

# Synergy Resources

Well Name: **SRC Markham 31-16-9NHZ**

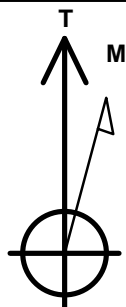
Surface Location: SRC Markham Pad Sec.16-T4N-R68W  
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4964.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1357580.30	3136523.30	40.313924	-105.010428	
RKB - 13' WELL @ 4977.0ft (RKB - 13')						

## WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 2440'FNL & 2054'FWL, SEC.16	1.0	0.0	0.0	Point
BHL 460'FNL & 1800' FEL, SEC.9	6150.0	7311.4	1422.7	Point
LANDING PT. 2198'FNL & 1800'FEL, SEC.16	6150.0	259.1	1433.4	Point



Azimuths to True North  
Magnetic North: 8.61°

Magnetic Field  
Strength: 52762.9snT  
Dip Angle: 66.84°  
Date: 4/7/2014  
Model: IGRF2010

SRC Markham Pad Sec.16-T4N-R68W  
SRC Markham 31-16-9NHZ  
Plan #1 (3-31-14)  
11:16, April 09 2014

## ANNOTATIONS

TVD	MD	Annotation
1400.0	1400.0	KOP - Start Build 2.00
5388.4	5599.4	Start DLS 8.00 TFO -109.94
6150.0	6812.6	Start 7052.0 hold at 6812.6 MD
6150.0	13864.6	TD at 13864.6

South(-)/North(+) (3000 ft/in)

**BHL 460'FNL & 1800' FEL, SEC.9**

SRC Markham 31-16-9NHZ

Casing Pt. 2198'FNL & 1800'FEL, SEC.16

SRC Markham 31-16-9NHZ

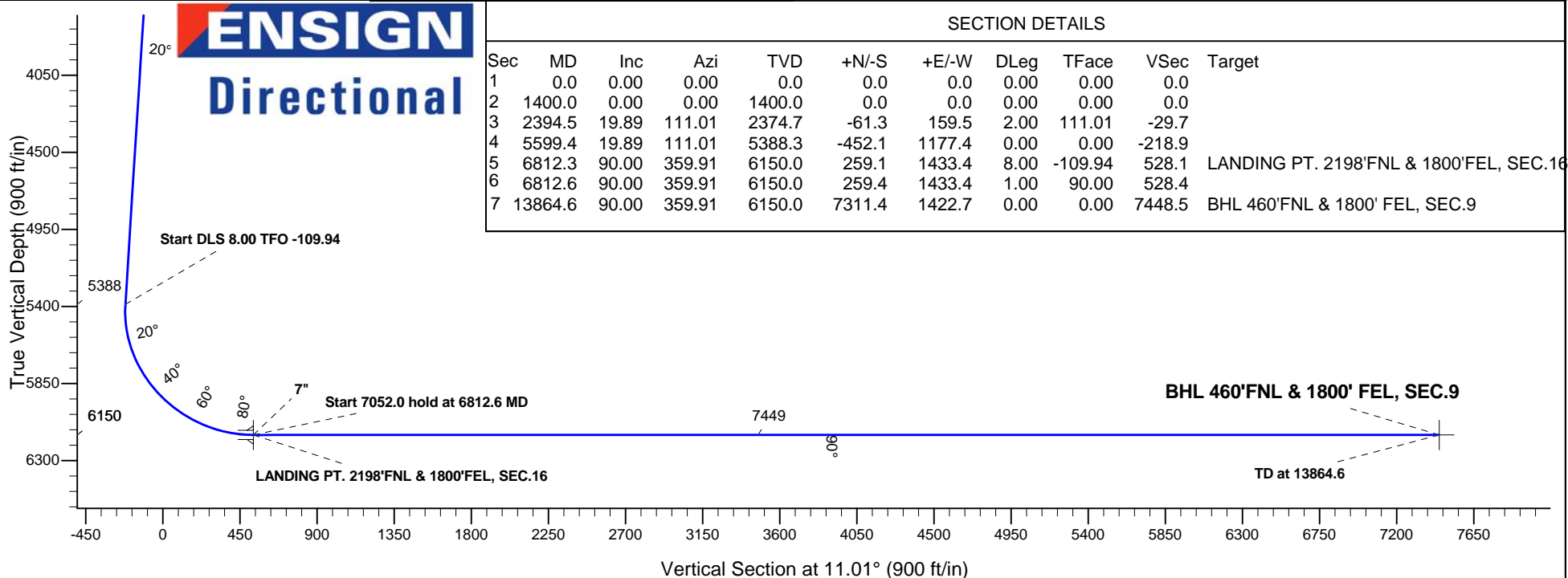
LANDING PT. 2198'FNL & 1800'FEL, SEC.16

**SHL 2440'FNL & 2054'FWL, SEC.16**

460' Setback

Sec.16-T4N-R68W

West(-)/East(+) (3000 ft/in)





## **Synergy Resources**

**Sec.16-T4N-R68W**

**SRC Markham Pad Sec.16-T4N-R68W**

**SRC Markham 31-16-9NHZ**

**Wellbore #1**

**Plan: Plan #1 (3-31-14)**

## **Standard Planning Report**

**08 April, 2014**

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	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,394.5	19.89	111.01	2,374.7	-61.3	159.5	2.00	2.00	0.00	111.01	
5,599.4	19.89	111.01	5,388.3	-452.1	1,177.4	0.00	0.00	0.00	0.00	
6,812.3	90.00	359.91	6,150.0	259.1	1,433.4	8.00	5.78	-9.16	-109.94	LANDING PT. 2198
6,812.6	90.00	359.91	6,150.0	259.4	1,433.4	1.00	0.00	1.00	90.00	
13,864.6	90.00	359.91	6,150.0	7,311.4	1,422.7	0.00	0.00	0.00	0.00	BHL 460'FNL & 180

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well SRC Markham 31-16-9NHZ
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 4977.0ft (RKB - 13')
<b>Project:</b>	Sec.16-T4N-R68W	<b>MD Reference:</b>	WELL @ 4977.0ft (RKB - 13')
<b>Site:</b>	SRC Markham Pad Sec.16-T4N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	SRC Markham 31-16-9NHZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (3-31-14)		

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
1.0	0.00	0.00	1.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>SHL 2440'FNL &amp; 2054'FWL, SEC.16</b>									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	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
500.0	0.00	0.00	500.0	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
700.0	0.00	0.00	700.0	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
900.0	0.00	0.00	900.0	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
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>KOP - Start Build 2.00</b>									
1,500.0	2.00	111.01	1,500.0	-0.6	1.6	-0.3	2.00	2.00	0.00
1,600.0	4.00	111.01	1,599.8	-2.5	6.5	-1.2	2.00	2.00	0.00
1,700.0	6.00	111.01	1,699.5	-5.6	14.7	-2.7	2.00	2.00	0.00
1,800.0	8.00	111.01	1,798.7	-10.0	26.0	-4.8	2.00	2.00	0.00
1,900.0	10.00	111.01	1,897.5	-15.6	40.6	-7.6	2.00	2.00	0.00
2,000.0	12.00	111.01	1,995.6	-22.4	58.4	-10.9	2.00	2.00	0.00
2,100.0	14.00	111.01	2,093.1	-30.5	79.4	-14.8	2.00	2.00	0.00
2,200.0	16.00	111.01	2,189.6	-39.8	103.6	-19.3	2.00	2.00	0.00
2,300.0	18.00	111.01	2,285.3	-50.3	130.9	-24.3	2.00	2.00	0.00
2,394.5	19.89	111.01	2,374.7	-61.3	159.5	-29.7	2.00	2.00	0.00
2,400.0	19.89	111.01	2,379.8	-61.9	161.3	-30.0	0.00	0.00	0.00
2,500.0	19.89	111.01	2,473.9	-74.1	193.0	-35.9	0.00	0.00	0.00
2,600.0	19.89	111.01	2,567.9	-86.3	224.8	-41.8	0.00	0.00	0.00
2,700.0	19.89	111.01	2,661.9	-98.5	256.6	-47.7	0.00	0.00	0.00
2,800.0	19.89	111.01	2,756.0	-110.7	288.3	-53.6	0.00	0.00	0.00
2,900.0	19.89	111.01	2,850.0	-122.9	320.1	-59.5	0.00	0.00	0.00
3,000.0	19.89	111.01	2,944.0	-135.1	351.8	-65.4	0.00	0.00	0.00
3,100.0	19.89	111.01	3,038.1	-147.3	383.6	-71.3	0.00	0.00	0.00
3,200.0	19.89	111.01	3,132.1	-159.5	415.4	-77.2	0.00	0.00	0.00
3,300.0	19.89	111.01	3,226.1	-171.7	447.1	-83.1	0.00	0.00	0.00
3,400.0	19.89	111.01	3,320.2	-183.9	478.9	-89.0	0.00	0.00	0.00
3,500.0	19.89	111.01	3,414.2	-196.1	510.6	-94.9	0.00	0.00	0.00
3,600.0	19.89	111.01	3,508.2	-208.3	542.4	-100.8	0.00	0.00	0.00
3,700.0	19.89	111.01	3,602.3	-220.5	574.2	-106.8	0.00	0.00	0.00
3,800.0	19.89	111.01	3,696.3	-232.7	605.9	-112.7	0.00	0.00	0.00
3,900.0	19.89	111.01	3,790.3	-244.9	637.7	-118.6	0.00	0.00	0.00
4,000.0	19.89	111.01	3,884.4	-257.1	669.5	-124.5	0.00	0.00	0.00
4,100.0	19.89	111.01	3,978.4	-269.3	701.2	-130.4	0.00	0.00	0.00
4,200.0	19.89	111.01	4,072.4	-281.5	733.0	-136.3	0.00	0.00	0.00
4,300.0	19.89	111.01	4,166.5	-293.7	764.7	-142.2	0.00	0.00	0.00
4,400.0	19.89	111.01	4,260.5	-305.9	796.5	-148.1	0.00	0.00	0.00
4,500.0	19.89	111.01	4,354.5	-318.0	828.3	-154.0	0.00	0.00	0.00
4,600.0	19.89	111.01	4,448.6	-330.2	860.0	-159.9	0.00	0.00	0.00
4,700.0	19.89	111.01	4,542.6	-342.4	891.8	-165.8	0.00	0.00	0.00
4,800.0	19.89	111.01	4,636.6	-354.6	923.5	-171.7	0.00	0.00	0.00
4,900.0	19.89	111.01	4,730.7	-366.8	955.3	-177.6	0.00	0.00	0.00

COMPASS 2003.21 Build 46

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well SRC Markham 31-16-9NHZ
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 4977.0ft (RKB - 13')
<b>Project:</b>	Sec.16-T4N-R68W	<b>MD Reference:</b>	WELL @ 4977.0ft (RKB - 13')
<b>Site:</b>	SRC Markham Pad Sec.16-T4N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	SRC Markham 31-16-9NHZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (3-31-14)		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
9,700.0	90.00	359.91	6,150.0	3,146.8	1,429.0	3,361.8	0.00	0.00	0.00	
9,800.0	90.00	359.91	6,150.0	3,246.8	1,428.9	3,459.9	0.00	0.00	0.00	
9,900.0	90.00	359.91	6,150.0	3,346.8	1,428.7	3,558.1	0.00	0.00	0.00	
10,000.0	90.00	359.91	6,150.0	3,446.8	1,428.6	3,656.2	0.00	0.00	0.00	
10,100.0	90.00	359.91	6,150.0	3,546.8	1,428.4	3,754.3	0.00	0.00	0.00	
10,200.0	90.00	359.91	6,150.0	3,646.8	1,428.3	3,852.5	0.00	0.00	0.00	
10,300.0	90.00	359.91	6,150.0	3,746.8	1,428.1	3,950.6	0.00	0.00	0.00	
10,400.0	90.00	359.91	6,150.0	3,846.8	1,428.0	4,048.7	0.00	0.00	0.00	
10,500.0	90.00	359.91	6,150.0	3,946.8	1,427.8	4,146.9	0.00	0.00	0.00	
10,600.0	90.00	359.91	6,150.0	4,046.8	1,427.6	4,245.0	0.00	0.00	0.00	
10,700.0	90.00	359.91	6,150.0	4,146.8	1,427.5	4,343.1	0.00	0.00	0.00	
10,800.0	90.00	359.91	6,150.0	4,246.8	1,427.3	4,441.2	0.00	0.00	0.00	
10,900.0	90.00	359.91	6,150.0	4,346.8	1,427.2	4,539.4	0.00	0.00	0.00	
11,000.0	90.00	359.91	6,150.0	4,446.8	1,427.0	4,637.5	0.00	0.00	0.00	
11,100.0	90.00	359.91	6,150.0	4,546.8	1,426.9	4,735.6	0.00	0.00	0.00	
11,200.0	90.00	359.91	6,150.0	4,646.8	1,426.7	4,833.8	0.00	0.00	0.00	
11,300.0	90.00	359.91	6,150.0	4,746.8	1,426.6	4,931.9	0.00	0.00	0.00	
11,400.0	90.00	359.91	6,150.0	4,846.8	1,426.4	5,030.0	0.00	0.00	0.00	
11,500.0	90.00	359.91	6,150.0	4,946.8	1,426.3	5,128.2	0.00	0.00	0.00	
11,600.0	90.00	359.91	6,150.0	5,046.8	1,426.1	5,226.3	0.00	0.00	0.00	
11,700.0	90.00	359.91	6,150.0	5,146.8	1,426.0	5,324.4	0.00	0.00	0.00	
11,800.0	90.00	359.91	6,150.0	5,246.8	1,425.8	5,422.5	0.00	0.00	0.00	
11,900.0	90.00	359.91	6,150.0	5,346.8	1,425.7	5,520.7	0.00	0.00	0.00	
12,000.0	90.00	359.91	6,150.0	5,446.8	1,425.5	5,618.8	0.00	0.00	0.00	
12,100.0	90.00	359.91	6,150.0	5,546.8	1,425.4	5,716.9	0.00	0.00	0.00	
12,200.0	90.00	359.91	6,150.0	5,646.8	1,425.2	5,815.1	0.00	0.00	0.00	
12,300.0	90.00	359.91	6,150.0	5,746.8	1,425.1	5,913.2	0.00	0.00	0.00	
12,400.0	90.00	359.91	6,150.0	5,846.8	1,424.9	6,011.3	0.00	0.00	0.00	
12,500.0	90.00	359.91	6,150.0	5,946.8	1,424.8	6,109.4	0.00	0.00	0.00	
12,600.0	90.00	359.91	6,150.0	6,046.8	1,424.6	6,207.6	0.00	0.00	0.00	
12,700.0	90.00	359.91	6,150.0	6,146.8	1,424.5	6,305.7	0.00	0.00	0.00	
12,800.0	90.00	359.91	6,150.0	6,246.8	1,424.3	6,403.8	0.00	0.00	0.00	
12,900.0	90.00	359.91	6,150.0	6,346.8	1,424.2	6,502.0	0.00	0.00	0.00	
13,000.0	90.00	359.91	6,150.0	6,446.8	1,424.0	6,600.1	0.00	0.00	0.00	
13,100.0	90.00	359.91	6,150.0	6,546.8	1,423.8	6,698.2	0.00	0.00	0.00	
13,200.0	90.00	359.91	6,150.0	6,646.8	1,423.7	6,796.4	0.00	0.00	0.00	
13,300.0	90.00	359.91	6,150.0	6,746.8	1,423.5	6,894.5	0.00	0.00	0.00	
13,400.0	90.00	359.91	6,150.0	6,846.8	1,423.4	6,992.6	0.00	0.00	0.00	
13,500.0	90.00	359.91	6,150.0	6,946.8	1,423.2	7,090.7	0.00	0.00	0.00	
13,600.0	90.00	359.91	6,150.0	7,046.8	1,423.1	7,188.9	0.00	0.00	0.00	
13,700.0	90.00	359.91	6,150.0	7,146.8	1,422.9	7,287.0	0.00	0.00	0.00	
13,800.0	90.00	359.91	6,150.0	7,246.8	1,422.8	7,385.1	0.00	0.00	0.00	
13,864.6	90.00	359.91	6,150.0	7,311.4	1,422.7	7,448.5	0.00	0.00	0.00	
BHL 460'FNL & 1800' FEL, SEC.9										

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
6,812.3	6,150.0	7"	7	7-1/2	

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well SRC Markham 31-16-9NHZ
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 4977.0ft (RKB - 13')
<b>Project:</b>	Sec.16-T4N-R68W	<b>MD Reference:</b>	WELL @ 4977.0ft (RKB - 13')
<b>Site:</b>	SRC Markham Pad Sec.16-T4N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	SRC Markham 31-16-9NHZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (3-31-14)		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,400.0	1,400.0	0.0	0.0	KOP - Start Build 2.00
5,599.4	5,388.4	-452.1	1,177.4	Start DLS 8.00 TFO -109.94
6,812.6	6,150.0	259.4	1,433.4	Start 7052.0 hold at 6812.6 MD
13,864.6	6,150.0	7,311.4	1,422.7	TD at 13864.6



## **Synergy Resources**

**Sec.16-T4N-R68W**

**SRC Markham Pad Sec.16-T4N-R68W**

**SRC Markham 31-16-9NHZ**

**Wellbore #1**

**Plan #1 (3-31-14)**

## **Anticollision Report**

**08 April, 2014**



<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well SRC Markham 31-16-9NHZ
<b>Project:</b>	Sec.16-T4N-R68W	<b>TVD Reference:</b>	WELL @ 4977.0ft (RKB - 13')
<b>Reference Site:</b>	SRC Markham Pad Sec.16-T4N-R68W	<b>MD Reference:</b>	WELL @ 4977.0ft (RKB - 13')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SRC Markham 31-16-9NHZ	<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 (3-31-14)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design SRC Markham Pad Sec.16-T4N-R68W - SRC Markham 31-16-9CHZ - Wellbore #1 - Plan #1 (3-31-14)													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		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	-89.97	0.0	-22.6	22.6	16.5	6.07	3.722	CC	
1,500.0	1,500.0	1,500.0	1,500.0	3.2	3.3	160.49	0.0	-22.6	24.2	17.7	6.50	3.729		
1,600.0	1,599.8	1,599.8	1,599.8	3.4	3.5	163.89	0.0	-22.6	29.2	22.3	6.90	4.232		
1,700.0	1,699.5	1,700.7	1,700.7	3.6	3.7	166.82	-0.7	-21.0	36.0	28.7	7.29	4.938		
1,800.0	1,798.7	1,801.8	1,801.6	3.9	3.9	168.56	-2.9	-16.1	42.8	35.2	7.65	5.599		
1,900.0	1,897.5	1,903.1	1,902.6	4.1	4.1	169.58	-6.5	-8.0	49.7	41.7	8.01	6.201		
2,000.0	1,995.6	2,004.7	2,003.4	4.4	4.3	170.15	-11.7	3.5	56.6	48.2	8.38	6.748		
2,100.0	2,093.1	2,106.6	2,103.9	4.7	4.6	170.40	-18.3	18.2	63.4	54.7	8.76	7.240		
2,200.0	2,189.6	2,208.7	2,204.1	5.1	4.9	170.44	-26.4	36.2	70.2	61.1	9.15	7.681		
2,300.0	2,285.3	2,311.0	2,303.7	5.6	5.2	170.32	-35.9	57.5	77.0	67.5	9.55	8.069		
2,400.0	2,379.8	2,413.6	2,402.7	6.1	5.6	170.07	-47.0	82.1	83.8	73.8	9.97	8.400		
2,500.0	2,473.9	2,515.6	2,500.1	6.7	6.0	169.55	-59.3	109.6	88.7	78.2	10.50	8.446		
2,600.0	2,567.9	2,615.5	2,595.3	7.3	6.5	168.96	-71.8	137.4	92.8	81.7	11.06	8.388		
2,700.0	2,661.9	2,715.4	2,690.5	7.9	7.0	168.42	-84.2	165.1	96.8	85.2	11.64	8.321		
2,800.0	2,756.0	2,815.3	2,785.6	8.6	7.6	167.92	-96.7	192.9	100.9	88.7	12.24	8.247		
2,900.0	2,850.0	2,915.2	2,880.8	9.2	8.1	167.46	-109.1	220.7	105.0	92.1	12.85	8.169		
3,000.0	2,944.0	3,015.1	2,976.0	9.9	8.7	167.03	-121.6	248.4	109.1	95.6	13.49	8.088		
3,100.0	3,038.1	3,115.1	3,071.1	10.6	9.3	166.64	-134.0	276.2	113.2	99.1	14.14	8.007		
3,200.0	3,132.1	3,215.0	3,166.3	11.2	9.9	166.27	-146.5	303.9	117.3	102.5	14.80	7.926		
3,300.0	3,226.1	3,314.9	3,261.5	11.9	10.5	165.93	-158.9	331.7	121.4	105.9	15.47	7.846		
3,400.0	3,320.2	3,414.8	3,356.6	12.6	11.1	165.61	-171.4	359.4	125.5	109.4	16.16	7.767		
3,500.0	3,414.2	3,514.7	3,451.8	13.3	11.7	165.31	-183.9	387.2	129.6	112.8	16.86	7.691		
3,600.0	3,508.2	3,614.6	3,547.0	14.0	12.3	165.03	-196.3	414.9	133.8	116.2	17.56	7.616		
3,700.0	3,602.3	3,714.5	3,642.1	14.7	12.9	164.77	-208.8	442.7	137.9	119.6	18.28	7.544		
3,800.0	3,696.3	3,814.4	3,737.3	15.4	13.5	164.52	-221.2	470.5	142.0	123.0	19.00	7.475		
3,900.0	3,790.3	3,914.4	3,832.5	16.1	14.1	164.29	-233.7	498.2	146.1	126.4	19.73	7.408		
4,000.0	3,884.4	4,014.3	3,927.6	16.9	14.8	164.06	-246.1	526.0	150.3	129.8	20.46	7.344		
4,100.0	3,978.4	4,114.2	4,022.8	17.6	15.4	163.85	-258.6	553.7	154.4	133.2	21.20	7.282		
4,200.0	4,072.4	4,214.1	4,118.0	18.3	16.0	163.65	-271.0	581.5	158.5	136.6	21.95	7.223		
4,300.0	4,166.5	4,314.0	4,213.2	19.0	16.7	163.47	-283.5	609.2	162.7	140.0	22.70	7.166		
4,400.0	4,260.5	4,413.9	4,308.3	19.7	17.3	163.29	-295.9	637.0	166.8	143.4	23.46	7.111		
4,500.0	4,354.5	4,513.8	4,403.5	20.4	17.9	163.12	-308.4	664.7	171.0	146.7	24.22	7.059		
4,600.0	4,448.6	4,613.7	4,498.7	21.1	18.6	162.95	-320.9	692.5	175.1	150.1	24.98	7.009		
4,700.0	4,542.6	4,713.7	4,593.8	21.9	19.2	162.80	-333.3	720.3	179.2	153.5	25.75	6.961		
4,800.0	4,636.6	4,813.6	4,689.0	22.6	19.8	162.65	-345.8	748.0	183.4	156.9	26.52	6.915		
4,900.0	4,730.7	4,913.5	4,784.2	23.3	20.5	162.51	-358.2	775.8	187.5	160.2	27.30	6.870		
5,000.0	4,824.7	5,013.4	4,879.3	24.0	21.1	162.37	-370.7	803.5	191.7	163.6	28.07	6.828		
5,100.0	4,918.8	5,113.3	4,974.5	24.8	21.8	162.24	-383.1	831.3	195.8	167.0	28.85	6.787		
5,200.0	5,012.8	5,213.2	5,069.7	25.5	22.4	162.12	-395.6	859.0	200.0	170.3	29.64	6.748		
5,300.0	5,106.8	5,313.1	5,164.8	26.2	23.0	162.00	-408.0	886.8	204.1	173.7	30.42	6.710		
5,400.0	5,200.9	5,413.1	5,260.0	26.9	23.7	161.89	-420.5	914.5	208.3	177.1	31.21	6.674		
5,500.0	5,294.9	5,513.0	5,355.2	27.6	24.3	161.78	-432.9	942.3	212.4	180.4	32.00	6.639		
5,600.0	5,388.9	5,612.9	5,450.4	28.4	25.0	161.81	-445.4	970.1	216.6	183.8	32.79	6.605		
5,700.0	5,483.5	5,712.4	5,545.2	29.0	25.6	-176.81	-457.2	997.7	220.6	186.7	33.97	6.495		
5,800.0	5,577.8	5,812.5	5,641.2	29.5	26.1	-157.15	-458.5	1,025.7	225.0	189.8	35.20	6.393		
5,900.0	5,670.0	5,913.9	5,737.8	29.9	26.5	-143.24	-445.5	1,053.8	229.7	193.6	36.09	6.366		
6,000.0	5,758.4	6,016.9	5,833.0	30.2	26.8	-134.72	-418.1	1,081.5	234.6	198.1	36.59	6.413		
6,100.0	5,841.2	6,121.4	5,924.7	30.4	27.0	-129.68	-376.0	1,108.2	239.6	202.9	36.69	6.529		
6,200.0	5,916.8	6,227.3	6,010.6	30.6	27.2	-126.69	-319.5	1,133.1	244.4	207.9	36.47	6.702		
6,300.0	5,983.7	6,334.6	6,088.6	30.8	27.3	-124.91	-249.6	1,155.8	248.8	212.8	36.03	6.905		
6,400.0	6,040.6	6,443.1	6,156.4	30.9	27.3	-123.85	-167.3	1,175.4	252.8	217.2	35.58	7.103		
6,500.0	6,086.5	6,552.7	6,212.0	30.9	27.3	-123.22	-74.4	1,191.5	256.0	220.7	35.34	7.246		

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

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
6,600.0	6,120.4	6,663.1	6,253.6	31.0	27.4	-122.84	27.1	1,203.4	258.5	223.0	35.51	7.279		
6,700.0	6,141.7	6,774.1	6,279.9	31.0	27.4	-122.62	134.6	1,210.9	260.0	223.8	36.26	7.172		
6,800.0	6,149.9	6,885.4	6,289.9	31.1	27.5	-122.51	245.3	1,213.6	260.6	222.9	37.65	6.920		
6,900.0	6,150.0	6,986.6	6,290.0	31.2	27.6	-122.50	346.5	1,213.5	260.6	221.5	39.08	6.667		
7,000.0	6,150.0	7,086.6	6,290.0	31.5	27.9	-122.50	446.5	1,213.4	260.6	219.8	40.80	6.386		
7,100.0	6,150.0	7,186.6	6,290.0	31.8	28.3	-122.50	546.5	1,213.2	260.6	217.9	42.71	6.100		
7,200.0	6,150.0	7,286.6	6,290.0	32.2	28.9	-122.50	646.5	1,213.0	260.6	215.8	44.79	5.818		
7,300.0	6,150.0	7,386.6	6,290.0	32.8	29.7	-122.50	746.5	1,212.9	260.6	213.6	47.01	5.543		
7,400.0	6,150.0	7,486.6	6,290.0	33.5	30.5	-122.50	846.5	1,212.7	260.6	211.2	49.36	5.279		
7,500.0	6,150.0	7,586.6	6,290.0	34.3	31.6	-122.50	946.5	1,212.6	260.6	208.8	51.82	5.029		
7,600.0	6,150.0	7,686.6	6,290.0	35.2	32.7	-122.50	1,046.5	1,212.4	260.6	206.2	54.37	4.793		
7,700.0	6,150.0	7,786.6	6,290.0	36.2	33.9	-122.49	1,146.5	1,212.3	260.6	203.6	57.00	4.572		
7,800.0	6,150.0	7,886.6	6,290.0	37.3	35.2	-122.49	1,246.5	1,212.1	260.6	200.9	59.70	4.365		
7,900.0	6,150.0	7,986.6	6,290.0	38.6	36.6	-122.49	1,346.5	1,211.9	260.6	198.1	62.47	4.172		
8,000.0	6,150.0	8,086.6	6,290.0	39.9	38.0	-122.49	1,446.5	1,211.8	260.6	195.3	65.28	3.992		
8,100.0	6,150.0	8,186.6	6,290.0	41.2	39.5	-122.49	1,546.5	1,211.6	260.6	192.5	68.15	3.824		
8,200.0	6,150.0	8,286.6	6,290.0	42.6	41.0	-122.49	1,646.5	1,211.5	260.6	189.6	71.05	3.668		
8,300.0	6,150.0	8,386.6	6,290.0	44.1	42.6	-122.49	1,746.5	1,211.3	260.6	186.6	73.99	3.522		
8,400.0	6,150.0	8,486.6	6,290.0	45.6	44.2	-122.49	1,846.5	1,211.2	260.6	183.7	76.97	3.386		
8,500.0	6,150.0	8,586.6	6,290.0	47.1	45.8	-122.49	1,946.5	1,211.0	260.6	180.7	79.97	3.259		
8,600.0	6,150.0	8,686.6	6,290.0	48.7	47.5	-122.49	2,046.5	1,210.8	260.6	177.6	83.00	3.140		
8,700.0	6,150.0	8,786.6	6,290.0	50.3	49.1	-122.49	2,146.5	1,210.7	260.6	174.6	86.05	3.029		
8,800.0	6,150.0	8,886.6	6,290.0	51.9	50.8	-122.49	2,246.5	1,210.5	260.6	171.5	89.12	2.925		
8,900.0	6,150.0	8,986.6	6,290.0	53.6	52.5	-122.49	2,346.5	1,210.4	260.7	168.4	92.21	2.827		
9,000.0	6,150.0	9,086.6	6,290.0	55.2	54.2	-122.49	2,446.5	1,210.2	260.7	165.3	95.31	2.735		
9,100.0	6,150.0	9,186.6	6,290.0	56.9	56.0	-122.49	2,546.5	1,210.1	260.7	162.2	98.43	2.648		
9,200.0	6,150.0	9,286.6	6,290.0	58.6	57.7	-122.49	2,646.5	1,209.9	260.7	159.1	101.57	2.566		
9,300.0	6,150.0	9,386.6	6,290.0	60.4	59.5	-122.49	2,746.5	1,209.7	260.7	156.0	104.72	2.489		
9,400.0	6,150.0	9,486.6	6,290.0	62.1	61.2	-122.48	2,846.5	1,209.6	260.7	152.8	107.88	2.416		
9,500.0	6,150.0	9,586.6	6,290.0	63.8	63.0	-122.48	2,946.5	1,209.4	260.7	149.6	111.04	2.347		
9,600.0	6,150.0	9,686.6	6,290.0	65.6	64.8	-122.48	3,046.5	1,209.3	260.7	146.5	114.22	2.282		
9,700.0	6,150.0	9,786.6	6,290.0	67.3	66.6	-122.48	3,146.5	1,209.1	260.7	143.3	117.41	2.220		
9,800.0	6,150.0	9,886.6	6,290.0	69.1	68.4	-122.48	3,246.5	1,209.0	260.7	140.1	120.61	2.161		
9,900.0	6,150.0	9,986.6	6,290.0	70.9	70.2	-122.48	3,346.5	1,208.8	260.7	136.9	123.81	2.106		
10,000.0	6,150.0	10,086.6	6,290.0	72.7	72.0	-122.48	3,446.5	1,208.6	260.7	133.7	127.02	2.052		
10,100.0	6,150.0	10,186.6	6,290.0	74.4	73.8	-122.48	3,546.5	1,208.5	260.7	130.5	130.24	2.002		
10,200.0	6,150.0	10,286.6	6,290.0	76.2	75.6	-122.48	3,646.5	1,208.3	260.7	127.2	133.46	1.953		
10,300.0	6,150.0	10,386.6	6,290.0	78.1	77.4	-122.48	3,746.5	1,208.2	260.7	124.0	136.69	1.907		
10,400.0	6,150.0	10,486.6	6,290.0	79.9	79.3	-122.48	3,846.5	1,208.0	260.7	120.8	139.92	1.863		
10,500.0	6,150.0	10,586.6	6,290.0	81.7	81.1	-122.48	3,946.5	1,207.9	260.7	117.6	143.16	1.821		
10,600.0	6,150.0	10,686.6	6,290.0	83.5	82.9	-122.48	4,046.5	1,207.7	260.7	114.3	146.40	1.781		
10,700.0	6,150.0	10,786.6	6,290.0	85.3	84.8	-122.48	4,146.5	1,207.5	260.7	111.1	149.65	1.742		
10,800.0	6,150.0	10,886.6	6,290.0	87.1	86.6	-122.48	4,246.5	1,207.4	260.7	107.8	152.90	1.705		
10,900.0	6,150.0	10,986.6	6,290.0	89.0	88.5	-122.48	4,346.5	1,207.2	260.7	104.6	156.15	1.670		
11,000.0	6,150.0	11,086.6	6,290.0	90.8	90.3	-122.48	4,446.5	1,207.1	260.7	101.3	159.41	1.636		
11,100.0	6,150.0	11,186.6	6,290.0	92.7	92.2	-122.47	4,546.5	1,206.9	260.7	98.1	162.67	1.603		
11,200.0	6,150.0	11,286.6	6,290.0	94.5	94.0	-122.47	4,646.5	1,206.8	260.7	94.8	165.93	1.571		
11,300.0	6,150.0	11,386.6	6,290.0	96.3	95.9	-122.47	4,746.5	1,206.6	260.8	91.6	169.20	1.541		
11,400.0	6,150.0	11,486.6	6,290.0	98.2	97.8	-122.47	4,846.5	1,206.4	260.8	88.3	172.47	1.512		
11,500.0	6,150.0	11,586.6	6,290.0	100.0	99.6	-122.47	4,946.5	1,206.3	260.8	85.0	175.74	1.484 Level 3		
11,600.0	6,150.0	11,686.6	6,290.0	101.9	101.5	-122.47	5,046.5	1,206.1	260.8	81.7	179.01	1.457 Level 3		
11,700.0	6,150.0	11,786.6	6,290.0	103.7	103.3	-122.47	5,146.5	1,206.0	260.8	78.5	182.29	1.431 Level 3		

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well SRC Markham 31-16-9NHZ
<b>Project:</b>	Sec.16-T4N-R68W	<b>TVD Reference:</b>	WELL @ 4977.0ft (RKB - 13')
<b>Reference Site:</b>	SRC Markham Pad Sec.16-T4N-R68W	<b>MD Reference:</b>	WELL @ 4977.0ft (RKB - 13')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SRC Markham 31-16-9NHZ	<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 (3-31-14)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> SRC Markham Pad Sec.16-T4N-R68W - SRC Markham 31-16-9CHZ - Wellbore #1 - Plan #1 (3-31-14)												<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
11,800.0	6,150.0	11,886.6	6,290.0	105.6	105.2	-122.47	5,246.5	1,205.8	260.8	75.2	185.57	1.405 Level 3	
11,900.0	6,150.0	11,986.6	6,290.0	107.5	107.1	-122.47	5,346.5	1,205.7	260.8	71.9	188.85	1.381 Level 3	
12,000.0	6,150.0	12,086.6	6,290.0	109.3	109.0	-122.47	5,446.5	1,205.5	260.8	68.6	192.13	1.357 Level 3	
12,100.0	6,150.0	12,186.6	6,290.0	111.2	110.8	-122.47	5,546.5	1,205.3	260.8	65.4	195.42	1.334 Level 3	
12,200.0	6,150.0	12,286.6	6,290.0	113.1	112.7	-122.47	5,646.5	1,205.2	260.8	62.1	198.71	1.312 Level 3	
12,300.0	6,150.0	12,386.6	6,290.0	114.9	114.6	-122.47	5,746.5	1,205.0	260.8	58.8	201.99	1.291 Level 3	
12,400.0	6,150.0	12,486.6	6,290.0	116.8	116.5	-122.47	5,846.5	1,204.9	260.8	55.5	205.28	1.270 Level 3	
12,500.0	6,150.0	12,586.6	6,290.0	118.7	118.3	-122.47	5,946.5	1,204.7	260.8	52.2	208.58	1.250 Level 3	
12,600.0	6,150.0	12,686.6	6,290.0	120.5	120.2	-122.47	6,046.5	1,204.6	260.8	48.9	211.87	1.231 Level 2	
12,700.0	6,150.0	12,786.6	6,290.0	122.4	122.1	-122.47	6,146.5	1,204.4	260.8	45.6	215.16	1.212 Level 2	
12,800.0	6,150.0	12,886.6	6,290.0	124.3	124.0	-122.46	6,246.5	1,204.2	260.8	42.4	218.46	1.194 Level 2	
12,900.0	6,150.0	12,986.6	6,290.0	126.2	125.9	-122.46	6,346.5	1,204.1	260.8	39.1	221.76	1.176 Level 2	
13,000.0	6,150.0	13,086.6	6,290.0	128.0	127.8	-122.46	6,446.5	1,203.9	260.8	35.8	225.05	1.159 Level 2	
13,100.0	6,150.0	13,186.6	6,290.0	129.9	129.6	-122.46	6,546.5	1,203.8	260.8	32.5	228.35	1.142 Level 2	
13,200.0	6,150.0	13,286.6	6,290.0	131.8	131.5	-122.46	6,646.5	1,203.6	260.8	29.2	231.65	1.126 Level 2	
13,300.0	6,150.0	13,386.6	6,290.0	133.7	133.4	-122.46	6,746.5	1,203.5	260.8	25.9	234.96	1.110 Level 2	
13,400.0	6,150.0	13,486.6	6,290.0	135.6	135.3	-122.46	6,846.5	1,203.3	260.8	22.6	238.26	1.095 Level 2	
13,500.0	6,150.0	13,586.6	6,290.0	137.5	137.2	-122.46	6,946.5	1,203.1	260.8	19.3	241.56	1.080 Level 2	
13,600.0	6,150.0	13,686.6	6,290.0	139.3	139.1	-122.46	7,046.5	1,203.0	260.8	16.0	244.87	1.065 Level 2	
13,700.0	6,150.0	13,786.6	6,290.0	141.2	141.0	-122.46	7,146.5	1,202.8	260.9	12.7	248.17	1.051 Level 2	
13,800.0	6,150.0	13,886.6	6,290.0	143.1	142.9	-122.46	7,246.5	1,202.7	260.9	9.4	251.48	1.037 Level 2	
13,851.7	6,150.0	13,938.9	6,290.0	144.1	143.9	-122.47	7,298.8	1,202.7	260.8	7.6	253.17	1.030 Level 2	
13,864.6	6,150.0	13,947.9	6,290.0	144.3	144.0	-122.47	7,307.7	1,202.7	260.8	7.2	253.53	1.029 Level 2, ES, SF	

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 SRC Markham 31-16-9NHZ
<b>Project:</b>	Sec.16-T4N-R68W	<b>TVD Reference:</b>	WELL @ 4977.0ft (RKB - 13')
<b>Reference Site:</b>	SRC Markham Pad Sec.16-T4N-R68W	<b>MD Reference:</b>	WELL @ 4977.0ft (RKB - 13')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SRC Markham 31-16-9NHZ	<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 (3-31-14)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b>												<b>Offset Site Error:</b>	0.0 ft
SRC Markham Pad Sec.16-T4N-R68W - SRC Markham 41-16-9CHZ - Wellbore #1 - Plan #1 (3-31-14)												<b>Offset Well Error:</b>	0.0 ft
Survey Program: 0-MWD													
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
5,200.0	5,012.8	5,038.9	4,675.5	25.5	37.7	-22.52	-355.5	1,789.4	813.1	778.7	34.40	23.635	
5,300.0	5,106.8	5,138.2	4,765.4	26.2	38.6	-22.71	-364.3	1,830.9	823.9	788.6	35.33	23.318	
5,400.0	5,200.9	5,237.6	4,855.3	26.9	39.6	-22.90	-373.1	1,872.3	834.7	798.4	36.27	23.014	
5,500.0	5,294.9	5,337.0	4,945.2	27.6	40.5	-23.08	-382.0	1,913.8	845.4	808.2	37.21	22.723	
5,600.0	5,388.9	5,436.4	5,035.0	28.4	41.4	-23.13	-390.8	1,955.3	856.2	818.1	38.15	22.444	
5,700.0	5,483.5	5,535.7	5,124.8	29.0	42.4	-0.85	-399.6	1,996.8	866.6	827.4	39.18	22.118 SF	
5,800.0	5,577.8	5,633.5	5,213.3	29.5	43.3	21.45	-408.3	2,037.6	876.2	836.7	39.53	22.168	
5,900.0	5,670.0	5,727.9	5,298.6	29.9	44.2	38.64	-416.7	2,077.0	885.7	846.4	39.35	22.510	
6,000.0	5,758.4	5,817.0	5,379.3	30.2	45.0	50.81	-424.6	2,114.2	896.3	857.4	38.92	23.030	
6,100.0	5,841.2	5,899.2	5,453.6	30.4	45.8	59.48	-431.9	2,148.5	909.6	871.1	38.53	23.610	
6,200.0	5,916.8	5,972.8	5,520.2	30.6	46.4	65.71	-438.4	2,179.2	927.2	888.8	38.36	24.172	
6,300.0	5,983.7	6,036.5	5,577.7	30.8	47.0	69.92	-444.1	2,205.8	950.6	912.1	38.50	24.688	
6,400.0	6,040.6	6,127.5	5,660.3	30.9	47.8	74.16	-446.9	2,243.9	980.2	941.5	38.67	25.349	

SRC Markham Pad Sec.16-T4N-R68W - SRC Markham 41-16-9NHZ - Wellbore #1 - Plan #1 (3-31-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													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	0.0	0.0	0.0	0.0	89.38	1.5	135.0	135.0					
100.0	100.0	99.0	99.0	0.1	0.1	89.38	1.5	135.0	135.0	134.8	0.22	603.566		
200.0	200.0	199.0	199.0	0.3	0.3	89.38	1.5	135.0	135.0	134.3	0.67	200.854 CC, ES		
300.0	300.0	294.6	294.6	0.6	0.5	89.51	1.2	136.5	136.6	135.5	1.10	124.140		
400.0	400.0	389.9	389.8	0.8	0.7	89.90	0.3	141.2	141.5	139.9	1.53	92.197		
500.0	500.0	484.9	484.4	1.0	1.0	90.48	-1.3	148.9	149.6	147.6	1.99	75.242		
600.0	600.0	579.2	578.1	1.2	1.2	91.20	-3.3	159.6	161.0	158.5	2.47	65.270		
700.0	700.0	672.7	670.5	1.5	1.6	91.98	-6.0	173.2	175.6	172.6	2.97	59.033		
800.0	800.0	765.1	761.5	1.7	1.9	92.78	-9.2	189.5	193.4	189.9	3.52	54.985		
900.0	900.0	856.4	850.7	1.9	2.3	93.54	-12.9	208.5	214.4	210.3	4.10	52.301		
1,000.0	1,000.0	946.4	938.0	2.1	2.7	94.25	-17.1	229.9	238.4	233.7	4.72	50.511		
1,100.0	1,100.0	1,034.9	1,023.1	2.4	3.2	94.89	-21.7	253.5	265.5	260.1	5.38	49.328		
1,200.0	1,200.0	1,121.8	1,105.9	2.6	3.7	95.47	-26.7	279.3	295.6	289.5	6.09	48.573		
1,300.0	1,300.0	1,206.9	1,186.3	2.8	4.3	95.98	-32.1	306.9	328.5	321.7	6.83	48.129		
1,400.0	1,400.0	1,290.2	1,264.1	3.0	4.9	96.42	-37.8	336.1	364.2	356.6	7.61	47.875		
1,500.0	1,500.0	1,372.3	1,339.8	3.2	5.5	-14.05	-43.9	367.1	401.0	394.3	6.64	60.412		
1,600.0	1,599.8	1,453.6	1,413.9	3.4	6.2	-13.67	-50.3	399.9	437.3	430.2	7.09	61.694		
1,700.0	1,699.5	1,534.2	1,486.5	3.6	7.0	-13.40	-57.0	434.4	473.1	465.5	7.55	62.650		
1,800.0	1,798.7	1,626.5	1,568.8	3.9	7.8	-13.22	-65.0	475.4	507.3	499.2	8.06	62.955		
1,900.0	1,897.5	1,721.5	1,653.6	4.1	8.8	-13.16	-73.3	517.5	538.3	529.7	8.58	62.715		
2,000.0	1,995.6	1,817.6	1,739.2	4.4	9.7	-13.19	-81.6	560.2	566.1	556.9	9.13	62.017		
2,100.0	2,093.1	1,914.5	1,825.7	4.7	10.6	-13.29	-90.0	603.2	590.6	580.9	9.69	60.940		
2,200.0	2,189.6	2,012.2	1,912.8	5.1	11.6	-13.48	-98.5	646.5	611.8	601.5	10.27	59.547		
2,300.0	2,285.3	2,110.5	2,000.5	5.6	12.6	-13.74	-107.0	690.1	629.7	618.8	10.88	57.886		
2,400.0	2,379.8	2,209.3	2,088.7	6.1	13.5	-14.07	-115.6	734.0	644.3	632.8	11.51	55.987		
2,500.0	2,473.9	2,308.3	2,177.0	6.7	14.5	-14.48	-124.1	778.0	657.4	645.2	12.20	53.894		
2,600.0	2,567.9	2,407.4	2,265.3	7.3	15.5	-14.88	-132.7	821.9	670.5	657.6	12.91	51.957		
2,700.0	2,661.9	2,506.4	2,353.6	7.9	16.5	-15.27	-141.3	865.8	683.7	670.1	13.63	50.164		
2,800.0	2,756.0	2,605.4	2,441.9	8.6	17.5	-15.64	-149.9	909.8	696.9	682.6	14.37	48.505		
2,900.0	2,850.0	2,704.4	2,530.3	9.2	18.4	-15.99	-158.5	953.7	710.2	695.1	15.12	46.967		
3,000.0	2,944.0	2,803.5	2,618.6	9.9	19.4	-16.34	-167.1	997.7	723.4	707.6	15.89	45.541		
3,100.0	3,038.1	2,902.5	2,706.9	10.6	20.4	-16.67	-175.6	1,041.6	736.7	720.1	16.66	44.216		
3,200.0	3,132.1	3,001.5	2,795.2	11.2	21.4	-16.99	-184.2	1,085.6	750.0	732.6	17.45	42.984		
3,300.0	3,226.1	3,100.5	2,883.6	11.9	22.4	-17.29	-192.8	1,129.5	763.4	745.1	18.25	41.835		
3,400.0	3,320.2	3,199.6	2,971.9	12.6	23.4	-17.59	-201.4	1,173.5	776.7	757.7	19.05	40.764		
3,500.0	3,414.2	3,298.6	3,060.2	13.3	24.3	-17.88	-210.0	1,217.4	790.1	770.2	19.87	39.763		
3,600.0	3,508.2	3,397.6	3,148.5	14.0	25.3	-18.16	-218.6	1,261.3	803.5	782.8	20.70	38.825		
3,700.0	3,602.3	3,496.6	3,236.9	14.7	26.3	-18.43	-227.1	1,305.3	816.9	795.4	21.53	37.947		
3,800.0	3,696.3	3,595.7	3,325.2	15.4	27.3	-18.69	-235.7	1,349.2	830.4	808.0	22.37	37.122		
3,900.0	3,790.3	3,694.7	3,413.5	16.1	28.3	-18.94	-244.3	1,393.2	843.8	820.6	23.22	36.346		
4,000.0	3,884.4	3,793.7	3,501.8	16.9	29.3	-19.18	-252.9	1,437.1	857.3	833.2	24.07	35.616		
4,100.0	3,978.4	3,892.7	3,590.2	17.6	30.3	-19.42	-261.5	1,481.1	870.7	845.8	24.93	34.927		
4,200.0	4,072.4	3,991.8	3,678.5	18.3	31.2	-19.65	-270.1	1,525.0	884.2	858.4	25.80	34.277		
4,300.0	4,166.5	4,090.8	3,766.8	19.0	32.2	-19.87	-278.6	1,569.0	897.7	871.1	26.67	33.662		
4,400.0	4,260.5	4,189.8	3,855.1	19.7	33.2	-20.08	-287.2	1,612.9	911.3	883.7	27.55	33.080		
4,500.0	4,354.5	4,288.8	3,943.5	20.4	34.2	-20.29	-295.8	1,656.8	924.8	896.4	28.43	32.529		
4,600.0	4,448.6	4,387.9	4,031.8	21.1	35.2	-20.50	-304.4	1,700.8	938.3	909.0	29.32	32.005		
4,700.0	4,542.6	4,486.9	4,120.1	21.9	36.2	-20.69	-313.0	1,744.7	951.9	921.7	30.21	31.508		
4,800.0	4,636.6	4,585.9	4,208.4	22.6	37.2	-20.89	-321.6	1,788.7	965.4	934.3	31.11	31.035		
4,900.0	4,730.7	4,684.9	4,296.7	23.3	38.2	-21.07	-330.1	1,832.6	979.0	947.0	32.01	30.584		
5,000.0	4,824.7	4,784.0	4,385.1	24.0	39.1	-21.25	-338.7	1,876.6	992.6	959.7	32.92	30.155 SF		

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well SRC Markham 31-16-9NHZ
<b>Project:</b>	Sec.16-T4N-R68W	<b>TVD Reference:</b>	WELL @ 4977.0ft (RKB - 13')
<b>Reference Site:</b>	SRC Markham Pad Sec.16-T4N-R68W	<b>MD Reference:</b>	WELL @ 4977.0ft (RKB - 13')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SRC Markham 31-16-9NHZ	<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 (3-31-14)	<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		
0.0	0.0	0.0	0.0	0.0	0.0	89.04	0.4	22.3	22.3					
100.0	100.0	99.0	99.0	0.1	0.1	89.04	0.4	22.3	22.3	22.1	0.22	99.771		
200.0	200.0	199.0	199.0	0.3	0.3	89.04	0.4	22.3	22.3	21.6	0.67	33.202		
300.0	300.0	299.0	299.0	0.6	0.6	89.04	0.4	22.3	22.3	21.2	1.12	19.894		
400.0	400.0	399.0	399.0	0.8	0.8	89.04	0.4	22.3	22.3	20.7	1.57	14.202		
500.0	500.0	499.0	499.0	1.0	1.0	89.04	0.4	22.3	22.3	20.3	2.02	11.043		
600.0	600.0	599.0	599.0	1.2	1.2	89.04	0.4	22.3	22.3	19.8	2.47	9.033		
700.0	700.0	699.0	699.0	1.5	1.5	89.04	0.4	22.3	22.3	19.4	2.92	7.642		
800.0	800.0	799.0	799.0	1.7	1.7	89.04	0.4	22.3	22.3	18.9	3.37	6.623		
900.0	900.0	899.0	899.0	1.9	1.9	89.04	0.4	22.3	22.3	18.5	3.82	5.843		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	89.04	0.4	22.3	22.3	18.0	4.27	5.228		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	89.04	0.4	22.3	22.3	17.6	4.72	4.730		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	89.04	0.4	22.3	22.3	17.1	5.17	4.318 CC		
1,300.0	1,300.0	1,298.2	1,298.2	2.8	2.8	90.38	-0.2	23.9	23.9	18.3	5.60	4.273		
1,400.0	1,400.0	1,397.2	1,397.1	3.0	3.0	93.50	-1.8	28.8	28.9	22.9	6.02	4.798		
1,500.0	1,500.0	1,495.9	1,495.4	3.2	3.2	-14.80	-4.4	36.8	35.6	29.2	6.41	5.547		
1,600.0	1,599.8	1,594.4	1,593.1	3.4	3.4	-13.18	-8.1	48.0	42.3	35.5	6.79	6.227		
1,700.0	1,699.5	1,692.6	1,690.2	3.6	3.7	-12.19	-12.9	62.4	49.0	41.8	7.18	6.831		
1,800.0	1,798.7	1,790.6	1,786.4	3.9	4.0	-11.62	-18.7	79.9	55.7	48.2	7.57	7.365		
1,900.0	1,897.5	1,888.4	1,881.8	4.1	4.3	-11.32	-25.5	100.5	62.4	54.4	7.96	7.835		
2,000.0	1,995.6	1,986.0	1,976.1	4.4	4.7	-11.21	-33.3	124.0	69.0	60.6	8.37	8.245		
2,100.0	2,093.1	2,083.3	2,069.4	4.7	5.1	-11.24	-42.1	150.6	75.5	66.8	8.79	8.596		
2,200.0	2,189.6	2,180.5	2,161.4	5.1	5.7	-11.38	-51.8	180.0	82.0	72.8	9.22	8.897		
2,300.0	2,285.3	2,278.8	2,253.6	5.6	6.2	-11.65	-62.6	212.5	88.1	78.4	9.68	9.094		
2,400.0	2,379.8	2,378.8	2,347.2	6.1	6.9	-12.30	-73.6	246.0	91.1	81.0	10.18	8.952		
2,500.0	2,473.9	2,478.7	2,440.8	6.7	7.5	-13.14	-84.7	279.4	92.7	81.9	10.78	8.598		
2,600.0	2,567.9	2,578.7	2,534.3	7.3	8.2	-13.95	-95.8	312.8	94.3	82.9	11.41	8.263		
2,700.0	2,661.9	2,678.7	2,627.9	7.9	8.9	-14.73	-106.8	346.3	95.9	83.9	12.07	7.947		
2,800.0	2,756.0	2,778.7	2,721.5	8.6	9.6	-15.48	-117.9	379.7	97.6	84.8	12.76	7.649		
2,900.0	2,850.0	2,878.7	2,815.0	9.2	10.3	-16.21	-129.0	413.1	99.2	85.8	13.46	7.370		
3,000.0	2,944.0	2,978.6	2,908.6	9.9	11.0	-16.92	-140.0	446.5	100.9	86.7	14.19	7.107		
3,100.0	3,038.1	3,078.6	3,002.2	10.6	11.7	-17.60	-151.1	480.0	102.6	87.6	14.95	6.861		
3,200.0	3,132.1	3,178.6	3,095.7	11.2	12.5	-18.26	-162.2	513.4	104.3	88.5	15.72	6.631		
3,300.0	3,226.1	3,278.6	3,189.3	11.9	13.2	-18.90	-173.2	546.8	106.0	89.4	16.52	6.415		
3,400.0	3,320.2	3,378.5	3,282.9	12.6	13.9	-19.52	-184.3	580.3	107.7	90.4	17.33	6.213		
3,500.0	3,414.2	3,478.5	3,376.5	13.3	14.7	-20.12	-195.4	613.7	109.4	91.3	18.16	6.024		
3,600.0	3,508.2	3,578.5	3,470.0	14.0	15.4	-20.70	-206.4	647.1	111.2	92.1	19.01	5.846		
3,700.0	3,602.3	3,678.5	3,563.6	14.7	16.1	-21.26	-217.5	680.6	112.9	93.0	19.88	5.679		
3,800.0	3,696.3	3,778.5	3,657.2	15.4	16.9	-21.81	-228.6	714.0	114.7	93.9	20.76	5.523		
3,900.0	3,790.3	3,878.4	3,750.7	16.1	17.6	-22.33	-239.6	747.4	116.5	94.8	21.66	5.376		
4,000.0	3,884.4	3,978.4	3,844.3	16.9	18.4	-22.85	-250.7	780.9	118.2	95.7	22.57	5.238		
4,100.0	3,978.4	4,078.4	3,937.9	17.6	19.1	-23.35	-261.7	814.3	120.0	96.5	23.50	5.108		
4,200.0	4,072.4	4,178.4	4,031.5	18.3	19.9	-23.83	-272.8	847.7	121.8	97.4	24.44	4.986		
4,300.0	4,166.5	4,278.4	4,125.0	19.0	20.6	-24.30	-283.9	881.2	123.6	98.3	25.39	4.870		
4,400.0	4,260.5	4,378.3	4,218.6	19.7	21.3	-24.75	-294.9	914.6	125.5	99.1	26.35	4.761		
4,500.0	4,354.5	4,478.3	4,312.2	20.4	22.1	-25.20	-306.0	948.0	127.3	100.0	27.32	4.659		
4,600.0	4,448.6	4,578.3	4,405.7	21.1	22.8	-25.62	-317.1	981.5	129.1	100.8	28.31	4.561		
4,700.0	4,542.6	4,678.3	4,499.3	21.9	23.6	-26.04	-328.1	1,014.9	131.0	101.7	29.30	4.469		
4,800.0	4,636.6	4,778.2	4,592.9	22.6	24.3	-26.45	-339.2	1,048.3	132.8	102.5	30.31	4.382		
4,900.0	4,730.7	4,878.2	4,686.5	23.3	25.1	-26.84	-350.3	1,081.8	134.7	103.3	31.32	4.300		
5,000.0	4,824.7	4,978.2	4,780.0	24.0	25.8	-27.23	-361.3	1,115.2	136.5	104.2	32.34	4.221		
5,100.0	4,918.8	5,078.2	4,873.6	24.8	26.6	-27.60	-372.4	1,148.6	138.4	105.0	33.37	4.147		

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

SRC Markham Pad Sec.16-T4N-R68W - SRC Markham C-16-9CHZ - Wellbore #1 - Plan #1 (3-31-14)													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		
5,200.0	5,012.8	5,178.2	4,967.2	25.5	27.3	-27.97	-383.5	1,182.1	140.3	105.9	34.41	4.076		
5,300.0	5,106.8	5,278.1	5,060.7	26.2	28.1	-28.32	-394.5	1,215.5	142.1	106.7	35.46	4.009		
5,400.0	5,200.9	5,378.1	5,154.3	26.9	28.9	-28.66	-405.6	1,248.9	144.0	107.5	36.51	3.945		
5,500.0	5,294.9	5,478.1	5,247.9	27.6	29.6	-29.00	-416.7	1,282.4	145.9	108.3	37.57	3.884		
5,600.0	5,388.9	5,578.1	5,341.5	28.4	30.4	-29.19	-427.7	1,315.8	147.8	109.2	38.64	3.826		
5,700.0	5,483.5	5,677.8	5,434.8	29.0	31.1	-4.09	-438.8	1,349.1	148.7	110.4	38.25	3.887		
5,800.0	5,577.8	5,775.7	5,526.4	29.5	31.8	25.22	-449.6	1,381.9	149.3	113.7	35.52	4.202		
5,900.0	5,670.0	5,873.6	5,618.4	29.9	32.5	51.37	-455.6	1,414.7	153.9	121.0	32.87	4.681		
6,000.0	5,758.4	5,975.7	5,714.1	30.2	33.0	71.23	-447.9	1,448.9	163.5	131.3	32.18	5.079		
6,100.0	5,841.2	6,082.5	5,812.2	30.4	33.5	86.17	-424.4	1,483.9	176.9	144.3	32.60	5.426		
6,200.0	5,916.8	6,194.5	5,910.3	30.6	33.9	97.43	-383.5	1,518.9	192.7	159.7	32.94	5.849		
6,300.0	5,983.7	6,312.1	6,005.5	30.8	34.3	105.91	-323.6	1,552.8	209.3	176.7	32.58	6.425		
6,400.0	6,040.6	6,435.5	6,094.0	30.9	34.5	112.24	-243.9	1,584.3	225.3	193.9	31.44	7.166		
6,500.0	6,086.5	6,564.4	6,171.4	30.9	34.7	116.83	-144.7	1,611.7	239.5	209.7	29.82	8.031		
6,600.0	6,120.4	6,698.4	6,232.8	31.0	34.9	119.99	-27.9	1,633.5	250.7	222.5	28.20	8.890		
6,700.0	6,141.7	6,836.2	6,273.4	31.0	35.0	121.90	102.8	1,647.7	258.2	231.0	27.21	9.488		
6,800.0	6,149.9	6,976.2	6,289.8	31.1	35.0	122.64	241.6	1,653.4	261.3	233.9	27.35	9.553		
6,900.0	6,150.0	7,081.8	6,290.0	31.2	35.1	122.65	347.1	1,653.3	261.3	233.2	28.13	9.291		
7,000.0	6,150.0	7,181.8	6,290.0	31.5	35.3	122.65	447.1	1,653.2	261.3	231.8	29.58	8.835		
7,100.0	6,150.0	7,281.8	6,290.0	31.8	35.6	122.65	547.1	1,653.0	261.3	230.0	31.34	8.338		
7,200.0	6,150.0	7,381.8	6,290.0	32.2	35.9	122.65	647.1	1,652.8	261.3	228.0	33.34	7.838		
7,300.0	6,150.0	7,481.8	6,290.0	32.8	36.4	122.65	747.1	1,652.7	261.3	225.8	35.54	7.352		
7,400.0	6,150.0	7,581.8	6,290.0	33.5	36.9	122.65	847.1	1,652.5	261.3	223.4	37.91	6.894		
7,500.0	6,150.0	7,681.8	6,290.0	34.3	37.6	122.65	947.1	1,652.4	261.3	220.9	40.41	6.467		
7,600.0	6,150.0	7,781.8	6,290.0	35.2	38.3	122.65	1,047.1	1,652.2	261.3	218.3	43.02	6.074		
7,700.0	6,150.0	7,881.8	6,290.0	36.2	39.2	122.65	1,147.1	1,652.1	261.3	215.6	45.73	5.714		
7,800.0	6,150.0	7,981.8	6,290.0	37.3	40.2	122.65	1,247.1	1,651.9	261.3	212.8	48.52	5.387		
7,900.0	6,150.0	8,081.8	6,290.0	38.6	41.2	122.65	1,347.1	1,651.8	261.3	210.0	51.36	5.088		
8,000.0	6,150.0	8,181.8	6,290.0	39.9	42.4	122.65	1,447.1	1,651.6	261.3	207.1	54.27	4.816		
8,100.0	6,150.0	8,281.8	6,290.0	41.2	43.6	122.65	1,547.1	1,651.5	261.3	204.1	57.22	4.567		
8,200.0	6,150.0	8,381.8	6,290.0	42.6	44.8	122.65	1,647.1	1,651.3	261.3	201.1	60.21	4.340		
8,300.0	6,150.0	8,481.8	6,290.0	44.1	46.2	122.65	1,747.1	1,651.2	261.3	198.1	63.23	4.133		
8,400.0	6,150.0	8,581.8	6,290.0	45.6	47.6	122.65	1,847.1	1,651.0	261.3	195.0	66.28	3.943		
8,500.0	6,150.0	8,681.8	6,290.0	47.1	49.0	122.65	1,947.1	1,650.9	261.3	192.0	69.36	3.768		
8,600.0	6,150.0	8,781.8	6,290.0	48.7	50.5	122.65	2,047.1	1,650.7	261.3	188.9	72.46	3.606		
8,700.0	6,150.0	8,881.8	6,290.0	50.3	52.0	122.65	2,147.1	1,650.6	261.3	185.7	75.58	3.458		
8,800.0	6,150.0	8,981.8	6,290.0	51.9	53.5	122.65	2,247.1	1,650.4	261.3	182.6	78.72	3.320		
8,900.0	6,150.0	9,081.8	6,290.0	53.6	55.1	122.65	2,347.1	1,650.3	261.3	179.5	81.87	3.192		
9,000.0	6,150.0	9,181.8	6,290.0	55.2	56.7	122.65	2,447.1	1,650.1	261.3	176.3	85.03	3.073		
9,100.0	6,150.0	9,281.8	6,290.0	56.9	58.3	122.65	2,547.1	1,649.9	261.3	173.1	88.21	2.962		
9,200.0	6,150.0	9,381.8	6,290.0	58.6	60.0	122.65	2,647.1	1,649.8	261.3	169.9	91.40	2.859		
9,300.0	6,150.0	9,481.8	6,290.0	60.4	61.7	122.65	2,747.1	1,649.6	261.3	166.7	94.60	2.762		
9,400.0	6,150.0	9,581.8	6,290.0	62.1	63.3	122.65	2,847.1	1,649.5	261.3	163.5	97.80	2.672		
9,500.0	6,150.0	9,681.8	6,290.0	63.8	65.0	122.65	2,947.1	1,649.3	261.3	160.3	101.02	2.587		
9,600.0	6,150.0	9,781.8	6,290.0	65.6	66.7	122.65	3,047.1	1,649.2	261.3	157.1	104.24	2.507		
9,700.0	6,150.0	9,881.8	6,290.0	67.3	68.5	122.65	3,147.1	1,649.0	261.3	153.9	107.46	2.432		
9,800.0	6,150.0	9,981.8	6,290.0	69.1	70.2	122.65	3,247.1	1,648.9	261.3	150.6	110.70	2.361		
9,900.0	6,150.0	10,081.8	6,290.0	70.9	71.9	122.65	3,347.1	1,648.7	261.3	147.4	113.94	2.293		
10,000.0	6,150.0	10,181.8	6,290.0	72.7	73.7	122.66	3,447.1	1,648.6	261.3	144.1	117.18	2.230		
10,100.0	6,150.0	10,281.8	6,290.0	74.4	75.4	122.66	3,547.1	1,648.4	261.3	140.9	120.43	2.170		
10,200.0	6,150.0	10,381.8	6,290.0	76.2	77.2	122.66	3,647.1	1,648.3	261.3	137.6	123.68	2.113		
10,300.0	6,150.0	10,481.8	6,290.0	78.1	79.0	122.66	3,747.1	1,648.1	261.3	134.4	126.94	2.059		

Offset Design      SRC Markham Pad Sec.16-T4N-R68W - SRC Markham C-16-9CHZ - Wellbore #1 - Plan #1 (3-31-14)													Offset Site Error:      0.0 ft	
Survey Program:    0-MWD													Offset Well Error:      0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,400.0	6,150.0	10,581.8	6,290.0	79.9	80.8	122.66	3,847.1	1,648.0	261.3	131.1	130.20	2.007		
10,500.0	6,150.0	10,681.8	6,290.0	81.7	82.5	122.66	3,947.1	1,647.8	261.3	127.8	133.46	1.958		
10,600.0	6,150.0	10,781.8	6,290.0	83.5	84.3	122.66	4,047.1	1,647.7	261.3	124.6	136.73	1.911		
10,700.0	6,150.0	10,881.8	6,290.0	85.3	86.1	122.66	4,147.1	1,647.5	261.3	121.3	140.00	1.866		
10,800.0	6,150.0	10,981.8	6,290.0	87.1	88.0	122.66	4,247.1	1,647.3	261.3	118.0	143.27	1.824		
10,900.0	6,150.0	11,081.8	6,290.0	89.0	89.8	122.66	4,347.1	1,647.2	261.3	114.8	146.55	1.783		
11,000.0	6,150.0	11,181.8	6,290.0	90.8	91.6	122.66	4,447.1	1,647.0	261.3	111.5	149.83	1.744		
11,100.0	6,150.0	11,281.8	6,290.0	92.7	93.4	122.66	4,547.1	1,646.9	261.3	108.2	153.10	1.707		
11,200.0	6,150.0	11,381.8	6,290.0	94.5	95.2	122.66	4,647.1	1,646.7	261.3	104.9	156.39	1.671		
11,300.0	6,150.0	11,481.8	6,290.0	96.3	97.0	122.66	4,747.1	1,646.6	261.3	101.6	159.67	1.637		
11,400.0	6,150.0	11,581.8	6,290.0	98.2	98.9	122.66	4,847.1	1,646.4	261.3	98.4	162.96	1.604		
11,500.0	6,150.0	11,681.8	6,290.0	100.0	100.7	122.66	4,947.1	1,646.3	261.3	95.1	166.24	1.572		
11,600.0	6,150.0	11,781.8	6,290.0	101.9	102.6	122.66	5,047.1	1,646.1	261.3	91.8	169.53	1.541		
11,700.0	6,150.0	11,881.8	6,290.0	103.7	104.4	122.66	5,147.1	1,646.0	261.3	88.5	172.82	1.512		
11,800.0	6,150.0	11,981.8	6,290.0	105.6	106.2	122.66	5,247.1	1,645.8	261.3	85.2	176.11	1.484	Level 3	
11,900.0	6,150.0	12,081.8	6,290.0	107.5	108.1	122.66	5,347.1	1,645.7	261.3	81.9	179.40	1.456	Level 3	
12,000.0	6,150.0	12,181.8	6,290.0	109.3	109.9	122.66	5,447.1	1,645.5	261.3	78.6	182.70	1.430	Level 3	
12,100.0	6,150.0	12,281.8	6,290.0	111.2	111.8	122.66	5,547.1	1,645.4	261.3	75.3	185.99	1.405	Level 3	
12,200.0	6,150.0	12,381.8	6,290.0	113.1	113.6	122.66	5,647.1	1,645.2	261.3	72.0	189.29	1.380	Level 3	
12,300.0	6,150.0	12,481.8	6,290.0	114.9	115.5	122.66	5,747.1	1,645.1	261.3	68.7	192.59	1.357	Level 3	
12,400.0	6,150.0	12,581.8	6,290.0	116.8	117.4	122.66	5,847.1	1,644.9	261.3	65.4	195.89	1.334	Level 3	
12,500.0	6,150.0	12,681.8	6,290.0	118.7	119.2	122.66	5,947.1	1,644.8	261.3	62.1	199.19	1.312	Level 3	
12,600.0	6,150.0	12,781.8	6,290.0	120.5	121.1	122.66	6,047.1	1,644.6	261.3	58.8	202.49	1.290	Level 3	
12,700.0	6,150.0	12,881.8	6,290.0	122.4	122.9	122.66	6,147.1	1,644.4	261.3	55.5	205.79	1.270	Level 3	
12,800.0	6,150.0	12,981.8	6,290.0	124.3	124.8	122.66	6,247.1	1,644.3	261.3	52.2	209.09	1.250	Level 2	
12,900.0	6,150.0	13,081.8	6,290.0	126.2	126.7	122.66	6,347.1	1,644.1	261.3	48.9	212.39	1.230	Level 2	
13,000.0	6,150.0	13,181.8	6,290.0	128.0	128.5	122.66	6,447.1	1,644.0	261.3	45.6	215.70	1.211	Level 2	
13,100.0	6,150.0	13,281.8	6,290.0	129.9	130.4	122.66	6,547.1	1,643.8	261.3	42.3	219.00	1.193	Level 2	
13,200.0	6,150.0	13,381.8	6,290.0	131.8	132.3	122.66	6,647.1	1,643.7	261.3	39.0	222.31	1.175	Level 2	
13,300.0	6,150.0	13,481.8	6,290.0	133.7	134.2	122.66	6,747.1	1,643.5	261.3	35.7	225.61	1.158	Level 2	
13,400.0	6,150.0	13,581.8	6,290.0	135.6	136.0	122.66	6,847.1	1,643.4	261.3	32.4	228.92	1.141	Level 2	
13,500.0	6,150.0	13,681.8	6,290.0	137.5	137.9	122.66	6,947.1	1,643.2	261.3	29.1	232.23	1.125	Level 2	
13,600.0	6,150.0	13,781.8	6,290.0	139.3	139.8	122.66	7,047.1	1,643.1	261.3	25.8	235.53	1.109	Level 2	
13,700.0	6,150.0	13,881.8	6,290.0	141.2	141.7	122.66	7,147.1	1,642.9	261.3	22.4	238.84	1.094	Level 2	
13,800.0	6,150.0	13,981.8	6,290.0	143.1	143.5	122.66	7,247.1	1,642.8	261.3	19.1	242.15	1.079	Level 2	
13,864.6	6,150.0	14,046.3	6,290.0	144.3	144.8	122.66	7,311.7	1,642.7	261.3	17.0	244.29	1.070 Level 2, ES, SF		

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well SRC Markham 31-16-9NHZ
<b>Project:</b>	Sec.16-T4N-R68W	<b>TVD Reference:</b>	WELL @ 4977.0ft (RKB - 13')
<b>Reference Site:</b>	SRC Markham Pad Sec.16-T4N-R68W	<b>MD Reference:</b>	WELL @ 4977.0ft (RKB - 13')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SRC Markham 31-16-9NHZ	<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 (3-31-14)	<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		
0.0	0.0	0.0	0.0	0.0	0.0	89.05	0.7	44.9	44.9					
100.0	100.0	99.0	99.0	0.1	0.1	89.05	0.7	44.9	44.9	44.7	0.22	200.789		
200.0	200.0	199.0	199.0	0.3	0.3	89.05	0.7	44.9	44.9	44.2	0.67	66.818		
300.0	300.0	299.0	299.0	0.6	0.6	89.05	0.7	44.9	44.9	43.8	1.12	40.037		
400.0	400.0	399.0	399.0	0.8	0.8	89.05	0.7	44.9	44.9	43.3	1.57	28.582		
500.0	500.0	499.0	499.0	1.0	1.0	89.05	0.7	44.9	44.9	42.9	2.02	22.223		
600.0	600.0	599.0	599.0	1.2	1.2	89.05	0.7	44.9	44.9	42.4	2.47	18.179		
700.0	700.0	699.0	699.0	1.5	1.5	89.05	0.7	44.9	44.9	42.0	2.92	15.380		
800.0	800.0	799.0	799.0	1.7	1.7	89.05	0.7	44.9	44.9	41.5	3.37	13.328		
900.0	900.0	899.0	899.0	1.9	1.9	89.05	0.7	44.9	44.9	41.1	3.82	11.759		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	89.05	0.7	44.9	44.9	40.6	4.27	10.521 CC, ES		
1,100.0	1,100.0	1,097.5	1,097.5	2.4	2.3	89.66	0.3	46.5	46.5	41.8	4.70	9.901		
1,200.0	1,200.0	1,195.8	1,195.6	2.6	2.5	91.27	-1.1	51.3	51.4	46.3	5.12	10.051		
1,300.0	1,300.0	1,293.6	1,293.0	2.8	2.7	93.36	-3.5	59.3	59.7	54.2	5.55	10.763		
1,400.0	1,400.0	1,390.7	1,389.5	3.0	3.0	95.47	-6.7	70.4	71.4	65.4	6.00	11.906		
1,500.0	1,500.0	1,487.2	1,484.8	3.2	3.2	-13.88	-10.9	84.6	84.7	78.4	6.38	13.291		
1,600.0	1,599.8	1,583.2	1,579.2	3.4	3.5	-12.84	-15.9	101.7	98.1	91.3	6.77	14.490		
1,700.0	1,699.5	1,678.9	1,672.5	3.6	3.9	-12.19	-21.8	121.7	111.3	104.2	7.17	15.536		
1,800.0	1,798.7	1,774.1	1,764.7	3.9	4.3	-11.80	-28.5	144.7	124.5	116.9	7.57	16.441		
1,900.0	1,897.5	1,869.0	1,855.7	4.1	4.7	-11.60	-36.1	170.4	137.5	129.6	7.99	17.218		
2,000.0	1,995.6	1,963.4	1,945.3	4.4	5.2	-11.54	-44.4	198.9	150.5	142.0	8.41	17.880		
2,100.0	2,093.1	2,057.5	2,033.6	4.7	5.8	-11.58	-53.5	230.1	163.2	154.3	8.86	18.427		
2,200.0	2,189.6	2,152.4	2,121.6	5.1	6.4	-11.70	-63.6	264.3	175.7	166.4	9.32	18.850		
2,300.0	2,285.3	2,251.9	2,213.4	5.6	7.2	-12.00	-74.3	301.0	185.8	176.0	9.82	18.926		
2,400.0	2,379.8	2,351.7	2,305.5	6.1	7.9	-12.50	-85.1	337.8	192.5	182.2	10.35	18.609		
2,500.0	2,473.9	2,451.5	2,397.7	6.7	8.7	-13.10	-95.9	374.6	197.7	186.8	10.97	18.028		
2,600.0	2,567.9	2,551.3	2,489.9	7.3	9.4	-13.66	-106.7	411.5	203.0	191.4	11.61	17.476		
2,700.0	2,661.9	2,651.2	2,582.0	7.9	10.2	-14.19	-117.5	448.3	208.2	196.0	12.28	16.954		
2,800.0	2,756.0	2,751.0	2,674.2	8.6	11.0	-14.70	-128.3	485.2	213.5	200.5	12.97	16.462		
2,900.0	2,850.0	2,850.9	2,766.4	9.2	11.8	-15.19	-139.1	522.0	218.8	205.1	13.68	15.999		
3,000.0	2,944.0	2,950.7	2,858.5	9.9	12.6	-15.65	-149.9	558.9	224.1	209.7	14.40	15.565		
3,100.0	3,038.1	3,050.6	2,950.7	10.6	13.4	-16.09	-160.7	595.7	229.4	214.3	15.14	15.157		
3,200.0	3,132.1	3,150.4	3,042.9	11.2	14.2	-16.51	-171.5	632.6	234.7	218.9	15.89	14.775		
3,300.0	3,226.1	3,250.2	3,135.0	11.9	15.0	-16.91	-182.3	669.4	240.1	223.4	16.65	14.417		
3,400.0	3,320.2	3,350.1	3,227.2	12.6	15.8	-17.29	-193.2	706.3	245.4	228.0	17.43	14.080		
3,500.0	3,414.2	3,449.9	3,319.3	13.3	16.7	-17.66	-204.0	743.1	250.8	232.6	18.22	13.765		
3,600.0	3,508.2	3,549.8	3,411.5	14.0	17.5	-18.01	-214.8	779.9	256.2	237.2	19.02	13.468		
3,700.0	3,602.3	3,649.6	3,503.7	14.7	18.3	-18.35	-225.6	816.8	261.6	241.7	19.83	13.189		
3,800.0	3,696.3	3,749.5	3,595.8	15.4	19.1	-18.68	-236.4	853.6	266.9	246.3	20.65	12.927		
3,900.0	3,790.3	3,849.3	3,688.0	16.1	19.9	-18.99	-247.2	890.5	272.3	250.9	21.48	12.680		
4,000.0	3,884.4	3,949.1	3,780.2	16.9	20.7	-19.29	-258.0	927.3	277.8	255.4	22.31	12.447		
4,100.0	3,978.4	4,049.0	3,872.3	17.6	21.6	-19.57	-268.8	964.2	283.2	260.0	23.16	12.227		
4,200.0	4,072.4	4,148.8	3,964.5	18.3	22.4	-19.85	-279.6	1,001.0	288.6	264.6	24.01	12.020		
4,300.0	4,166.5	4,248.7	4,056.7	19.0	23.2	-20.12	-290.4	1,037.9	294.0	269.2	24.87	11.823		
4,400.0	4,260.5	4,348.5	4,148.8	19.7	24.0	-20.37	-301.2	1,074.7	299.5	273.7	25.73	11.637		
4,500.0	4,354.5	4,448.4	4,241.0	20.4	24.9	-20.62	-312.0	1,111.6	304.9	278.3	26.60	11.461		
4,600.0	4,448.6	4,548.2	4,333.2	21.1	25.7	-20.86	-322.8	1,148.4	310.3	282.9	27.48	11.293		
4,700.0	4,542.6	4,648.1	4,425.3	21.9	26.5	-21.09	-333.6	1,185.2	315.8	287.4	28.36	11.135		
4,800.0	4,636.6	4,747.9	4,517.5	22.6	27.3	-21.31	-344.4	1,222.1	321.2	292.0	29.25	10.984		
4,900.0	4,730.7	4,847.7	4,609.7	23.3	28.2	-21.53	-355.2	1,258.9	326.7	296.6	30.14	10.840		
5,000.0	4,824.7	4,947.6	4,701.8	24.0	29.0	-21.74	-366.0	1,295.8	332.2	301.1	31.04	10.703		
5,100.0	4,918.8	5,047.4	4,794.0	24.8	29.8	-21.94	-376.8	1,332.6	337.6	305.7	31.94	10.572		

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 SRC Markham 31-16-9NHZ
<b>Project:</b>	Sec.16-T4N-R68W	<b>TVD Reference:</b>	WELL @ 4977.0ft (RKB - 13')
<b>Reference Site:</b>	SRC Markham Pad Sec.16-T4N-R68W	<b>MD Reference:</b>	WELL @ 4977.0ft (RKB - 13')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SRC Markham 31-16-9NHZ	<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 (3-31-14)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWDD												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	
5,200.0	5,012.8	5,147.3	4,886.2	25.5	30.6	-22.14	-387.6	1,369.5	343.1	310.3	32.84	10.448	
5,300.0	5,106.8	5,247.1	4,978.3	26.2	31.5	-22.32	-398.4	1,406.3	348.6	314.8	33.75	10.329	
5,400.0	5,200.9	5,347.0	5,070.5	26.9	32.3	-22.51	-409.2	1,443.2	354.1	319.4	34.66	10.215	
5,500.0	5,294.9	5,446.8	5,162.7	27.6	33.1	-22.69	-420.0	1,480.0	359.6	324.0	35.58	10.107	
5,600.0	5,388.9	5,546.6	5,254.8	28.4	34.0	-22.73	-430.8	1,516.9	365.0	328.5	36.50	10.002	
5,700.0	5,483.5	5,646.3	5,346.8	29.0	34.8	0.60	-441.6	1,553.6	370.2	333.2	36.98	10.012	
5,800.0	5,577.8	5,744.2	5,437.3	29.5	35.6	24.96	-451.7	1,589.8	375.3	338.9	36.43	10.304	
5,900.0	5,670.0	5,843.6	5,529.4	29.9	36.2	43.89	-451.9	1,626.6	381.5	345.9	35.68	10.693	
6,000.0	5,758.4	5,946.3	5,623.8	30.2	36.8	57.18	-437.6	1,664.3	388.8	353.7	35.12	11.073	
6,100.0	5,841.2	6,052.6	5,718.5	30.4	37.4	66.64	-407.7	1,702.1	396.9	362.1	34.80	11.406	
6,200.0	5,916.8	6,162.9	5,811.3	30.6	37.8	73.64	-361.1	1,739.1	405.5	370.7	34.73	11.674	
6,300.0	5,983.7	6,277.3	5,899.2	30.8	38.2	78.95	-297.3	1,774.1	414.0	379.1	34.88	11.870	
6,400.0	6,040.6	6,395.6	5,979.2	30.9	38.5	83.01	-216.2	1,806.0	422.0	386.8	35.20	11.989	
6,500.0	6,086.5	6,517.7	6,047.5	30.9	38.7	86.05	-118.9	1,833.1	429.1	393.4	35.70	12.018	
6,600.0	6,120.4	6,643.1	6,100.7	31.0	38.9	88.21	-7.5	1,854.2	434.7	398.3	36.41	11.938	
6,700.0	6,141.7	6,771.0	6,135.5	31.0	39.0	89.55	114.6	1,867.9	438.4	401.0	37.39	11.724	
6,800.0	6,149.9	6,900.3	6,149.7	31.1	39.1	90.11	242.9	1,873.4	440.0	401.3	38.69	11.374	
6,900.0	6,150.0	7,005.0	6,150.0	31.2	39.1	90.13	347.5	1,873.3	440.1	400.2	39.83	11.047	
7,000.0	6,150.0	7,105.0	6,150.0	31.5	39.3	90.13	447.5	1,873.2	440.1	398.5	41.52	10.598	
7,100.0	6,150.0	7,205.0	6,150.0	31.8	39.5	90.13	547.5	1,873.0	440.1	396.6	43.49	10.120	
7,200.0	6,150.0	7,305.0	6,150.0	32.2	39.8	90.13	647.5	1,872.9	440.1	394.4	45.69	9.632	
7,300.0	6,150.0	7,405.0	6,150.0	32.8	40.1	90.13	747.5	1,872.7	440.1	392.0	48.10	9.149	
7,400.0	6,150.0	7,505.0	6,150.0	33.5	40.6	90.13	847.5	1,872.6	440.1	389.4	50.68	8.682	
7,500.0	6,150.0	7,605.0	6,150.0	34.3	41.1	90.13	947.5	1,872.4	440.1	386.6	53.42	8.238	
7,600.0	6,150.0	7,705.0	6,150.0	35.2	41.7	90.13	1,047.5	1,872.3	440.1	383.8	56.29	7.818	
7,700.0	6,150.0	7,805.0	6,150.0	36.2	42.4	90.13	1,147.5	1,872.1	440.1	380.8	59.26	7.425	
7,800.0	6,150.0	7,905.0	6,150.0	37.3	43.2	90.13	1,247.5	1,872.0	440.1	377.7	62.33	7.060	
7,900.0	6,150.0	8,005.0	6,150.0	38.6	44.1	90.13	1,347.5	1,871.8	440.1	374.6	65.49	6.720	
8,000.0	6,150.0	8,105.0	6,150.0	39.9	45.1	90.13	1,447.5	1,871.7	440.1	371.3	68.71	6.405	
8,100.0	6,150.0	8,205.0	6,150.0	41.2	46.2	90.13	1,547.5	1,871.5	440.0	368.1	71.99	6.113	
8,200.0	6,150.0	8,305.0	6,150.0	42.6	47.3	90.13	1,647.5	1,871.3	440.0	364.7	75.33	5.842	
8,300.0	6,150.0	8,405.0	6,150.0	44.1	48.5	90.13	1,747.5	1,871.2	440.0	361.3	78.71	5.591	
8,400.0	6,150.0	8,505.0	6,150.0	45.6	49.8	90.13	1,847.5	1,871.0	440.0	357.9	82.13	5.358	
8,500.0	6,150.0	8,605.0	6,150.0	47.1	51.1	90.13	1,947.5	1,870.9	440.0	354.5	85.59	5.141	
8,600.0	6,150.0	8,705.0	6,150.0	48.7	52.5	90.13	2,047.5	1,870.7	440.0	351.0	89.08	4.940	
8,700.0	6,150.0	8,805.0	6,150.0	50.3	53.9	90.13	2,147.5	1,870.6	440.0	347.4	92.59	4.752	
8,800.0	6,150.0	8,905.0	6,150.0	51.9	55.4	90.13	2,247.5	1,870.4	440.0	343.9	96.14	4.577	
8,900.0	6,150.0	9,005.0	6,150.0	53.6	56.9	90.13	2,347.5	1,870.3	440.0	340.3	99.70	4.414	
9,000.0	6,150.0	9,105.0	6,150.0	55.2	58.4	90.13	2,447.5	1,870.1	440.0	336.8	103.28	4.260	
9,100.0	6,150.0	9,205.0	6,150.0	56.9	59.9	90.13	2,547.5	1,870.0	440.0	333.1	106.89	4.117	
9,200.0	6,150.0	9,305.0	6,150.0	58.6	61.5	90.13	2,647.5	1,869.8	440.0	329.5	110.50	3.982	
9,300.0	6,150.0	9,405.0	6,150.0	60.4	63.1	90.13	2,747.5	1,869.7	440.0	325.9	114.14	3.855	
9,400.0	6,150.0	9,505.0	6,150.0	62.1	64.8	90.13	2,847.5	1,869.5	440.0	322.2	117.78	3.736	
9,500.0	6,150.0	9,605.0	6,150.0	63.8	66.4	90.13	2,947.5	1,869.3	440.0	318.6	121.44	3.623	
9,600.0	6,150.0	9,705.0	6,150.0	65.6	68.1	90.13	3,047.5	1,869.2	440.0	314.9	125.11	3.517	
9,700.0	6,150.0	9,805.0	6,150.0	67.3	69.7	90.13	3,147.5	1,869.0	440.0	311.2	128.79	3.417	
9,800.0	6,150.0	9,905.0	6,150.0	69.1	71.4	90.13	3,247.5	1,868.9	440.0	307.5	132.48	3.322	
9,900.0	6,150.0	10,005.0	6,150.0	70.9	73.1	90.13	3,347.5	1,868.7	440.0	303.9	136.17	3.231	
10,000.0	6,150.0	10,105.0	6,150.0	72.7	74.9	90.13	3,447.5	1,868.6	440.0	300.1	139.88	3.146	
10,100.0	6,150.0	10,205.0	6,150.0	74.4	76.6	90.13	3,547.5	1,868.4	440.0	296.4	143.59	3.064	
10,200.0	6,150.0	10,305.0	6,150.0	76.2	78.3	90.13	3,647.5	1,868.3	440.0	292.7	147.31	2.987	
10,300.0	6,150.0	10,405.0	6,150.0	78.1	80.1	90.13	3,747.5	1,868.1	440.0	289.0	151.03	2.913	

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

Offset Design													Offset Site Error:	
Survey Program: 0-MWD													Offset Well Error:	
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		
10,400.0	6,150.0	10,505.0	6,150.0	79.9	81.8	90.13	3,847.5	1,868.0	440.0	285.3	154.76	2.843		
10,500.0	6,150.0	10,605.0	6,150.0	81.7	83.6	90.13	3,947.5	1,867.8	440.0	281.5	158.49	2.776		
10,600.0	6,150.0	10,705.0	6,150.0	83.5	85.3	90.13	4,047.5	1,867.7	440.0	277.8	162.24	2.712		
10,700.0	6,150.0	10,805.0	6,150.0	85.3	87.1	90.13	4,147.5	1,867.5	440.0	274.0	165.98	2.651		
10,800.0	6,150.0	10,905.0	6,150.0	87.1	88.9	90.13	4,247.5	1,867.4	440.0	270.3	169.73	2.592		
10,900.0	6,150.0	11,005.0	6,150.0	89.0	90.7	90.13	4,347.5	1,867.2	440.0	266.5	173.48	2.536		
11,000.0	6,150.0	11,105.0	6,150.0	90.8	92.5	90.13	4,447.5	1,867.0	440.0	262.8	177.24	2.483		
11,100.0	6,150.0	11,205.0	6,150.0	92.7	94.3	90.13	4,547.5	1,866.9	440.0	259.0	181.00	2.431		
11,200.0	6,150.0	11,305.0	6,150.0	94.5	96.1	90.13	4,647.5	1,866.7	440.0	255.2	184.76	2.381		
11,300.0	6,150.0	11,405.0	6,150.0	96.3	97.9	90.13	4,747.5	1,866.6	440.0	251.5	188.53	2.334		
11,400.0	6,150.0	11,505.0	6,150.0	98.2	99.7	90.13	4,847.5	1,866.4	440.0	247.7	192.30	2.288		
11,500.0	6,150.0	11,605.0	6,150.0	100.0	101.5	90.13	4,947.5	1,866.3	440.0	243.9	196.07	2.244		
11,600.0	6,150.0	11,705.0	6,150.0	101.9	103.4	90.13	5,047.5	1,866.1	440.0	240.1	199.85	2.202		
11,700.0	6,150.0	11,805.0	6,150.0	103.7	105.2	90.13	5,147.5	1,866.0	440.0	236.4	203.63	2.161		
11,800.0	6,150.0	11,905.0	6,150.0	105.6	107.0	90.13	5,247.5	1,865.8	440.0	232.6	207.41	2.121		
11,900.0	6,150.0	12,005.0	6,150.0	107.5	108.9	90.13	5,347.5	1,865.7	440.0	228.8	211.19	2.083		
12,000.0	6,150.0	12,105.0	6,150.0	109.3	110.7	90.13	5,447.5	1,865.5	440.0	225.0	214.97	2.047		
12,100.0	6,150.0	12,205.0	6,150.0	111.2	112.5	90.13	5,547.5	1,865.4	440.0	221.2	218.76	2.011		
12,200.0	6,150.0	12,305.0	6,150.0	113.1	114.4	90.13	5,647.5	1,865.2	440.0	217.4	222.55	1.977		
12,300.0	6,150.0	12,405.0	6,150.0	114.9	116.2	90.13	5,747.5	1,865.0	440.0	213.6	226.34	1.944		
12,400.0	6,150.0	12,505.0	6,150.0	116.8	118.1	90.13	5,847.5	1,864.9	440.0	209.9	230.13	1.912		
12,500.0	6,150.0	12,605.0	6,150.0	118.7	119.9	90.13	5,947.5	1,864.7	440.0	206.1	233.92	1.881		
12,600.0	6,150.0	12,705.0	6,150.0	120.5	121.8	90.13	6,047.5	1,864.6	440.0	202.3	237.72	1.851		
12,700.0	6,150.0	12,805.0	6,150.0	122.4	123.6	90.13	6,147.5	1,864.4	440.0	198.5	241.51	1.822		
12,800.0	6,150.0	12,905.0	6,150.0	124.3	125.5	90.13	6,247.5	1,864.3	440.0	194.7	245.31	1.794		
12,900.0	6,150.0	13,005.0	6,150.0	126.2	127.3	90.13	6,347.5	1,864.1	440.0	190.9	249.11	1.766		
13,000.0	6,150.0	13,105.0	6,150.0	128.0	129.2	90.13	6,447.5	1,864.0	440.0	187.1	252.91	1.740		
13,100.0	6,150.0	13,205.0	6,150.0	129.9	131.0	90.13	6,547.5	1,863.8	440.0	183.3	256.71	1.714		
13,200.0	6,150.0	13,305.0	6,150.0	131.8	132.9	90.13	6,647.5	1,863.7	440.0	179.5	260.51	1.689		
13,300.0	6,150.0	13,405.0	6,150.0	133.7	134.8	90.13	6,747.5	1,863.5	440.0	175.7	264.32	1.665		
13,400.0	6,150.0	13,505.0	6,150.0	135.6	136.6	90.13	6,847.5	1,863.4	440.0	171.8	268.12	1.641		
13,500.0	6,150.0	13,605.0	6,150.0	137.5	138.5	90.13	6,947.5	1,863.2	440.0	168.0	271.93	1.618		
13,600.0	6,150.0	13,705.0	6,150.0	139.3	140.4	90.13	7,047.5	1,863.1	440.0	164.2	275.74	1.596		
13,700.0	6,150.0	13,805.0	6,150.0	141.2	142.2	90.13	7,147.5	1,862.9	440.0	160.4	279.54	1.574		
13,800.0	6,150.0	13,905.0	6,150.0	143.1	144.1	90.13	7,247.5	1,862.7	440.0	156.6	283.35	1.553		
13,864.6	6,150.0	13,969.5	6,150.0	144.3	145.3	90.13	7,312.0	1,862.6	440.0	154.2	285.81	1.539 SF		

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well SRC Markham 31-16-9NHZ
<b>Project:</b>	Sec.16-T4N-R68W	<b>TVD Reference:</b>	WELL @ 4977.0ft (RKB - 13')
<b>Reference Site:</b>	SRC Markham Pad Sec.16-T4N-R68W	<b>MD Reference:</b>	WELL @ 4977.0ft (RKB - 13')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SRC Markham 31-16-9NHZ	<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 (3-31-14)	<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		
0.0	0.0	0.0	0.0	0.0	0.0	89.38	0.7	67.5	67.5					
100.0	100.0	99.0	99.0	0.1	0.1	89.38	0.7	67.5	67.5	67.3	0.22	301.783		
200.0	200.0	199.0	199.0	0.3	0.3	89.38	0.7	67.5	67.5	66.8	0.67	100.427		
300.0	300.0	299.0	299.0	0.6	0.6	89.38	0.7	67.5	67.5	66.4	1.12	60.176		
400.0	400.0	399.0	399.0	0.8	0.8	89.38	0.7	67.5	67.5	65.9	1.57	42.958		
500.0	500.0	499.0	499.0	1.0	1.0	89.38	0.7	67.5	67.5	65.5	2.02	33.401		
600.0	600.0	599.0	599.0	1.2	1.2	89.38	0.7	67.5	67.5	65.0	2.47	27.323		
700.0	700.0	699.0	699.0	1.5	1.5	89.38	0.7	67.5	67.5	64.6	2.92	23.116		
800.0	800.0	799.0	799.0	1.7	1.7	89.38	0.7	67.5	67.5	64.1	3.37	20.032 CC, ES		
900.0	900.0	896.8	896.7	1.9	1.9	89.74	0.3	69.1	69.1	65.3	3.80	18.195		
1,000.0	1,000.0	994.3	994.1	2.1	2.1	90.72	-0.9	73.9	74.0	69.8	4.22	17.546		
1,100.0	1,100.0	1,091.3	1,090.8	2.4	2.3	92.10	-3.0	81.8	82.3	77.6	4.65	17.685		
1,200.0	1,200.0	1,187.7	1,186.6	2.6	2.5	93.61	-5.9	92.8	93.9	88.8	5.10	18.393		
1,300.0	1,300.0	1,283.3	1,281.0	2.8	2.8	95.08	-9.5	106.8	108.8	103.2	5.58	19.500		
1,400.0	1,400.0	1,377.7	1,373.8	3.0	3.1	96.40	-13.9	123.7	127.0	120.9	6.08	20.871		
1,500.0	1,500.0	1,471.3	1,465.2	3.2	3.4	-13.53	-19.0	143.3	146.8	140.4	6.37	23.023		
1,600.0	1,599.8	1,564.3	1,555.2	3.4	3.8	-12.83	-24.8	165.6	166.4	159.6	6.78	24.542		
1,700.0	1,699.5	1,656.7	1,644.0	3.6	4.3	-12.39	-31.2	190.5	185.9	178.7	7.20	25.836		
1,800.0	1,798.7	1,748.6	1,731.3	3.9	4.8	-12.14	-38.4	218.1	205.2	197.6	7.62	26.920		
1,900.0	1,897.5	1,839.9	1,817.2	4.1	5.4	-12.01	-46.2	248.2	224.3	216.2	8.05	27.849		
2,000.0	1,995.6	1,930.8	1,901.6	4.4	6.0	-11.99	-54.7	280.7	243.1	234.6	8.50	28.587		
2,100.0	2,093.1	2,027.0	1,990.2	4.7	6.7	-12.07	-64.1	317.2	260.8	251.8	8.98	29.036		
2,200.0	2,189.6	2,125.9	2,081.1	5.1	7.5	-12.30	-73.9	354.8	275.3	265.9	9.49	29.025		
2,300.0	2,285.3	2,225.3	2,172.5	5.6	8.3	-12.67	-83.7	392.5	286.5	276.5	10.01	28.611		
2,400.0	2,379.8	2,324.9	2,264.1	6.1	9.1	-13.18	-93.6	430.4	294.3	283.7	10.57	27.840		
2,500.0	2,473.9	2,424.7	2,355.9	6.7	9.9	-13.76	-103.4	468.4	300.6	289.4	11.21	26.804		
2,600.0	2,567.9	2,524.4	2,447.6	7.3	10.7	-14.32	-113.3	506.3	306.9	295.0	11.88	25.834		
2,700.0	2,661.9	2,624.2	2,539.4	7.9	11.5	-14.85	-123.1	544.2	313.2	300.7	12.57	24.929		
2,800.0	2,756.0	2,723.9	2,631.1	8.6	12.3	-15.37	-133.0	582.1	319.6	306.4	13.27	24.085		
2,900.0	2,850.0	2,823.7	2,722.8	9.2	13.1	-15.86	-142.8	620.1	326.0	312.0	13.99	23.298		
3,000.0	2,944.0	2,923.5	2,814.6	9.9	14.0	-16.34	-152.7	658.0	332.5	317.7	14.73	22.565		
3,100.0	3,038.1	3,023.2	2,906.3	10.6	14.8	-16.80	-162.5	695.9	338.9	323.4	15.49	21.882		
3,200.0	3,132.1	3,123.0	2,998.1	11.2	15.6	-17.24	-172.4	733.8	345.4	329.1	16.26	21.244		
3,300.0	3,226.1	3,222.7	3,089.8	11.9	16.5	-17.66	-182.2	771.8	351.9	334.8	17.04	20.649		
3,400.0	3,320.2	3,322.5	3,181.5	12.6	17.3	-18.07	-192.1	809.7	358.4	340.5	17.84	20.092		
3,500.0	3,414.2	3,422.2	3,273.3	13.3	18.2	-18.46	-201.9	847.6	364.9	346.3	18.64	19.571		
3,600.0	3,508.2	3,522.0	3,365.0	14.0	19.0	-18.84	-211.8	885.5	371.5	352.0	19.46	19.084		
3,700.0	3,602.3	3,621.7	3,456.7	14.7	19.8	-19.21	-221.7	923.5	378.0	357.7	20.29	18.626		
3,800.0	3,696.3	3,721.5	3,548.5	15.4	20.7	-19.57	-231.5	961.4	384.6	363.5	21.13	18.197		
3,900.0	3,790.3	3,821.3	3,640.2	16.1	21.5	-19.91	-241.4	999.3	391.2	369.2	21.98	17.793		
4,000.0	3,884.4	3,921.0	3,732.0	16.9	22.4	-20.24	-251.2	1,037.2	397.8	374.9	22.84	17.413		
4,100.0	3,978.4	4,020.8	3,823.7	17.6	23.2	-20.56	-261.1	1,075.2	404.4	380.7	23.71	17.055		
4,200.0	4,072.4	4,120.5	3,915.4	18.3	24.0	-20.87	-270.9	1,113.1	411.0	386.4	24.59	16.717		
4,300.0	4,166.5	4,220.3	4,007.2	19.0	24.9	-21.17	-280.8	1,151.0	417.7	392.2	25.47	16.398		
4,400.0	4,260.5	4,320.0	4,098.9	19.7	25.7	-21.46	-290.6	1,188.9	424.3	397.9	26.36	16.097		
4,500.0	4,354.5	4,419.8	4,190.6	20.4	26.6	-21.74	-300.5	1,226.9	431.0	403.7	27.26	15.811		
4,600.0	4,448.6	4,519.5	4,282.4	21.1	27.4	-22.02	-310.3	1,264.8	437.6	409.5	28.16	15.540		
4,700.0	4,542.6	4,619.3	4,374.1	21.9	28.3	-22.28	-320.2	1,302.7	444.3	415.2	29.07	15.283		
4,800.0	4,636.6	4,719.1	4,465.9	22.6	29.1	-22.54	-330.0	1,340.6	451.0	421.0	29.99	15.039		
4,900.0	4,730.7	4,818.8	4,557.6	23.3	30.0	-22.79	-339.9	1,378.6	457.7	426.8	30.91	14.807		
5,000.0	4,824.7	4,918.6	4,649.3	24.0	30.8	-23.03	-349.7	1,416.5	464.4	432.6	31.84	14.586		
5,100.0	4,918.8	5,018.3	4,741.1	24.8	31.7	-23.27	-359.6	1,454.4	471.1	438.3	32.77	14.376		

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 SRC Markham 31-16-9NHZ
<b>Project:</b>	Sec.16-T4N-R68W	<b>TVD Reference:</b>	WELL @ 4977.0ft (RKB - 13')
<b>Reference Site:</b>	SRC Markham Pad Sec.16-T4N-R68W	<b>MD Reference:</b>	WELL @ 4977.0ft (RKB - 13')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SRC Markham 31-16-9NHZ	<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 (3-31-14)	<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						
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
5,200.0	5,012.8	5,118.1	4,832.8	25.5	32.5	-23.49	-369.5	1,492.3	477.8	444.1	33.71	14.175	
5,300.0	5,106.8	5,217.8	4,924.5	26.2	33.4	-23.72	-379.3	1,530.3	484.6	449.9	34.65	13.984	
5,400.0	5,200.9	5,317.6	5,016.3	26.9	34.2	-23.93	-389.2	1,568.2	491.3	455.7	35.60	13.801	
5,500.0	5,294.9	5,417.4	5,108.0	27.6	35.0	-24.14	-399.0	1,606.1	498.1	461.5	36.55	13.626	
5,600.0	5,388.9	5,517.1	5,199.8	28.4	35.9	-24.22	-408.9	1,644.0	504.8	467.3	37.51	13.458	
5,700.0	5,483.5	5,616.7	5,291.3	29.0	36.7	-1.31	-418.7	1,681.9	511.0	472.8	38.19	13.380	
5,800.0	5,577.8	5,714.7	5,381.4	29.5	37.6	22.21	-428.4	1,719.1	516.6	478.6	37.94	13.614	
5,900.0	5,670.0	5,809.1	5,468.3	29.9	38.4	41.08	-437.7	1,755.0	522.8	485.7	37.12	14.084	
6,000.0	5,758.4	5,898.1	5,550.1	30.2	39.1	55.15	-446.5	1,788.9	531.9	495.7	36.21	14.689	
6,100.0	5,841.2	5,992.7	5,637.4	30.4	39.8	66.13	-451.2	1,825.0	545.9	510.4	35.50	15.377	
6,200.0	5,916.8	6,097.4	5,733.7	30.6	40.5	74.84	-442.1	1,864.7	564.1	529.0	35.15	16.048	
6,300.0	5,983.7	6,213.5	5,837.8	30.8	41.2	82.02	-414.3	1,907.7	585.7	550.6	35.04	16.716	
6,400.0	6,040.6	6,344.6	5,948.6	30.9	41.8	88.13	-361.6	1,953.4	609.1	574.1	34.99	17.409	
6,500.0	6,086.5	6,494.4	6,061.8	30.9	42.3	93.35	-275.8	2,000.1	632.3	597.5	34.89	18.123	
6,600.0	6,120.4	6,666.2	6,168.2	31.0	42.7	97.63	-148.8	2,043.8	652.9	618.1	34.81	18.756	
6,700.0	6,141.7	6,860.1	6,250.9	31.0	43.0	100.65	22.7	2,077.7	668.0	632.9	35.04	19.062	
6,800.0	6,149.9	7,070.2	6,289.1	31.1	43.2	102.02	227.9	2,093.2	674.8	638.7	36.09	18.696	
6,900.0	6,150.0	7,190.2	6,290.0	31.2	43.2	102.06	347.8	2,093.4	675.0	637.7	37.32	18.088	
7,000.0	6,150.0	7,290.2	6,290.0	31.5	43.4	102.06	447.8	2,093.2	675.0	636.1	38.91	17.348	
7,100.0	6,150.0	7,390.2	6,290.0	31.8	43.5	102.06	547.8	2,093.1	675.0	634.2	40.78	16.551	
7,200.0	6,150.0	7,490.2	6,290.0	32.2	43.8	102.06	647.8	2,092.9	675.0	632.1	42.91	15.731	
7,300.0	6,150.0	7,590.2	6,290.0	32.8	44.1	102.06	747.8	2,092.7	675.0	629.7	45.24	14.918	
7,400.0	6,150.0	7,690.2	6,290.0	33.5	44.4	102.06	847.8	2,092.6	675.0	627.2	47.77	14.131	
7,500.0	6,150.0	7,790.2	6,290.0	34.3	44.9	102.06	947.8	2,092.4	675.0	624.5	50.44	13.381	
7,600.0	6,150.0	7,890.2	6,290.0	35.2	45.4	102.06	1,047.8	2,092.3	675.0	621.7	53.25	12.675	
7,700.0	6,150.0	7,990.2	6,290.0	36.2	46.0	102.06	1,147.8	2,092.1	675.0	618.8	56.17	12.016	
7,800.0	6,150.0	8,090.2	6,290.0	37.3	46.7	102.06	1,247.8	2,092.0	674.9	615.8	59.19	11.403	
7,900.0	6,150.0	8,190.2	6,290.0	38.6	47.5	102.06	1,347.8	2,091.8	674.9	612.7	62.29	10.836	
8,000.0	6,150.0	8,290.2	6,290.0	39.9	48.3	102.06	1,447.8	2,091.6	674.9	609.5	65.46	10.311	
8,100.0	6,150.0	8,390.2	6,290.0	41.2	49.3	102.06	1,547.8	2,091.5	674.9	606.2	68.68	9.827	
8,200.0	6,150.0	8,490.2	6,290.0	42.6	50.3	102.06	1,647.8	2,091.3	674.9	603.0	71.97	9.378	
8,300.0	6,150.0	8,590.2	6,290.0	44.1	51.4	102.06	1,747.8	2,091.2	674.9	599.6	75.29	8.964	
8,400.0	6,150.0	8,690.2	6,290.0	45.6	52.5	102.06	1,847.8	2,091.0	674.9	596.3	78.66	8.580	
8,500.0	6,150.0	8,790.2	6,290.0	47.1	53.7	102.06	1,947.8	2,090.9	674.9	592.9	82.06	8.225	
8,600.0	6,150.0	8,890.2	6,290.0	48.7	55.0	102.06	2,047.8	2,090.7	674.9	589.4	85.49	7.894	
8,700.0	6,150.0	8,990.2	6,290.0	50.3	56.3	102.06	2,147.8	2,090.5	674.9	585.9	88.95	7.587	
8,800.0	6,150.0	9,090.2	6,290.0	51.9	57.6	102.06	2,247.8	2,090.4	674.9	582.5	92.44	7.301	
8,900.0	6,150.0	9,190.2	6,290.0	53.6	59.0	102.06	2,347.8	2,090.2	674.9	579.0	95.94	7.034	
9,000.0	6,150.0	9,290.2	6,290.0	55.2	60.5	102.06	2,447.8	2,090.1	674.9	575.4	99.47	6.785	
9,100.0	6,150.0	9,390.2	6,290.0	56.9	62.0	102.06	2,547.8	2,089.9	674.9	571.9	103.01	6.552	
9,200.0	6,150.0	9,490.2	6,290.0	58.6	63.5	102.06	2,647.8	2,089.8	674.9	568.3	106.56	6.333	
9,300.0	6,150.0	9,590.2	6,290.0	60.4	65.0	102.06	2,747.8	2,089.6	674.9	564.7	110.14	6.128	
9,400.0	6,150.0	9,690.2	6,290.0	62.1	66.6	102.06	2,847.8	2,089.4	674.9	561.1	113.72	5.934	
9,500.0	6,150.0	9,790.2	6,290.0	63.8	68.2	102.06	2,947.8	2,089.3	674.9	557.5	117.31	5.753	
9,600.0	6,150.0	9,890.2	6,290.0	65.6	69.8	102.06	3,047.8	2,089.1	674.9	553.9	120.92	5.581	
9,700.0	6,150.0	9,990.2	6,290.0	67.3	71.4	102.06	3,147.8	2,089.0	674.9	550.3	124.54	5.419	
9,800.0	6,150.0	10,090.2	6,290.0	69.1	73.0	102.06	3,247.8	2,088.8	674.8	546.7	128.16	5.266	
9,900.0	6,150.0	10,190.2	6,290.0	70.9	74.7	102.06	3,347.8	2,088.7	674.8	543.0	131.79	5.120	
10,000.0	6,150.0	10,290.2	6,290.0	72.7	76.4	102.06	3,447.8	2,088.5	674.8	539.4	135.43	4.983	
10,100.0	6,150.0	10,390.2	6,290.0	74.4	78.0	102.06	3,547.8	2,088.3	674.8	535.8	139.08	4.852	
10,200.0	6,150.0	10,490.2	6,290.0	76.2	79.7	102.06	3,647.8	2,088.2	674.8	532.1	142.73	4.728	
10,300.0	6,150.0	10,590.2	6,290.0	78.1	81.5	102.06	3,747.8	2,088.0	674.8	528.4	146.39	4.610	

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

Offset Design										SRC Markham Pad Sec.16-T4N-R68W - SRC Markham R-16-9-CHZ - Wellbore #1 - Plan#1 (3-31-14)				Offset Site Error:		0.0 ft
Survey Program: 0-MWD														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)					
10,400.0	6,150.0	10,690.2	6,290.0	79.9	83.2	102.06	3,847.8	2,087.9	674.8	524.8	150.06	4.497				
10,500.0	6,150.0	10,790.2	6,290.0	81.7	84.9	102.06	3,947.8	2,087.7	674.8	521.1	153.73	4.390				
10,600.0	6,150.0	10,890.2	6,290.0	83.5	86.6	102.06	4,047.8	2,087.6	674.8	517.4	157.40	4.287				
10,700.0	6,150.0	10,990.2	6,290.0	85.3	88.4	102.06	4,147.8	2,087.4	674.8	513.7	161.08	4.189				
10,800.0	6,150.0	11,090.2	6,290.0	87.1	90.2	102.06	4,247.8	2,087.2	674.8	510.0	164.76	4.096				
10,900.0	6,150.0	11,190.2	6,290.0	89.0	91.9	102.06	4,347.8	2,087.1	674.8	506.3	168.45	4.006				
11,000.0	6,150.0	11,290.2	6,290.0	90.8	93.7	102.06	4,447.8	2,086.9	674.8	502.7	172.14	3.920				
11,100.0	6,150.0	11,390.2	6,290.0	92.7	95.5	102.06	4,547.8	2,086.8	674.8	499.0	175.83	3.838				
11,200.0	6,150.0	11,490.2	6,290.0	94.5	97.2	102.06	4,647.8	2,086.6	674.8	495.3	179.53	3.759				
11,300.0	6,150.0	11,590.2	6,290.0	96.3	99.0	102.06	4,747.8	2,086.5	674.8	491.5	183.22	3.683				
11,400.0	6,150.0	11,690.2	6,290.0	98.2	100.8	102.06	4,847.8	2,086.3	674.8	487.8	186.93	3.610				
11,500.0	6,150.0	11,790.2	6,290.0	100.0	102.6	102.06	4,947.8	2,086.1	674.8	484.1	190.63	3.540				
11,600.0	6,150.0	11,890.2	6,290.0	101.9	104.4	102.06	5,047.8	2,086.0	674.8	480.4	194.34	3.472				
11,700.0	6,150.0	11,990.2	6,290.0	103.7	106.2	102.06	5,147.8	2,085.8	674.8	476.7	198.05	3.407				
11,800.0	6,150.0	12,090.2	6,290.0	105.6	108.0	102.06	5,247.8	2,085.7	674.7	473.0	201.76	3.344				
11,900.0	6,150.0	12,190.2	6,290.0	107.5	109.9	102.06	5,347.8	2,085.5	674.7	469.3	205.47	3.284				
12,000.0	6,150.0	12,290.2	6,290.0	109.3	111.7	102.06	5,447.8	2,085.4	674.7	465.6	209.19	3.226				
12,100.0	6,150.0	12,390.2	6,290.0	111.2	113.5	102.06	5,547.8	2,085.2	674.7	461.8	212.91	3.169				
12,200.0	6,150.0	12,490.2	6,290.0	113.1	115.3	102.06	5,647.8	2,085.0	674.7	458.1	216.62	3.115				
12,300.0	6,150.0	12,590.2	6,290.0	114.9	117.2	102.06	5,747.8	2,084.9	674.7	454.4	220.35	3.062				
12,400.0	6,150.0	12,690.2	6,290.0	116.8	119.0	102.06	5,847.8	2,084.7	674.7	450.7	224.07	3.011				
12,500.0	6,150.0	12,790.2	6,290.0	118.7	120.8	102.06	5,947.8	2,084.6	674.7	446.9	227.79	2.962				
12,600.0	6,150.0	12,890.2	6,290.0	120.5	122.7	102.06	6,047.8	2,084.4	674.7	443.2	231.52	2.914				
12,700.0	6,150.0	12,990.2	6,290.0	122.4	124.5	102.06	6,147.8	2,084.3	674.7	439.5	235.24	2.868				
12,800.0	6,150.0	13,090.2	6,290.0	124.3	126.3	102.06	6,247.8	2,084.1	674.7	435.7	238.97	2.823				
12,900.0	6,150.0	13,190.2	6,290.0	126.2	128.2	102.06	6,347.8	2,083.9	674.7	432.0	242.70	2.780				
13,000.0	6,150.0	13,290.2	6,290.0	128.0	130.0	102.06	6,447.8	2,083.8	674.7	428.3	246.43	2.738				
13,100.0	6,150.0	13,390.2	6,290.0	129.9	131.9	102.06	6,547.8	2,083.6	674.7	424.5	250.16	2.697				
13,200.0	6,150.0	13,490.2	6,290.0	131.8	133.7	102.06	6,647.8	2,083.5	674.7	420.8	253.90	2.657				
13,300.0	6,150.0	13,590.2	6,290.0	133.7	135.6	102.06	6,747.8	2,083.3	674.7	417.0	257.63	2.619				
13,400.0	6,150.0	13,690.2	6,290.0	135.6	137.4	102.06	6,847.8	2,083.2	674.7	413.3	261.36	2.581				
13,500.0	6,150.0	13,790.2	6,290.0	137.5	139.3	102.06	6,947.8	2,083.0	674.7	409.6	265.10	2.545				
13,600.0	6,150.0	13,890.2	6,290.0	139.3	141.2	102.06	7,047.8	2,082.8	674.7	405.8	268.84	2.510				
13,700.0	6,150.0	13,990.2	6,290.0	141.2	143.0	102.06	7,147.8	2,082.7	674.7	402.1	272.57	2.475				
13,800.0	6,150.0	14,090.2	6,290.0	143.1	144.9	102.06	7,247.8	2,082.5	674.7	398.3	276.31	2.442				
13,805.4	6,150.0	14,095.5	6,290.0	143.2	145.0	102.06	7,253.2	2,082.5	674.7	398.1	276.51	2.440				
13,864.6	6,150.0	14,152.8	6,290.0	144.3	146.1	102.06	7,310.4	2,082.6	674.8	396.1	278.69	2.421 SF				

Offset Design      SRC Markham Pad Sec.16-T4N-R68W - SRC Markham R-16-9NHZ - Wellbore #1 - Plan #1 (3-31-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth Depth (ft)	Vertical Depth (ft)	Measured Depth Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	89.29	1.1	89.8	89.8					
100.0	100.0	99.0	99.0	0.1	0.1	89.29	1.1	89.8	89.8	89.6	0.22	401.553		
200.0	200.0	199.0	199.0	0.3	0.3	89.29	1.1	89.8	89.8	89.1	0.67	133.628		
300.0	300.0	299.0	299.0	0.6	0.6	89.29	1.1	89.8	89.8	88.7	1.12	80.070		
400.0	400.0	399.0	399.0	0.8	0.8	89.29	1.1	89.8	89.8	88.2	1.57	57.160		
500.0	500.0	499.0	499.0	1.0	1.0	89.29	1.1	89.8	89.8	87.8	2.02	44.444		
600.0	600.0	599.0	599.0	1.2	1.2	89.29	1.1	89.8	89.8	87.3	2.47	36.356 CC, ES		
700.0	700.0	696.0	696.0	1.5	1.4	89.54	0.7	91.4	91.4	88.5	2.90	31.543		
800.0	800.0	792.8	792.7	1.7	1.6	90.23	-0.4	96.1	96.3	93.0	3.32	29.004		
900.0	900.0	889.2	888.7	1.9	1.9	91.23	-2.2	104.0	104.5	100.8	3.76	27.817		
1,000.0	1,000.0	984.9	983.7	2.1	2.1	92.39	-4.8	114.9	116.0	111.8	4.21	27.535		
1,100.0	1,100.0	1,079.7	1,077.5	2.4	2.4	93.58	-8.1	128.8	130.8	126.1	4.70	27.858		
1,200.0	1,200.0	1,173.5	1,169.7	2.6	2.7	94.71	-12.0	145.5	148.9	143.7	5.21	28.570		
1,300.0	1,300.0	1,266.1	1,260.1	2.8	3.0	95.73	-16.5	164.8	170.2	164.4	5.76	29.519		
1,400.0	1,400.0	1,357.3	1,348.5	3.0	3.4	96.62	-21.7	186.7	194.6	188.2	6.36	30.600		
1,500.0	1,500.0	1,447.3	1,435.0	3.2	3.9	-13.59	-27.4	210.9	220.4	214.0	6.41	34.366		
1,600.0	1,599.8	1,536.7	1,520.1	3.4	4.4	-13.06	-33.6	237.6	246.1	239.2	6.84	35.992		
1,700.0	1,699.5	1,625.5	1,603.7	3.6	5.0	-12.71	-40.5	266.6	271.4	264.1	7.27	37.344		
1,800.0	1,798.7	1,713.6	1,685.8	3.9	5.6	-12.50	-47.8	297.9	296.4	288.7	7.71	38.450		
1,900.0	1,897.5	1,800.0	1,765.2	4.1	6.2	-12.39	-55.6	330.9	321.1	312.9	8.16	39.351		
2,000.0	1,995.6	1,893.0	1,849.7	4.4	7.0	-12.37	-64.5	368.7	345.0	336.4	8.65	39.898		
2,100.0	2,093.1	1,990.8	1,938.4	4.7	7.8	-12.47	-73.9	408.8	366.1	356.9	9.16	39.963		
2,200.0	2,189.6	2,089.2	2,027.6	5.1	8.7	-12.68	-83.4	449.2	383.8	374.1	9.69	39.589		
2,300.0	2,285.3	2,188.1	2,117.3	5.6	9.6	-13.00	-92.9	489.8	398.1	387.9	10.25	38.839		
2,400.0	2,379.8	2,287.4	2,207.4	6.1	10.5	-13.41	-102.5	530.6	409.2	398.3	10.84	37.758		
2,500.0	2,473.9	2,386.9	2,297.6	6.7	11.3	-13.90	-112.1	571.4	418.7	407.2	11.50	36.409		
2,600.0	2,567.9	2,486.4	2,387.8	7.3	12.2	-14.37	-121.7	612.2	428.3	416.1	12.18	35.152		
2,700.0	2,661.9	2,585.9	2,478.0	7.9	13.1	-14.82	-131.3	653.0	437.8	425.0	12.88	33.982		
2,800.0	2,756.0	2,685.4	2,568.3	8.6	14.0	-15.25	-140.9	693.8	447.5	433.9	13.60	32.895		
2,900.0	2,850.0	2,784.9	2,658.5	9.2	14.9	-15.67	-150.5	734.7	457.1	442.8	14.34	31.883		
3,000.0	2,944.0	2,884.3	2,748.7	9.9	15.8	-16.06	-160.1	775.5	466.8	451.7	15.08	30.942		
3,100.0	3,038.1	2,983.8	2,838.9	10.6	16.7	-16.44	-169.7	816.3	476.4	460.6	15.85	30.067		
3,200.0	3,132.1	3,083.3	2,929.1	11.2	17.7	-16.80	-179.3	857.1	486.1	469.5	16.62	29.251		
3,300.0	3,226.1	3,182.8	3,019.3	11.9	18.6	-17.15	-188.9	897.9	495.9	478.5	17.41	28.490		
3,400.0	3,320.2	3,282.3	3,109.5	12.6	19.5	-17.49	-198.5	938.8	505.6	487.4	18.20	27.779		
3,500.0	3,414.2	3,381.7	3,199.7	13.3	20.4	-17.81	-208.1	979.6	515.4	496.4	19.01	27.114		
3,600.0	3,508.2	3,481.2	3,290.0	14.0	21.3	-18.12	-217.7	1,020.4	525.1	505.3	19.82	26.491		
3,700.0	3,602.3	3,580.7	3,380.2	14.7	22.2	-18.42	-227.3	1,061.2	534.9	514.3	20.65	25.908		
3,800.0	3,696.3	3,680.2	3,470.4	15.4	23.1	-18.71	-236.9	1,102.0	544.7	523.2	21.48	25.360		
3,900.0	3,790.3	3,779.7	3,560.6	16.1	24.0	-18.99	-246.5	1,142.9	554.5	532.2	22.32	24.844		
4,000.0	3,884.4	3,879.2	3,650.8	16.9	24.9	-19.26	-256.1	1,183.7	564.4	541.2	23.17	24.359		
4,100.0	3,978.4	3,978.6	3,741.0	17.6	25.8	-19.52	-265.7	1,224.5	574.2	550.2	24.02	23.902		
4,200.0	4,072.4	4,078.1	3,831.2	18.3	26.8	-19.77	-275.3	1,265.3	584.1	559.2	24.88	23.470		
4,300.0	4,166.5	4,177.6	3,921.4	19.0	27.7	-20.01	-284.9	1,306.1	593.9	568.2	25.75	23.062		
4,400.0	4,260.5	4,277.1	4,011.7	19.7	28.6	-20.25	-294.5	1,346.9	603.8	577.2	26.63	22.676		
4,500.0	4,354.5	4,376.6	4,101.9	20.4	29.5	-20.48	-304.1	1,387.8	613.7	586.2	27.51	22.311		
4,600.0	4,448.6	4,476.0	4,192.1	21.1	30.4	-20.70	-313.7	1,428.6	623.6	595.2	28.39	21.964		
4,700.0	4,542.6	4,575.5	4,282.3	21.9	31.3	-20.91	-323.3	1,469.4	633.5	604.2	29.28	21.635		
4,800.0	4,636.6	4,675.0	4,372.5	22.6	32.2	-21.12	-332.9	1,510.2	643.4	613.2	30.17	21.322		
4,900.0	4,730.7	4,774.5	4,462.7	23.3	33.2	-21.32	-342.5	1,551.0	653.3	622.2	31.07	21.024		
5,000.0	4,824.7	4,874.0	4,552.9	24.0	34.1	-21.51	-352.1	1,591.9	663.2	631.2	31.98	20.740		
5,100.0	4,918.8	4,973.5	4,643.1	24.8	35.0	-21.70	-361.7	1,632.7	673.1	640.2	32.88	20.470		

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SRC Markham Pad Sec.16-T4N-R68W - SRC Markham R-16-9NHZ - Wellbore #1 - Plan #1 (3-31-14)													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	
5,200.0	5,012.8	5,072.9	4,733.4	25.5	35.9	-21.88	-371.2	1,673.5	683.1	649.3	33.80	20.212		
5,300.0	5,106.8	5,172.4	4,823.6	26.2	36.8	-22.06	-380.8	1,714.3	693.0	658.3	34.71	19.965		
5,400.0	5,200.9	5,271.9	4,913.8	26.9	37.7	-22.23	-390.4	1,755.1	703.0	667.3	35.63	19.730		
5,500.0	5,294.9	5,371.4	5,004.0	27.6	38.6	-22.40	-400.0	1,796.0	712.9	676.4	36.55	19.504		
5,600.0	5,388.9	5,470.9	5,094.2	28.4	39.6	-22.44	-409.6	1,836.8	722.9	685.4	37.48	19.287		
5,700.0	5,483.5	5,570.2	5,184.3	29.0	40.5	0.00	-419.2	1,877.5	732.5	694.1	38.41	19.069		
5,800.0	5,577.8	5,667.9	5,272.9	29.5	41.4	22.59	-428.6	1,917.6	741.7	703.0	38.63	19.200		
5,900.0	5,670.0	5,762.1	5,358.4	29.9	42.2	40.17	-437.7	1,956.3	751.2	712.8	38.33	19.596		
6,000.0	5,758.4	5,851.5	5,439.4	30.2	43.1	52.76	-446.3	1,993.0	762.5	724.6	37.83	20.153		
6,100.0	5,841.2	5,948.7	5,527.9	30.4	43.8	62.08	-448.3	2,033.0	776.5	739.2	37.34	20.794		
6,200.0	5,916.8	6,054.5	5,623.5	30.6	44.5	69.15	-435.6	2,076.2	792.8	755.8	37.06	21.393		
6,300.0	5,983.7	6,171.3	5,725.7	30.8	45.2	74.80	-403.7	2,122.4	810.8	773.8	36.99	21.920		
6,400.0	6,040.6	6,301.9	5,832.8	30.9	45.9	79.51	-347.1	2,170.8	829.5	792.4	37.10	22.358		
6,500.0	6,086.5	6,449.5	5,940.3	30.9	46.5	83.47	-258.7	2,219.2	847.5	810.1	37.38	22.675		
6,600.0	6,120.4	6,616.4	6,039.0	31.0	47.0	86.69	-132.2	2,263.7	863.2	825.3	37.86	22.798		
6,700.0	6,141.7	6,802.0	6,114.2	31.0	47.3	88.97	33.5	2,297.4	874.5	835.8	38.70	22.594		
6,800.0	6,149.9	7,001.1	6,149.0	31.1	47.4	90.02	228.3	2,312.9	879.7	839.5	40.16	21.904		
6,900.0	6,150.0	7,120.9	6,150.0	31.2	47.5	90.07	348.1	2,313.1	879.9	838.5	41.38	21.262		
7,000.0	6,150.0	7,220.9	6,150.0	31.5	47.6	90.07	448.1	2,313.0	879.9	836.8	43.01	20.456		
7,100.0	6,150.0	7,320.9	6,150.0	31.8	47.8	90.07	548.1	2,312.8	879.9	834.9	44.91	19.590		
7,200.0	6,150.0	7,420.9	6,150.0	32.2	48.0	90.07	648.1	2,312.7	879.9	832.8	47.05	18.701		
7,300.0	6,150.0	7,520.9	6,150.0	32.8	48.2	90.07	748.1	2,312.5	879.9	830.5	49.39	17.813		
7,400.0	6,150.0	7,620.9	6,150.0	33.5	48.5	90.07	848.1	2,312.4	879.9	827.9	51.92	16.948		
7,500.0	6,150.0	7,720.9	6,150.0	34.3	48.9	90.07	948.1	2,312.2	879.9	825.3	54.59	16.117		
7,600.0	6,150.0	7,820.9	6,150.0	35.2	49.3	90.07	1,048.1	2,312.1	879.9	822.5	57.40	15.329		
7,700.0	6,150.0	7,920.9	6,150.0	36.2	49.8	90.07	1,148.1	2,311.9	879.9	819.5	60.32	14.587		
7,800.0	6,150.0	8,020.9	6,150.0	37.3	50.4	90.07	1,248.1	2,311.8	879.9	816.5	63.34	13.892		
7,900.0	6,150.0	8,120.9	6,150.0	38.6	51.1	90.07	1,348.1	2,311.6	879.9	813.4	66.44	13.243		
8,000.0	6,150.0	8,220.9	6,150.0	39.9	51.8	90.07	1,448.1	2,311.5	879.9	810.3	69.62	12.638		
8,100.0	6,150.0	8,320.9	6,150.0	41.2	52.6	90.07	1,548.1	2,311.3	879.9	807.0	72.86	12.076		
8,200.0	6,150.0	8,420.9	6,150.0	42.6	53.5	90.07	1,648.1	2,311.2	879.9	803.7	76.16	11.554		
8,300.0	6,150.0	8,520.9	6,150.0	44.1	54.4	90.07	1,748.1	2,311.0	879.9	800.4	79.50	11.067		
8,400.0	6,150.0	8,620.9	6,150.0	45.6	55.4	90.07	1,848.1	2,310.9	879.9	797.0	82.89	10.615		
8,500.0	6,150.0	8,720.9	6,150.0	47.1	56.5	90.07	1,948.1	2,310.7	879.9	793.6	86.32	10.194		
8,600.0	6,150.0	8,820.9	6,150.0	48.7	57.6	90.07	2,048.1	2,310.6	879.9	790.1	89.77	9.801		
8,700.0	6,150.0	8,920.9	6,150.0	50.3	58.8	90.07	2,148.1	2,310.4	879.9	786.6	93.26	9.434		
8,800.0	6,150.0	9,020.9	6,150.0	51.9	60.0	90.07	2,248.1	2,310.3	879.9	783.1	96.78	9.092		
8,900.0	6,150.0	9,120.9	6,150.0	53.6	61.3	90.07	2,348.1	2,310.1	879.9	779.6	100.32	8.771		
9,000.0	6,150.0	9,220.9	6,150.0	55.2	62.6	90.07	2,448.1	2,310.0	879.9	776.0	103.88	8.470		
9,100.0	6,150.0	9,320.9	6,150.0	56.9	64.0	90.07	2,548.1	2,309.8	879.9	772.4	107.46	8.188		
9,200.0	6,150.0	9,420.9	6,150.0	58.6	65.4	90.07	2,648.1	2,309.7	879.9	768.8	111.06	7.923		
9,300.0	6,150.0	9,520.9	6,150.0	60.4	66.9	90.07	2,748.1	2,309.5	879.9	765.2	114.67	7.673		
9,400.0	6,150.0	9,620.9	6,150.0	62.1	68.4	90.07	2,848.1	2,309.4	879.9	761.6	118.30	7.438		
9,500.0	6,150.0	9,720.9	6,150.0	63.8	69.9	90.07	2,948.1	2,309.2	879.9	757.9	121.94	7.216		
9,600.0	6,150.0	9,820.9	6,150.0	65.6	71.4	90.07	3,048.1	2,309.1	879.9	754.3	125.59	7.006		
9,700.0	6,150.0	9,920.9	6,150.0	67.3	73.0	90.07	3,148.1	2,308.9	879.9	750.6	129.26	6.807		
9,800.0	6,150.0	10,020.9	6,150.0	69.1	74.6	90.07	3,248.1	2,308.7	879.9	747.0	132.93	6.619		
9,900.0	6,150.0	10,120.9	6,150.0	70.9	76.2	90.07	3,348.1	2,308.6	879.9	743.3	136.61	6.441		
10,000.0	6,150.0	10,220.9	6,150.0	72.7	77.8	90.07	3,448.1	2,308.4	879.9	739.6	140.31	6.271		
10,100.0	6,150.0	10,320.9	6,150.0	74.4	79.4	90.07	3,548.1	2,308.3	879.9	735.9	144.00	6.110		
10,200.0	6,150.0	10,420.9	6,150.0	76.2	81.1	90.07	3,648.1	2,308.1	879.9	732.2	147.71	5.957		
10,300.0	6,150.0	10,520.9	6,150.0	78.1	82.7	90.07	3,748.1	2,308.0	879.9	728.5	151.42	5.811		

Offset Design      SRC Markham Pad Sec.16-T4N-R68W - SRC Markham R-16-9NHZ - Wellbore #1 - Plan #1 (3-31-14)												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	
10,400.0	6,150.0	10,620.9	6,150.0	79.9	84.4	90.07	3,848.1	2,307.8	879.9	724.7	155.14	5.671	
10,500.0	6,150.0	10,720.9	6,150.0	81.7	86.1	90.07	3,948.1	2,307.7	879.9	721.0	158.87	5.538	
10,600.0	6,150.0	10,820.9	6,150.0	83.5	87.8	90.07	4,048.1	2,307.5	879.9	717.3	162.60	5.411	
10,700.0	6,150.0	10,920.9	6,150.0	85.3	89.5	90.07	4,148.1	2,307.4	879.9	713.6	166.34	5.290	
10,800.0	6,150.0	11,020.9	6,150.0	87.1	91.2	90.07	4,248.1	2,307.2	879.9	709.8	170.08	5.174	
10,900.0	6,150.0	11,120.9	6,150.0	89.0	93.0	90.07	4,348.1	2,307.1	879.9	706.1	173.82	5.062	
11,000.0	6,150.0	11,220.9	6,150.0	90.8	94.7	90.07	4,448.1	2,306.9	879.9	702.3	177.57	4.955	
11,100.0	6,150.0	11,320.9	6,150.0	92.7	96.5	90.07	4,548.1	2,306.8	879.9	698.6	181.32	4.853	
11,200.0	6,150.0	11,420.9	6,150.0	94.5	98.2	90.07	4,648.1	2,306.6	879.9	694.8	185.08	4.754	
11,300.0	6,150.0	11,520.9	6,150.0	96.3	100.0	90.07	4,748.1	2,306.5	879.9	691.1	188.84	4.660	
11,400.0	6,150.0	11,620.9	6,150.0	98.2	101.7	90.07	4,848.1	2,306.3	879.9	687.3	192.60	4.569	
11,500.0	6,150.0	11,720.9	6,150.0	100.0	103.5	90.07	4,948.1	2,306.2	879.9	683.5	196.37	4.481	
11,600.0	6,150.0	11,820.9	6,150.0	101.9	105.3	90.07	5,048.1	2,306.0	879.9	679.8	200.14	4.397	
11,700.0	6,150.0	11,920.9	6,150.0	103.7	107.1	90.07	5,148.1	2,305.9	879.9	676.0	203.91	4.315	
11,800.0	6,150.0	12,020.9	6,150.0	105.6	108.9	90.07	5,248.1	2,305.7	879.9	672.2	207.68	4.237	
11,900.0	6,150.0	12,120.9	6,150.0	107.5	110.7	90.07	5,348.1	2,305.6	879.9	668.4	211.46	4.161	
12,000.0	6,150.0	12,220.9	6,150.0	109.3	112.5	90.07	5,448.1	2,305.4	879.9	664.7	215.24	4.088	
12,100.0	6,150.0	12,320.9	6,150.0	111.2	114.3	90.07	5,548.1	2,305.3	879.9	660.9	219.02	4.018	
12,200.0	6,150.0	12,420.9	6,150.0	113.1	116.1	90.07	5,648.1	2,305.1	879.9	657.1	222.80	3.949	
12,300.0	6,150.0	12,520.9	6,150.0	114.9	117.9	90.07	5,748.1	2,305.0	879.9	653.3	226.59	3.883	
12,400.0	6,150.0	12,620.9	6,150.0	116.8	119.7	90.07	5,848.1	2,304.8	879.9	649.5	230.37	3.820	
12,500.0	6,150.0	12,720.9	6,150.0	118.7	121.5	90.07	5,948.1	2,304.7	879.9	645.7	234.16	3.758	
12,600.0	6,150.0	12,820.9	6,150.0	120.5	123.4	90.07	6,048.1	2,304.5	879.9	642.0	237.95	3.698	
12,700.0	6,150.0	12,920.9	6,150.0	122.4	125.2	90.07	6,148.1	2,304.4	879.9	638.2	241.74	3.640	
12,800.0	6,150.0	13,020.9	6,150.0	124.3	127.0	90.07	6,248.1	2,304.2	879.9	634.4	245.54	3.584	
12,900.0	6,150.0	13,120.9	6,150.0	126.2	128.8	90.07	6,348.1	2,304.1	879.9	630.6	249.33	3.529	
13,000.0	6,150.0	13,220.9	6,150.0	128.0	130.7	90.07	6,448.1	2,303.9	879.9	626.8	253.13	3.476	
13,100.0	6,150.0	13,320.9	6,150.0	129.9	132.5	90.07	6,548.1	2,303.8	879.9	623.0	256.93	3.425	
13,200.0	6,150.0	13,420.9	6,150.0	131.8	134.4	90.07	6,648.1	2,303.6	879.9	619.2	260.72	3.375	
13,300.0	6,150.0	13,520.9	6,150.0	133.7	136.2	90.07	6,748.1	2,303.5	879.9	615.4	264.52	3.326	
13,400.0	6,150.0	13,620.9	6,150.0	135.6	138.0	90.07	6,848.1	2,303.3	879.9	611.6	268.33	3.279	
13,500.0	6,150.0	13,720.9	6,150.0	137.5	139.9	90.07	6,948.1	2,303.2	879.9	607.8	272.13	3.233	
13,600.0	6,150.0	13,820.9	6,150.0	139.3	141.7	90.07	7,048.1	2,303.0	879.9	604.0	275.93	3.189	
13,700.0	6,150.0	13,920.9	6,150.0	141.2	143.6	90.07	7,148.1	2,302.9	879.9	600.2	279.74	3.146	
13,800.0	6,150.0	14,020.9	6,150.0	143.1	145.4	90.07	7,248.1	2,302.7	879.9	596.4	283.54	3.103	
13,864.6	6,150.0	14,085.5	6,150.0	144.3	146.6	90.07	7,312.7	2,302.6	879.9	593.9	286.00	3.077 SF	

**Company:** Synergy Resources  
**Project:** Sec.16-T4N-R68W  
**Reference Site:** SRC Markham Pad Sec.16-T4N-R68W  
**Site Error:** 0.0ft  
**Reference Well:** SRC Markham 31-16-9NHZ  
**Well Error:** 0.0ft  
**Reference Wellbore:** Wellbore #1  
**Reference Design:** Plan #1 (3-31-14)

**Local Co-ordinate Reference:** Well SRC Markham 31-16-9NHZ  
**TVD Reference:** WELL @ 4977.0ft (RKB - 13')  
**MD Reference:** WELL @ 4977.0ft (RKB - 13')  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at** 2.00 sigma  
**Database:** Landmark  
**Offset TVD Reference:** Offset Datum

Reference Depths are relative to WELL @ 4977.0ft (RKB - 13')

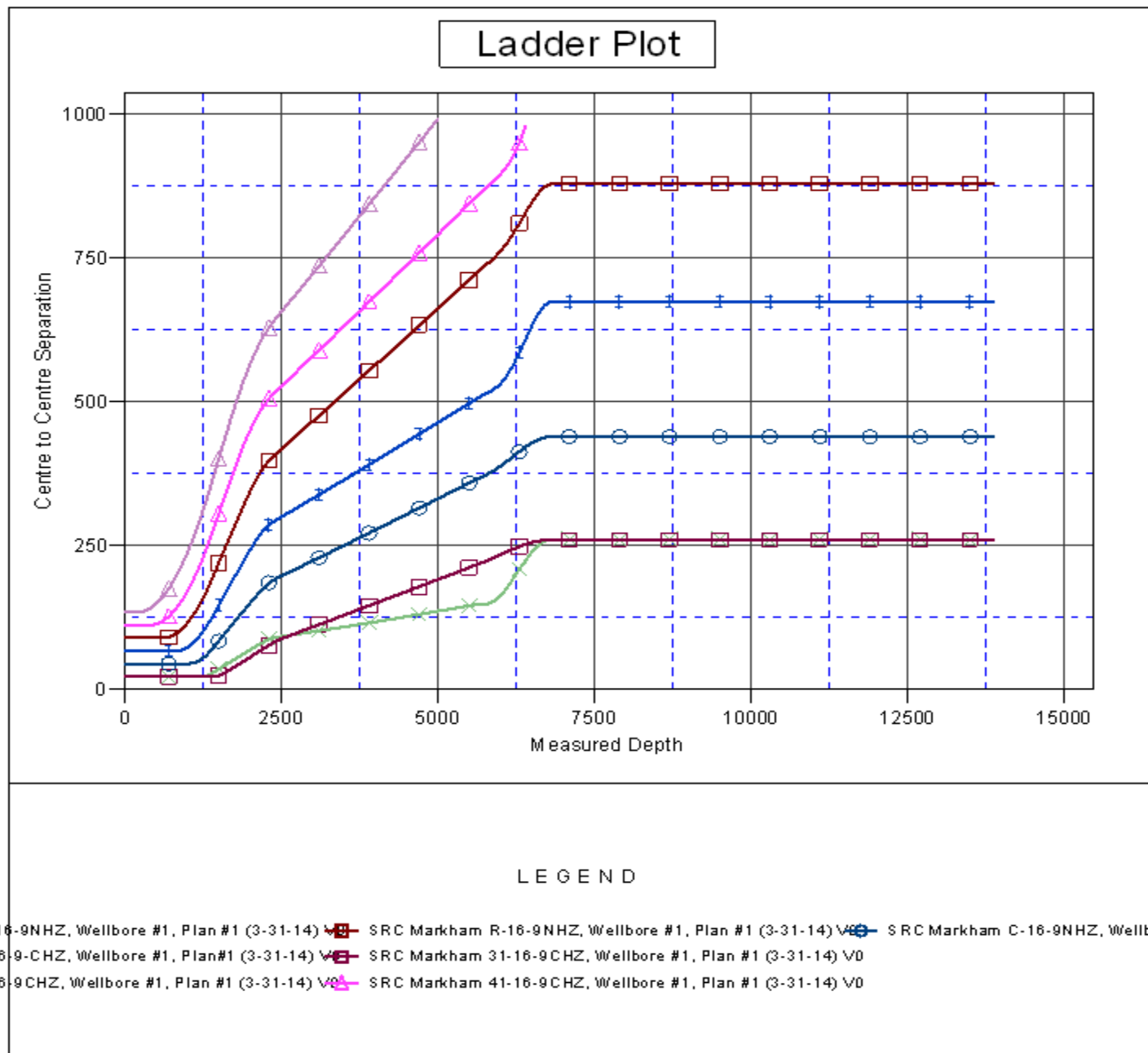
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: SRC Markham 31-16-9NHZ

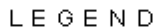
Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.32°



Reference Depths are relative to WELL @ 4977.0ft (RKB - 13')  
Offset Depths are relative to Offset Datum  
Central Meridian is -105.500000 °

Coordinates are relative to: SRC Markham 31-16-9NHZ  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.32°



16-9NHZ, Wellbore #1, Plan #1 (3-31-14) V0 SRC Markham R-16-9NHZ, Wellbore #1, Plan #1 (3-31-14) V0 SRC Markham C-16-9NHZ, Wellbore #1, Plan #1 (3-31-14) V0