.569	
5,900.0	5,852.1	5,862.9	5,823.3	18.1	17.8	-122.52	376.0	-493.2	600.6	566.5	34.08	17.625	
6,000.0	5,951.1	5,962.1	5,921.8	18.5	18.1	-122.59	382.7	-503.2	613.3	578.6	34.69	17.679	
6,100.0	6,050.2	6,061.3	6,020.2	18.8	18.4	-122.66	389.3	-513.3	626.0	590.7	35.31	17.731	
6,200.0	6,149.2	6,160.4	6,118.7	19.2	18.8	-122.73	396.0	-523.3	638.7	602.8	35.92	17.782	
6,300.0	6,248.2	6,259.6	6,217.2	19.5	19.1	-122.79	402.6	-533.3	651.4	614.9	36.53	17.831	
6,400.0	6,347.2	6,358.8	6,315.6	19.8	19.4	-122.85	409.3	-543.4	664.1	627.0	37.15	17.878	
6,500.0	6,446.2	6,458.0	6,414.1	20.2	19.7	-122.91	415.9	-553.4	676.8	639.1	37.76	17.924	
6,600.0	6,545.3	6,557.2	6,512.5	20.5	20.0	-122.97	422.5	-563.5	689.5	651.2	38.38	17.968	
6,700.0	6,644.3	6,656.4	6,611.0	20.9	20.3	-123.03	429.2	-573.5	702.2	663.3	38.99	18.011	
6,800.0	6,743.3	6,755.6	6,709.4	21.2	20.7	-123.08	435.8	-583.5	714.9	675.3	39.60	18.052	
6,900.0	6,842.3	6,854.8	6,807.9	21.5	21.0	-123.13	442.5	-593.6	727.7	687.4	40.22	18.093	

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

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well Pratt 2KD
<b>Project:</b>	SEC.2-T4N-R68W	<b>TVD Reference:</b>	WELL @ 5015.0ft (Original Well Elev)
<b>Reference Site:</b>	Pratt 14-2D Pad Sec.2-T4N-R68W	<b>MD Reference:</b>	WELL @ 5015.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Pratt 2KD	<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 (11-12-12)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> Pratt 14-2D Pad Sec.2-T4N-R68W - Pratt 13-2D - Wellbore #1 - Plan #2 (11-09-12)												<b>Offset Site Error:</b>	0.0 ft
Survey Program: 0-MWD												<b>Offset Well Error:</b>	0.0 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
7,000.0	6,941.3	6,953.9	6,906.3	21.9	21.3	-123.18	449.1	-603.6	740.4	699.5	40.83	18.132	
7,100.0	7,040.4	7,053.1	7,004.8	22.2	21.6	-123.23	455.8	-613.7	753.1	711.6	41.45	18.170	
7,200.0	7,139.4	7,152.3	7,103.2	22.5	21.9	-123.28	462.4	-623.7	765.8	723.7	42.06	18.206	
7,300.0	7,238.4	7,251.5	7,201.7	22.9	22.2	-123.32	469.0	-633.8	778.5	735.8	42.68	18.242	
7,400.0	7,337.4	7,350.7	7,300.1	23.2	22.6	-123.37	475.7	-643.8	791.2	747.9	43.29	18.277	
7,500.0	7,436.4	7,449.9	7,398.6	23.6	22.9	-123.41	482.3	-653.8	803.9	760.0	43.90	18.310	
7,600.0	7,535.5	7,549.1	7,497.1	23.9	23.2	-123.45	489.0	-663.9	816.6	772.1	44.52	18.343	
7,700.0	7,634.5	7,648.3	7,595.5	24.2	23.5	-123.49	495.6	-673.9	829.3	784.2	45.13	18.375	
7,800.0	7,733.5	7,747.4	7,694.0	24.6	23.8	-123.53	502.3	-684.0	842.0	796.3	45.75	18.406	
7,900.0	7,832.5	7,846.6	7,792.4	24.9	24.1	-123.56	508.9	-694.0	854.7	808.4	46.36	18.436	
7,967.6	7,899.5	7,914.7	7,860.0	25.1	24.3	-123.59	513.4	-700.9	863.3	816.6	46.77	18.459	
8,000.0	7,931.6	7,949.0	7,894.0	25.2	24.4	-123.67	515.6	-704.2	867.3	820.3	46.95	18.471	
8,100.0	8,030.9	8,055.2	7,999.6	25.5	24.7	-123.83	521.7	-713.3	877.7	830.2	47.45	18.496	
8,119.1	8,050.0	8,075.5	8,019.9	25.5	24.7	-123.84	522.8	-714.9	879.3	831.8	47.53	18.502	
8,119.6	8,050.5	8,076.1	8,020.4	25.5	24.7	-123.84	522.8	-714.9	879.4	831.8	47.53	18.503	

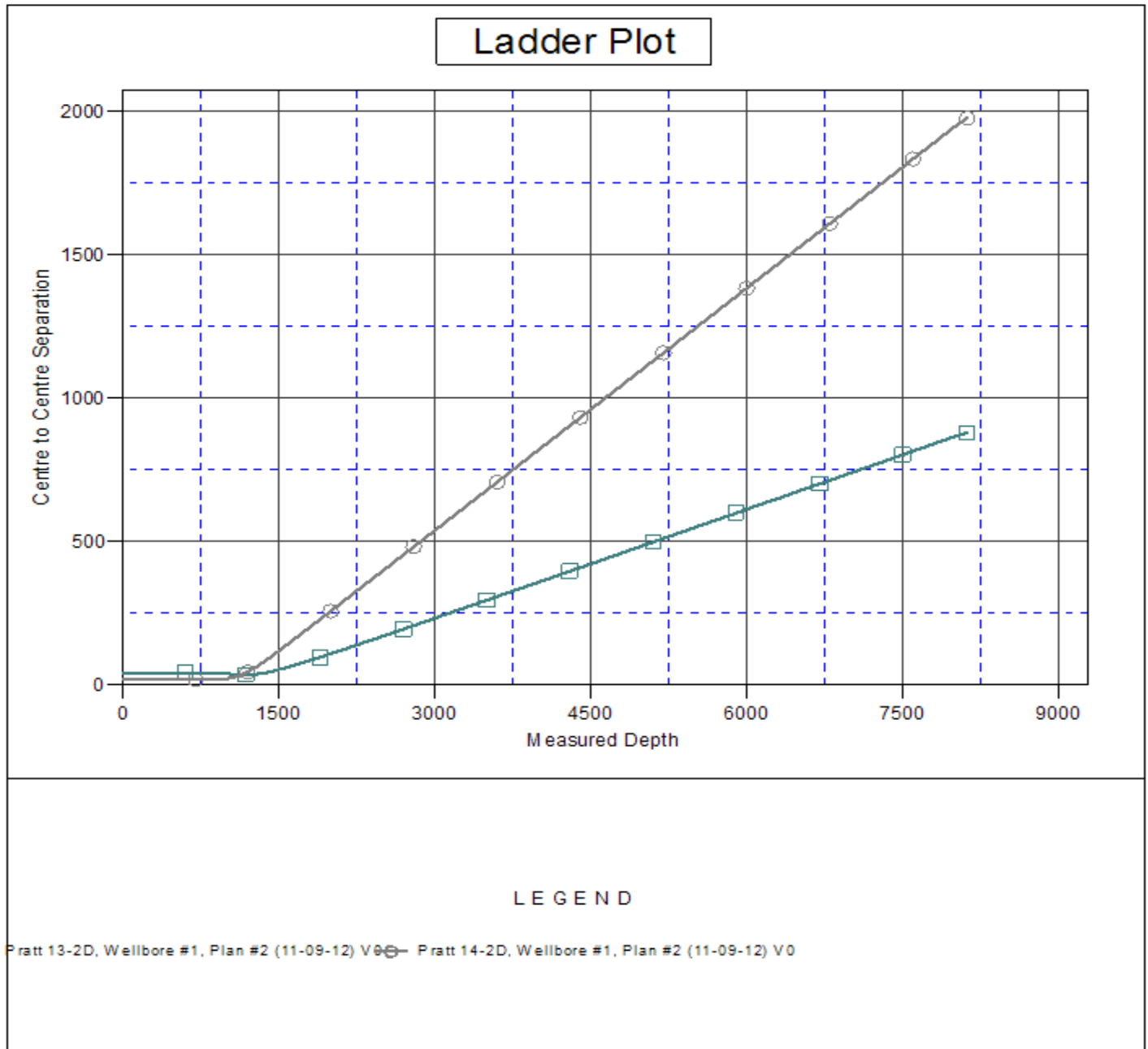
Offset Design Pratt 14-2D Pad Sec.2-T4N-R68W - Pratt 14-2D - Wellbore #1 - Plan #2 (11-09-12)													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured 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		
0.0	0.0	3.0	3.0	0.0	0.0	91.06	-0.4	20.1	20.1	20.1	0.00	5,630.327		
100.0	100.0	103.0	103.0	0.1	0.1	91.06	-0.4	20.1	20.1	19.8	0.23	86.713		
200.0	200.0	203.0	203.0	0.3	0.3	91.06	-0.4	20.1	20.1	19.4	0.68	29.477		
300.0	300.0	303.0	303.0	0.6	0.6	91.06	-0.4	20.1	20.1	18.9	1.13	17.756		
400.0	400.0	403.0	403.0	0.8	0.8	91.06	-0.4	20.1	20.1	18.5	1.58	12.705		
500.0	500.0	503.0	503.0	1.0	1.0	91.06	-0.4	20.1	20.1	18.0	2.03	9.891		
600.0	600.0	603.0	603.0	1.2	1.2	91.06	-0.4	20.1	20.1	17.6	2.48	8.097		
700.0	700.0	703.0	703.0	1.5	1.5	91.06	-0.4	20.1	20.1	17.1	2.93	6.855		
750.0	750.0	753.0	753.0	1.6	1.6	91.06	-0.4	20.1	20.1	16.9	3.15	6.366		
777.0	777.0	780.0	780.0	1.6	1.6	90.00	-0.4	20.1	20.1	16.8	3.27	6.131 CC		
800.0	800.0	803.0	803.0	1.7	1.7	90.88	-0.4	20.1	20.1	16.7	3.38	5.944		
900.0	899.9	902.9	902.9	1.9	1.9	100.70	-0.4	20.1	20.4	16.6	3.83	5.340 ES, SF		
1,000.0	999.7	1,002.7	1,002.7	2.1	2.1	119.35	-0.8	19.8	22.8	18.5	4.26	5.340		
1,100.0	1,099.1	1,101.6	1,101.5	2.4	2.3	143.59	-3.7	17.9	30.5	25.9	4.67	6.538		
1,151.5	1,150.2	1,151.9	1,151.7	2.5	2.4	153.95	-6.4	16.2	37.8	32.9	4.88	7.741		
1,200.0	1,198.2	1,198.9	1,198.6	2.6	2.5	161.50	-9.5	14.2	46.3	41.3	5.09	9.114		
1,300.0	1,297.2	1,294.8	1,294.0	2.9	2.7	171.86	-17.8	8.8	67.3	61.8	5.51	12.211		
1,400.0	1,396.3	1,389.1	1,387.4	3.2	2.9	178.33	-28.6	1.9	92.2	86.2	5.95	15.481		
1,500.0	1,495.3	1,484.8	1,481.9	3.5	3.2	-177.41	-41.1	-6.2	119.3	112.9	6.40	18.646		
1,600.0	1,594.3	1,580.8	1,576.7	3.8	3.4	-174.72	-53.7	-14.3	146.8	140.0	6.84	21.461		
1,700.0	1,693.3	1,676.7	1,671.5	4.1	3.7	-172.88	-66.3	-22.4	174.6	167.3	7.29	23.941		
1,800.0	1,792.3	1,772.6	1,766.2	4.4	4.0	-171.55	-78.9	-30.5	202.5	194.7	7.75	26.132		
1,900.0	1,891.3	1,868.6	1,861.0	4.8	4.4	-170.54	-91.5	-36.7	230.4	222.2	8.21	28.069		
2,000.0	1,990.4	1,964.5	1,955.8	5.1	4.7	-169.74	-104.1	-46.8	258.4	249.7	8.67	29.799		
2,100.0	2,089.4	2,060.5	2,050.5	5.4	5.0	-169.11	-116.7	-54.9	286.4	277.3	9.14	31.345		
2,200.0	2,188.4	2,156.4	2,145.3	5.7	5.3	-168.58	-129.2	-63.0	314.5	304.9	9.61	32.733		
2,300.0	2,287.4	2,252.4	2,240.1	6.1	5.7	-168.14	-141.8	-71.1	342.6	332.5	10.08	33.986		
2,400.0	2,386.4	2,348.3	2,334.8	6.4	6.0	-167.77	-154.4	-79.2	370.7	360.1	10.55	35.121		
2,500.0	2,485.5	2,444.3	2,429.6	6.7	6.3	-167.45	-167.0	-87.3	398.8	387.8	11.03	36.154		
2,600.0	2,584.5	2,540.2	2,524.4	7.0	6.7	-167.17	-179.6	-95.4	426.9	415.4	11.51	37.096		
2,700.0	2,683.5	2,636.1	2,619.2	7.4	7.0	-166.93	-192.2	-103.6	455.1	443.1	11.99	37.959		
2,800.0	2,782.5	2,732.1	2,713.9	7.7	7.4	-166.72	-204.7	-111.7	483.2	470.7	12.47	38.753		
2,900.0	2,881.5	2,828.0	2,808.7	8.0	7.7	-166.52	-217.3	-119.8	511.3	498.4	12.95	39.484		
3,000.0	2,980.6	2,924.0	2,903.5	8.4	8.1	-166.35	-229.9	-127.9	539.5	526.0	13.43	40.160		
3,100.0	3,079.6	3,019.9	2,998.2	8.7	8.4	-166.20	-242.5	-136.0	567.6	553.7	13.92	40.787		
3,200.0	3,178.6	3,115.9	3,093.0	9.0	8.8	-166.06	-255.1	-144.1	595.8	581.4	14.40	41.369		
3,300.0	3,277.6	3,211.8	3,187.8	9.4	9.1	-165.93	-267.7	-152.2	623.9	609.1	14.89	41.912		
3,400.0	3,376.6	3,307.8	3,282.5	9.7	9.5	-165.82	-280.3	-160.3	652.1	636.7	15.37	42.418		
3,500.0	3,475.7	3,403.7	3,377.3	10.1	9.8	-165.71	-292.8	-168.5	680.3	664.4	15.86	42.892		
3,600.0	3,574.7	3,499.7	3,472.1	10.4	10.2	-165.61	-305.4	-176.6	708.4	692.1	16.35	43.336		
3,700.0	3,673.7	3,595.6	3,566.9	10.7	10.5	-165.52	-318.0	-184.7	736.6	719.8	16.84	43.753		
3,800.0	3,772.7	3,691.5	3,661.6	11.1	10.9	-165.44	-330.6	-192.8	764.8	747.4	17.32	44.145		
3,900.0	3,871.7	3,787.5	3,756.4	11.4	11.2	-165.36	-343.2	-200.9	792.9	775.1	17.81	44.515		
4,000.0	3,970.8	3,883.4	3,851.2	11.7	11.6	-165.29	-355.8	-209.0	821.1	802.8	18.30	44.863		
4,100.0	4,069.8	3,979.4	3,945.9	12.1	11.9	-165.22	-368.4	-217.1	849.3	830.5	18.79	45.193		
4,200.0	4,168.8	4,075.3	4,040.7	12.4	12.3	-165.16	-380.9	-225.2	877.4	858.2	19.28	45.505		
4,300.0	4,267.8	4,171.3	4,135.5	12.7	12.7	-165.10	-393.5	-233.4	905.6	885.8	19.77	45.801		
4,400.0	4,366.8	4,267.2	4,230.2	13.1	13.0	-165.04	-406.1	-241.5	933.8	913.5	20.26	46.082		
4,500.0	4,465.9	4,363.2	4,325.0	13.4	13.4	-164.99	-418.7	-249.6	962.0	941.2	20.76	46.348		
4,600.0	4,564.9	4,459.1	4,419.8	13.8	13.7	-164.94	-431.3	-257.7	990.1	968.9	21.25	46.602		
4,700.0	4,663.9	4,555.1	4,514.5	14.1	14.1	-164.89	-443.9	-265.8	1,018.3	996.6	21.74	46.844		
4,800.0	4,762.9	4,651.0	4,609.3	14.4	14.5	-164.85	-456.4	-273.9	1,046.5	1,024.3	22.23	47.074		

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well Pratt 2KD
<b>Project:</b>	SEC.2-T4N-R68W	<b>TVD Reference:</b>	WELL @ 5015.0ft (Original Well Elev)
<b>Reference Site:</b>	Pratt 14-2D Pad Sec.2-T4N-R68W	<b>MD Reference:</b>	WELL @ 5015.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Pratt 2KD	<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 (11-12-12)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Pratt 14-2D Pad Sec.2-T4N-R68W - Pratt 14-2D - Wellbore #1 - Plan #2 (11-09-12)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,900.0	4,861.9	4,746.9	4,704.1	14.8	14.8	-164.80	-469.0	-282.0	1,074.7	1,052.0	22.72	47.294	
5,000.0	4,961.0	4,842.9	4,798.9	15.1	15.2	-164.76	-481.6	-290.1	1,102.9	1,079.6	23.22	47.504	
5,100.0	5,060.0	4,938.8	4,893.6	15.4	15.5	-164.73	-494.2	-298.3	1,131.0	1,107.3	23.71	47.705	
5,200.0	5,159.0	5,034.8	4,988.4	15.8	15.9	-164.69	-506.8	-306.4	1,159.2	1,135.0	24.20	47.897	
5,300.0	5,258.0	5,130.7	5,083.2	16.1	16.2	-164.66	-519.4	-314.5	1,187.4	1,162.7	24.70	48.081	
5,400.0	5,357.0	5,226.7	5,177.9	16.5	16.6	-164.62	-532.0	-322.6	1,215.6	1,190.4	25.19	48.258	
5,500.0	5,456.1	5,322.6	5,272.7	16.8	17.0	-164.59	-544.5	-330.7	1,243.7	1,218.1	25.68	48.427	
5,600.0	5,555.1	5,418.6	5,367.5	17.1	17.3	-164.56	-557.1	-338.8	1,271.9	1,245.8	26.18	48.589	
5,700.0	5,654.1	5,514.5	5,462.2	17.5	17.7	-164.53	-569.7	-346.9	1,300.1	1,273.4	26.67	48.745	
5,800.0	5,753.1	5,610.5	5,557.0	17.8	18.0	-164.51	-582.3	-355.0	1,328.3	1,301.1	27.17	48.895	
5,900.0	5,852.1	5,706.4	5,651.8	18.1	18.4	-164.48	-594.9	-363.1	1,356.5	1,328.8	27.66	49.040	
6,000.0	5,951.1	5,802.3	5,746.6	18.5	18.8	-164.46	-607.5	-371.3	1,384.7	1,356.5	28.16	49.179	
6,100.0	6,050.2	5,898.3	5,841.3	18.8	19.1	-164.43	-620.1	-379.4	1,412.8	1,384.2	28.65	49.313	
6,200.0	6,149.2	5,994.2	5,936.1	19.2	19.5	-164.41	-632.6	-387.5	1,441.0	1,411.9	29.15	49.441	
6,300.0	6,248.2	6,090.2	6,030.9	19.5	19.8	-164.39	-645.2	-395.6	1,469.2	1,439.6	29.64	49.566	
6,400.0	6,347.2	6,186.1	6,125.6	19.8	20.2	-164.36	-657.8	-403.7	1,497.4	1,467.2	30.14	49.686	
6,500.0	6,446.2	6,282.1	6,220.4	20.2	20.6	-164.34	-670.4	-411.8	1,525.6	1,494.9	30.63	49.802	
6,600.0	6,545.3	6,378.0	6,315.2	20.5	20.9	-164.32	-683.0	-419.9	1,553.7	1,522.6	31.13	49.913	
6,700.0	6,644.3	6,474.0	6,409.9	20.9	21.3	-164.30	-695.6	-428.0	1,581.9	1,550.3	31.62	50.022	
6,800.0	6,743.3	6,569.9	6,504.7	21.2	21.6	-164.29	-708.1	-436.2	1,610.1	1,578.0	32.12	50.126	
6,900.0	6,842.3	6,665.8	6,599.5	21.5	22.0	-164.27	-720.7	-444.3	1,638.3	1,605.7	32.62	50.227	
7,000.0	6,941.3	6,761.8	6,694.3	21.9	22.4	-164.25	-733.3	-452.4	1,666.5	1,633.4	33.11	50.325	
7,100.0	7,040.4	6,857.7	6,789.0	22.2	22.7	-164.23	-745.9	-460.5	1,694.7	1,661.0	33.61	50.419	
7,200.0	7,139.4	6,953.7	6,883.8	22.5	23.1	-164.22	-758.5	-468.6	1,722.8	1,688.7	34.11	50.511	
7,300.0	7,238.4	7,049.6	6,978.6	22.9	23.4	-164.20	-771.1	-476.7	1,751.0	1,716.4	34.61	50.600	
7,400.0	7,337.4	7,145.6	7,073.3	23.2	23.8	-164.19	-783.7	-484.8	1,779.2	1,744.1	35.10	50.686	
7,500.0	7,436.4	7,241.5	7,168.1	23.6	24.2	-164.17	-796.2	-492.9	1,807.4	1,771.8	35.60	50.769	
7,600.0	7,535.5	7,337.5	7,262.9	23.9	24.5	-164.16	-808.8	-501.1	1,835.6	1,799.5	36.10	50.850	
7,700.0	7,634.5	7,433.4	7,357.6	24.2	24.9	-164.14	-821.4	-509.2	1,863.8	1,827.2	36.60	50.928	
7,800.0	7,733.5	7,529.4	7,452.4	24.6	25.2	-164.13	-834.0	-517.3	1,891.9	1,854.9	37.09	51.005	
7,900.0	7,832.5	7,625.3	7,547.2	24.9	25.6	-164.12	-846.6	-525.4	1,920.1	1,882.5	37.59	51.078	
7,967.6	7,899.5	7,690.2	7,611.3	25.1	25.9	-164.11	-855.1	-530.9	1,939.2	1,901.3	37.93	51.127	
8,000.0	7,931.6	7,721.3	7,642.0	25.2	26.0	-164.15	-859.2	-533.5	1,948.1	1,910.0	38.12	51.101	
8,100.0	8,030.9	7,818.0	7,737.5	25.5	26.3	-164.26	-871.9	-541.7	1,973.7	1,935.0	38.67	51.039	
8,119.1	8,050.0	7,836.6	7,755.9	25.5	26.4	-164.28	-874.3	-543.3	1,978.2	1,939.4	38.75	51.046	
8,119.6	8,050.5	7,837.0	7,756.3	25.5	26.4	-164.28	-874.4	-543.3	1,978.3	1,939.5	38.75	51.048	

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well Pratt 2KD
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<b>Reference Site:</b>	Pratt 14-2D Pad Sec.2-T4N-R68W	<b>MD Reference:</b>	WELL @ 5015.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Pratt 2KD	<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 (11-12-12)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 5015.0ft (Original Well Elev) Coordinates are relative to: Pratt 2KD  
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: 0.34°



<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well Pratt 2KD
<b>Project:</b>	SEC.2-T4N-R68W	<b>TVD Reference:</b>	WELL @ 5015.0ft (Original Well Elev)
<b>Reference Site:</b>	Pratt 14-2D Pad Sec.2-T4N-R68W	<b>MD Reference:</b>	WELL @ 5015.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Pratt 2KD	<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 (11-12-12)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 5015.0ft (Original Well Elev) Coordinates are relative to: Pratt 2KD  
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: 0.34°

